

A sustainable management framework for marine adventure tourism products

L Geldenhuys

 orcid.org/0000-0003-2284-3714

Thesis submitted in fulfilment of the requirements for the degree
Doctor of Philosophy in *Tourism Management* at the North-
West University

Supervisor: Prof Dr P van der Merwe

Co-Supervisor: Prof Dr M Saayman

Graduation May 2018

Student number: 21800995

Declaration of personal work

I, Linda-Louise Geldenhuys, identity number 9003200123086 and student number 21800995, hereby declare that this thesis registered as ‘*A sustainable management framework for marine adventure tourism products*’ as part of the completion of my *Philosophiae Doctor* in Tourism Management at the Potchefstroom Campus of the North-West University, is being submitted as my own work, and complies with the Code of Academic Integrity, as well as other relevant policies, procedure, rules and regulations of the North-West University, and has not been submitted before to any institution by myself or any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.

I understand and accept that this thesis which I am submitting, forms part of the university’s property.

Ms L Geldenhuys

Prof Dr P van der Merwe

Date

Financial assistance

Financial assistance from the North West University and the National Research Foundation (NRF) is gratefully acknowledged. Statements and suggestions made in this study are those of the author and should not be regarded as those of the NRF.

Acknowledgements

Undertaking this PhD has been a life changing journey, and one which ended in the fulfilment of a dream. While I have challenged myself, learnt more about myself and my field of study, and ultimately completed this journey, it would not have been possible without the guidance, inspiration, motivation and encouragement of people along the way. I would like to thank the following people from the bottom of my heart.

- My Heavenly Father who has blessed me with the strength, knowledge and abilities to undertake and complete this journey.
- My promotor, Professor Peet van der Merwe, thank you for the belief you put in me and for guiding me throughout my studies. Thank you for never losing faith in me, for all the time and effort you dedicated to my studies and for every word of inspiration. I am truly honoured to have had you as a promoter throughout my studies.
- My co-promoter, Professor Melville Saayman, thank you for assisting, lending guidance and answering every question. Having been able to learn from you has been an honour and a privilege.
- My parents, Leone and Wehan Geldenhuys, without your love and support I would not have been able to undertake this journey. Your constant support and encouragement have been the driving force behind this thesis. Thank you for always believing in me, building me up and offering help where ever possible.
- Every single friend that felt neglected or forgotten, thank you for understanding every time I used this thesis as an excuse. I promise to make it up to you. A special thanks to Liza-Marie Weppenaar, who has dedicated much of her time as motivator and transcriber. You have been a great source of encouragement.
- Thank you to the field workers who helped with the surveys: Bianca van Rensburg, Chiree Jacobs, Marna Herbst, Karin Hagen, Lara Boonzaaier and Janine Lubbe. You have been a great blessing.
- Thank you to Professor Suria Ellis for her time, patience and guidance with the statistical analyses.
- Thank you to Clarina Vorster for assisting with language editing.

Abstract

A sustainable management framework for marine adventure tourism products

We know that when we protect our oceans we're protecting our future

~Bill Clinton

Marine adventure tourism is a relatively new topic of research, and one which has not received much attention over the past years. Recently, this industry has experienced a significant increase in interest amongst tourists, which urges the need for research in various areas of this topic. Sustainability of the marine adventure industry is the central focus of this research. Sustainability is described as the long-term survival of any tourism offering where the focus is placed on specific resources. In order for any tourism product to be sustainable, three types of resources need to be taken into account, namely economic efficiency, social equity and environmental conservation. These three resources form the basis of sustainability and share a particular interrelationship. This relationship explains sustainability as not being viable if one of these areas are not accounted for.

Sustainability is a universal concept and does not take into account the level of development of a country. It does, however, have the ability to ensure economic, environmental and social development of a destination if implemented correctly. Underlying aspects which can ensure the correct implementation of sustainability in any tourism industry includes tourist satisfaction, participation of the local community in planning and development and conservation and promotion of the natural environment. The literature has placed much focus on sustainability of wildlife- and land-based adventure tourism. However, a lack of a framework for sustainability of marine adventure tourism products have been identified.

Therefore, the primary goal of this thesis was to develop a sustainable management framework for marine adventure tourism products. Specific focus is placed on two marine adventure activities, namely boat-based whale watching and shark cage diving. In order to achieve this goal, five objectives were set and reached during various stages of this thesis. Firstly, a critical analysis of marine tourism was conducted, which forms Chapter 2 of this thesis. The second objective was to conduct a critical analysis on adventure tourism (Chapter 3). The third objective involved a review about the sustainability of tourism products (Chapter 4). The fourth objective was to analyse the empirical results obtained from the data collection by means of statistical analyses (Chapter 5). And lastly, the sixth objective was to draw conclusions and make recommendations and to establish the framework for sustainable management of marine adventure products (Chapter 6).

The data was collected by means of both qualitative and quantitative methods in order to encapsulate all necessary information. The qualitative data collection focussed on the opinion and attitudes of operators in marine adventure tourism, while quantitative methods were implemented for the collection of information regarding the social community of Hermanus and participants of shark cage diving and whale watching. Two separate questionnaires were therefore used.

Non-probability sampling, with convenience sampling methods were implemented for the quantitative surveys. The surveys took place in Hermanus and Gansbaai, Western Cape. The sample included the community of Hermanus (n=250), participants of shark cage diving and whale watching (n=350) and whale and shark cage operators (n=4). The first phase of the research was qualitative in nature and involved conducting personal interviews with available and willing operators of marine adventure products. The second phase was exploratory in nature, which included the use of descriptive statistics, and two-way frequency tables to determine the socio-demographic profiles of both the residents of Hermanus and participants of marine adventure tourism. Three separate exploratory factor analyses were conducted to identify the community impacts of whale watching and shark cage diving operations, motives to participate and experiences of marine adventure participants. A frequency table was also used to identify the aspects influencing the satisfaction of participants. Other statistical analyses conducted include a cluster analysis and cross-tabulations. These analyses were used to develop a comprehensive profile of the market segments for marine adventure tourism.

The most important aspects identified from the qualitative interviews with operators include the fact that online marketing is seen as a more efficient means of marketing, operators are aware of the concept of sustainability, and there is a need for contributions to conservation of both whales and sharks. In terms of the quantitative surveys, three impacts (awareness, negative aspects and community benefits) of shark cage diving and whale watching on the Hermanus community were identified, of which *negative aspects* was identified as the most important factor and *community benefits* as the least important factor. The most important motive for participation for marine adventure participants was identified to be *marine species*, while *personal achievement* was identified as the least important factor. *Proximity to marine nature* was identified as the factor with the most influence on participants' experiences, while *sea conditions* was identified as the least important influencing factor. A six-cluster taxonomy for the market for marine adventure tourism was identified, namely T²RACE (thalassophiles, thrill seekers, risk takers, adrenaline junkies, consorts and experience seekers).

The contributions of this research was highlighted, and it was found that this research contributes to multiple areas of marine tourism, within both a literature and practical contribution. Firstly, this research contributes to the literature of marine tourism management because a model was established which highlights the important marine tourism management concepts, a model for describing sustainability as part of ecotourism was established, the community impacts of shark cage

diving and whale watching was identified and the market for marine adventure tourism was established by identifying the profile, the motives to participate, the market taxonomy and aspects influencing participants' satisfaction and experience. Secondly, the practical contribution of the research is the development of the framework which could be implemented by operators for sustainable management of the sector.

Key words: *marine tourism, adventure tourism, shark cage diving, whale watching, sustainability, tourism management, sustainable management*

Table of contents

CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION	1
1.2 BACKGROUND TO THE STUDY	3
1.2.1 Sustainability of tourism products	3
1.2.2 Adventure tourism	5
1.2.3 Marine wildlife tourism	6
1.2.4 Key findings from the literature	11
1.3 PROBLEM STATEMENT	12
1.4 GOALS AND OBJECTIVES	13
1.4.1 Goal.....	13
1.4.2 Objectives.....	13
1.5 METHOD OF RESEARCH	14
1.5.1 Literature study.....	14
1.5.2 Empirical survey	15
1.6 DEFINING THE CONCEPTS	28
1.6.1 Marine adventure tourism	28
1.6.2 Marine wildlife tourism	28
1.6.3 Tourist experiences	28
1.6.4 Sustainable management.....	29
1.6.5 Framework	29
1.7 CHAPTER CLASSIFICATION	29

CHAPTER 2: AN ANALYSIS OF MARINE TOURISM

2.1 INTRODUCTION	31
2.2 MARINE TOURISM.....	32
2.2.1 History and development of marine tourism.....	33
2.2.2 Defining marine tourism.....	33
2.2.3 Marine tourism sub-sectors	35
2.2.4 Marine tourism recreational opportunities	40
2.3 MARINE WILDLIFE TOURISM.....	43
2.3.1 Marine ecotourism	45
2.4 MARINE TOURISM MANAGEMENT	48
2.4.1 Key aspects pertaining to tourism and marine tourism management	48
2.5 CONCLUSION:	68

CHAPTER 3: ADVENTURE TOURISM

3.1 INTRODUCTION	69
3.2 DEFINING ADVENTURE TOURISM AND ADVENTURE TOURIST.....	70
3.2.1 Different types of adventure tourism	71
3.2.2 The adventure tourists.....	74
3.3 TRAVEL MOTIVES OF ADVENTURE TOURISTS.....	78
3.4 ADVENTURE TOURISM EXPERIENCE	85
3.4.1 Stages of adventure	86
3.4.2 The adventure experience paradigm	87
3.4.3 Adventure activity scale	88
3.4.4 Marine adventure tourists' benefits and experiences	89
3.5 MANAGEMENT OF ADVENTURE TOURISM.....	96
3.6 CONCLUSION	97

CHAPTER 4: SUSTAINABLE TOURISM MANAGEMENT

4.1 INTRODUCTION.....	99
4.2 DEFINING SUSTAINABLE TOURISM.....	100
4.2.1 Advantages and disadvantages of sustainability.....	105
4.2.2 Interpretations, perspectives and limitations of sustainable tourism.....	107
4.3 ECONOMIC EFFICIENCY.....	108
4.3.1 Economic Benefits.....	109
4.3.2 Economic impact studies on marine tourism.....	110
4.4 ENVIRONMENTAL CONSERVATION	111
4.4.1 Positive impacts of tourism on environments	116
4.4.2 Negative impacts of tourism on environments	117
4.5 SOCIAL EQUITY	120
4.5.1 Analysis of the concept "culture"	121
4.5.2 The host community	121
4.5.3 Impacts of tourism on the host community.....	123
4.6 SOCIAL IMPACT MODELS.....	126
4.6.1 Doxey's Irridex Model	127
4.6.2 Butler's Lifecycle Model	128
4.6.3 Dogan's Framework	130
4.6.4 The Social Exchange Theory.....	130
4.7 LITERATURE ON SUSTAINABLE MANAGEMENT FRAMEWORKS.....	132
4.8 CONCLUSION	136

CHAPTER 5: EMPIRICAL RESULTS

5.1 INTRODUCTION	138
5.2 SECTION A: QUALITATIVE RESULTS.....	139
5.2.1 Number of years in operation.....	139
5.2.2 Number of boats owned and in operation	139
5.2.3 Number of permanent staff and temporary workers	140
5.2.4 Role in the operation	141
5.2.5 Average price per person for a trip.....	141
5.2.6 Number of moths per year in operation.....	141
5.2.7 Training provided for staff members	142
5.2.8 Does the company have a website and is it in operation.....	143
5.2.9 Attendance to marketing shows	144
5.2.10 Marketing tools, such as direct marketing, that are used	144
5.2.11 Target market	145
5.2.12 Relationship to the Hermanus Whale Festival	146
5.2.13 Attitude towards conservation fees	147
5.2.14 Management advantage of the company	148
5.2.15 What do you think is sustainability?	149
5.2.16 What should be done to keep the industry sustainable?	150
5.2.17 What is being done to educate people about the sharks and whales?	151
5.2.18 Measures in place to look after the environment while on a trip	152
5.3 SECTION B: QUANTITATIVE RESULTS OF HERMANUS RESIDENTS AND ADVENTURE MARINE TOURISM PARTICIPANTS	154
5.3.1 Hermanus community results	154
5.3.2 RESULTS ON MARINE ADVENTURE TOURISM (WHALE WATCHING AND SHARK CAGE DIVING).....	165
5.4 SECTION C: RESULTS PERTAINING TO THE FACTOR ANALYSES	175
5.4.1 Factor analysis on the impact of shark cage diving and whale watching on the community	176
5.4.2 Factor analysis on the motives of adventure participants in marine adventure activities ..	179
5.4.3 Factor analysis on the experiences of marine adventure participants	182
5.4.4 Aspects contributing to the satisfaction of marine adventure participants	185
5.5 SECTION D: RESULTS OBTAINED FROM THE CLUSTER ANALYSIS AND CROSS-TABULATIONS	187
5.5.1 Results of the cluster analysis	187
5.5.2 Identification of clusters	187
5.6 CONCLUSION	195

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION 197

6.1.1 Personal journey as a phd student 198

6.2 CONCLUSIONS REGARDING THE RESEARCH 200

6.2.1 Conclusions regarding the literature analysis on marine tourism 200

6.2.2 Conclusions regarding the literature analysis on adventure tourism..... 203

6.2.3 Conclusions regarding the literature analysis on sustainable tourism management..... 204

6.2.4 Conclusions regarding the empirical results of this research..... 207

6.3 CONTRIBUTIONS AND LIMITATIONS OF THE STUDY 212

6.4 A SUSTAINABLE MANAGEMENT FRAMEWORK FOR MARINE ADVENTURE PRODUCTS
..... 214

6.4.1 External environment..... 216

6.4.2 Inputs 219

6.4.3 Demand side factors..... 227

6.4.4 Supply side factors 231

6.4.5 Guidelines to sustainability 234

6.4.6 Outputs..... 235

6.4.7 Feedback..... 236

6.5 RECOMMENDATIONS AND FUTURE RESEARCH OPPORTUNITIES 236

6.5.1 Managerial recommendations..... 236

6.5.2 Recommendations for future research..... 237

APPENDICES 237

BIBLIOGRAPHY 248

List of figures

Fig 1.1: Outline of chapter	2
Fig 1.2: Analysis of sustainability of tourism as part of ecotourism	4
Fig 1.3: Framework for sustainable management of marine adventure tourism products based on the key findings from the literature	12
Fig 2.1: Outline of chapter	32
Fig 2.2: Sub-sectors of marine tourism	36
Fig 2.3: Marine-based activities in comparison with the marine tourism categories	39
Fig 2.4: Core components of non-consumptive wildlife use	44
Fig 2.5: Elements of the definition of marine ecotourism	45
Fig 2.6: Management aspects of marine tourism management	48
Fig 2.7: A model of marine tourism management	56
Fig 2.8: Framework for sustainable coastal tourism management	63
Fig 3.1: Outline of chapter	70
Fig 3.2: Adventure quadrants	74
Fig 3.3: Characteristics of the “new” adventure tourist	75
Fig 3.4: Features of the “new” tourist	76
Fig 3.5: Stages of adventure	86
Fig 3.6: The adventure experience paradigm	87
Fig 3.7: The adventure activity scale	89
Fig 3.8: Conceptual model for adventure tourism management	97
Fig 4.1: Outline of chapter	100
Fig 4.2: Sustainable tourism	100
Fig 4.3: Sustainability of tourism offerings as part of ecotourism	103
Fig 4.4: Renewable and non-renewable resources	112
Fig 4.5: Butler’s lifecycle model	128
Fig 4.6: Social exchange theory	131
Fig 4.7: Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals	133
Fig 4.8: The multi-stakeholder involvement management framework	134
Fig 4.9: A sustainable management framework for Mapungubwe National Park	135
Fig 5.1: Outline fo chapter	139
Fig 5.2: Gender of residents of Hermanus	155
Fig 5.3: Occupation of residents of Hermanus	156

Fig 5.4: Impact of the festival on personal quality of life	158
Fig 5.5: Impact of the Hermanus Whale Festival on the community of Hermanus	159
Fig 5.6: Gender of marine adventure participants	166
Fig 5.7: Home language of marine adventure participants	167
Fig 5.8: Highest level of education of marine adventure participants	168
Fig 5.9: Type of marine adventure participant visitors	169
Fig 5.10: Future activities in marine adventure activities	172
Fig 5.11: Six-cluster solution: Ward's method with euclidian distance measures	187
Fig 6.1: Outline of chapter	199
Fig 6.2: A sustainable management framework for marine adventure tourism products	215

List of tables

Table 1.1: Comparison between qualitative and quantitative research methods	16
Table 2.1: The spectrum of marine recreation opportunities	40
Table 2.2: Shark cage diving and whale watching classification	42
Table 2.3: Code of conduct for shark cage diving activities at the Azores	65
Table 3.1: Soft versus hard adventure tourism	72
Table 3.2: Push and pull motives of marine tourists	81
Table 3.3: Summary of travel motives in various tourism industries	82
Table 3.4: Description of aspects influencing marine wildlife tourists' experiences	93
Table 4.1: Sustainable versus non-sustainable tourism development	105
Table 4.2: Doxey's Irridex	127
Table 5.1: Age of residents of Hermanus	155
Table 5.2: Highest level of education of residents of Hermanus	157
Table 5.3: Number of years living in Hermanus	157
Table 5.4: Working at the Hermanus Whale Festival	159
Table 5.5: Level of interest in the Hermanus Whale Festival	160
Table 5.6: Residents' evaluation of the Hermanus Whale Festival	161
Table 5.7: Importance of the events at the Hermanus Whale Festival for participation	162
Table 5.8: The impact of shark cage diving and whale watching on the community	163
Table 5.9: Age of marine adventure participants	166
Table 5.10: Province of residence of marine adventure participants	168
Table 5.11: Annual gross income of marine adventure participants	169
Table 5.12: Where marine adventure participants heard about the operator	170
Table 5.13: Participation in other marine activities	171
Table 5.14: Previous participation in marine adventure activities	172
Table 5.15: Motives of shark cage divers and whale watchers to participate in the activity	173
Table 5.16: Aspects influencing the experience of shark cage divers and whale watchers	174
Table 5.17: Community impacts of shark cage diving and whale watching	178
Table 5.18: Motives to participate of marine adventure participants	181
Table 5.19: Experiences of marine adventure participants	183
Table 5.20: Aspects influencing the level of satisfaction of marine adventure participants	186
Table 5.21: ANOVA and Tukey's post hoc multiple comparison results for marine adventure participants	188

Table 5.22: Cross-tabulation with Ward's Method results for marine adventure participants	192
Table 5.23: One-way ANOVA with Tukey's post hoc test results for marine adventure participants	193

List of maps

Map 1.1: Southern Right Whale congregation sites, Western Cape	8
Map 1.2: Hermanus, Western Cape	9
Map 1.3: Geographical location of shark cage diving in South Africa	10

Chapter 1

Introduction and Problem Statement

Ocean is more ancient than the mountains, and freighted with the memories and dreams of Time

~H.P. Lovecraft

1.1 INTRODUCTION

Douglas, Douglas and Derret (2001) suggest that tourism consumption patterns reflect the ongoing and always increasing diversity of interests of the late-modern leisure tourist. These days the tourism industry is increasingly conforming to an “experience industry” where tourists are willing to pay travel agents and operators in order to take part in leisure activities which deliver optimal experiences in a limited time space (Opaschowski, 2001:1). One such industry in tourism which has experienced an immense growth is marine tourism (Rogerson, 2007:228). Marine tourism can be defined as all recreational activities involving a person to travel away from his place of residence, to a destination where the host or focus is the marine environment (Orams, 1999:9). Orams (1999:9) further defines the marine environment to include saline waters which are affected by tides. Sectors of marine tourism include adventure tourism, wildlife-based tourism, leisure or recreational tourism and cruise ship holidays (Halpenny, 2002:9). The focus of this research was on marine adventure tourism.

Adventure tourism can be defined as guided commercial tours, where the principal attraction is an outdoor activity that relies on features of the natural terrain, generally requires specialised equipment and is exciting for the tour clients (Bentley & Page, 2001; Buckley, 2000; Hudson, 2002; Page, Bentley & Walker, 2005; Swarbrooke, Beard, Leckie, & Pomfret, 2003). Adventure tourism has broadened in scope and appeal and as a result interest in this industry has soared (Sung, Morrison & O’Leary, 2000:2). Within the scope of adventure tourism, marine tourism offers adventure activities to tourists that promise a unique experience (Orams, 2013:481). According to Buckley (2007:1428) marine adventure activities include sea kayaking, rafting, scuba diving, snorkelling, surfing, whale watching, shark cage diving and sailboarding, to name a few. Orams (2013:481) adds another component of marine adventure tourism, namely marine wildlife tourism. Marine wildlife tourism depicts a wide range of activities that focus on marine animals as the primary attraction such as whale watching, shark diving and turtle tours (Orams, 2013:482).

Two marine animals which have been gaining more and more interest over the past years for those in search of experiencing a close encounter, are whales and sharks (Wilson & Tisdell, 2003:50; Dicken & Hosking, 2009:227). Shark cage diving is seen as a controversial activity due to its reliance on attracting sharks to a viewing site by using bait, an activity referred to as chumming (Bruce & Bradford, 2013:889). Whale watching, on the other hand is more complex than providing the whale

with food. Whale watching is based on an annual migration of whales from the colder southern pole to the warmer waters of the South African coast (Wilson & Tisdell, 2003:50).

Although these topics have enjoyed much interest in international research pertaining to the behaviour of the animals (Cater, 2010; Cunningham, Huijbens & Wearing, 2012; Orams, 2013; Lück, 2003), little effort has been put into identifying the impact of experiencing an interaction with these animals on viewers themselves or the sustainability of these industries (Orams, 2000:562; Wearing, Cunningham, Scweinsberg & Jobberns, 2014:39), especially in a South African context (Dicken & Hosking, 2009:227). Much of the literature regarding sharks and whales focus on the behaviour of the animal and the impact of tourism on these animals (Orams, 2000:562).

The aim of this chapter is to give a background of the study, the problem statement, the goal and objectives are identified, a discussion on the methodology of the study is conducted, important concepts pertaining to the study are defined and the chapter outline for the thesis is provided. Figure 1.1 provides a summary of the outline of this chapter.

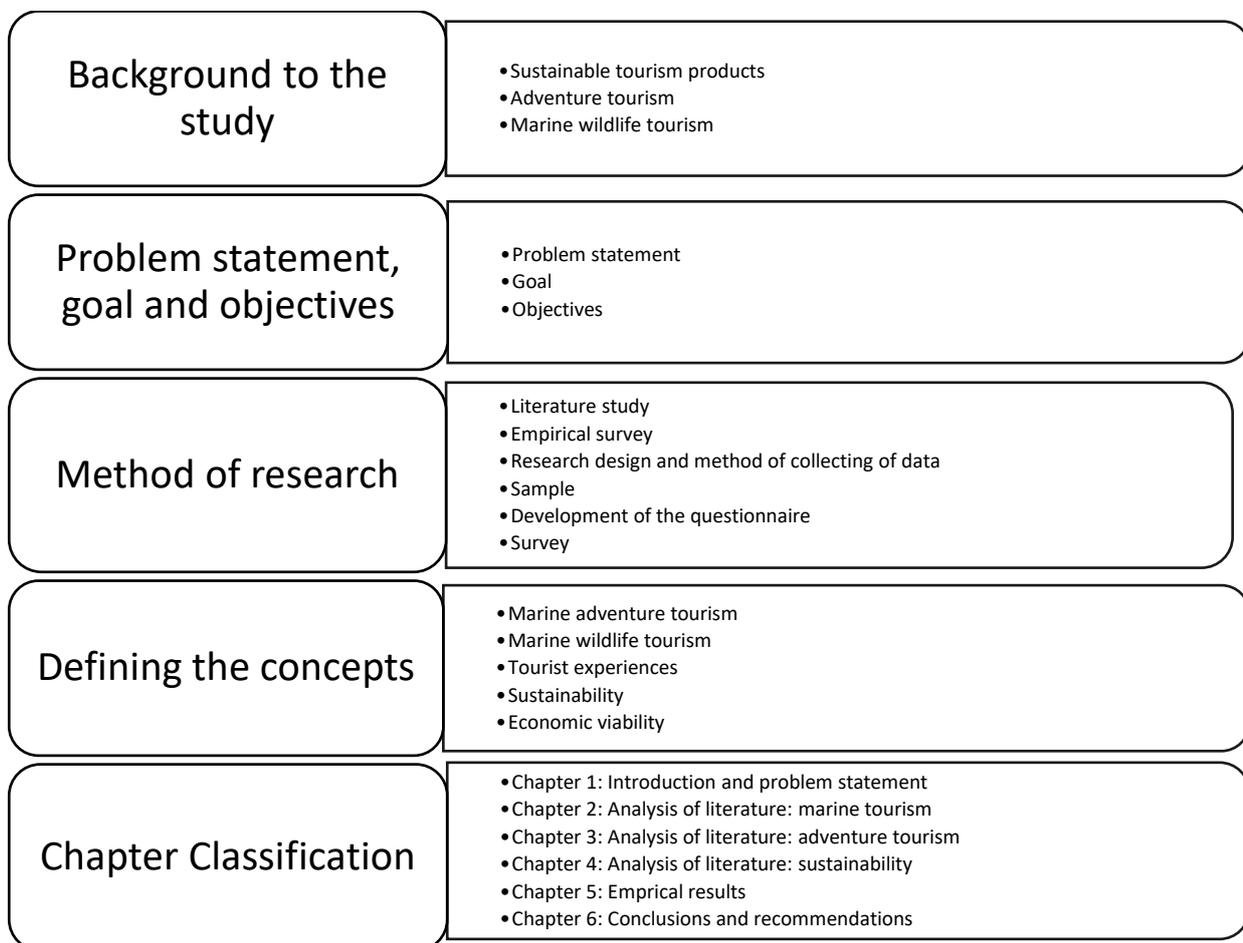


Figure 1.1: Outline of chapter

1.2 BACKGROUND TO THE STUDY

This following section provides a background literature to the study by discussing applicable concepts such as sustainability of tourism products, adventure tourism, marine wildlife tourism, the shark cage diving industry of South Africa and the whale watching industry of South Africa.

1.2.1 Sustainability of tourism products

The term sustainability can be defined as development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs (WCED, 1987:7). Coetzee and Saayman (2009:125) further state that sustainability highlights three arguments. Firstly, sustainable development of tourism products should be a long-term strategy for the preservation and conservation of the environment. Secondly, it should encompass an inter- and intra-generational balance of welfare. Thirdly, sustainable tourism development is proposed to be universally valid which does not consider the level of development of a country, socio-cultural and political conditions (Coetzee & Saayman, 2009a:125).

Sustainable tourism is a term used to describe the long-term survival of an offering in a specific destination. According to Ioannides (2001:59), tourism can be seen as sustainable at a destination where tourism numbers and tourism spending indicate a steady increase over a specific period of time. According to Guitierrez, Lamoureux, Matus and Sebunya (2005:4) it is important to consider the environmental resources, socio-cultural authenticity (or social equity) and economic efficiency in order for a tourism destination or offering to be called sustainable. Sustainable tourism is therefore based on environmentally sustainable economic development, where sustainability is dependent on the entire environmental system, including humanity (Coetzee & Saayman, 2009a:131).

According to Kent, Sinclair and Diduck (2012:89) certain issues in tourism and sustainability, such as the environmental system, carrying capacity, impact assessment and stakeholder management, can be shifted to ecotourism as well. Accurately so, the terms ecotourism and sustainability both have features which relate to the other, such as minimisation of negative impacts, conservation and promotion of the natural and cultural environments, tourist satisfaction as well as participation of the local community in tourism development (Sirakaya, Sasidharan & Sonmez, 1999; Kent *et al.*, 2012:89). Sustainable tourism can thus be summarised by means of Figure 1.2.

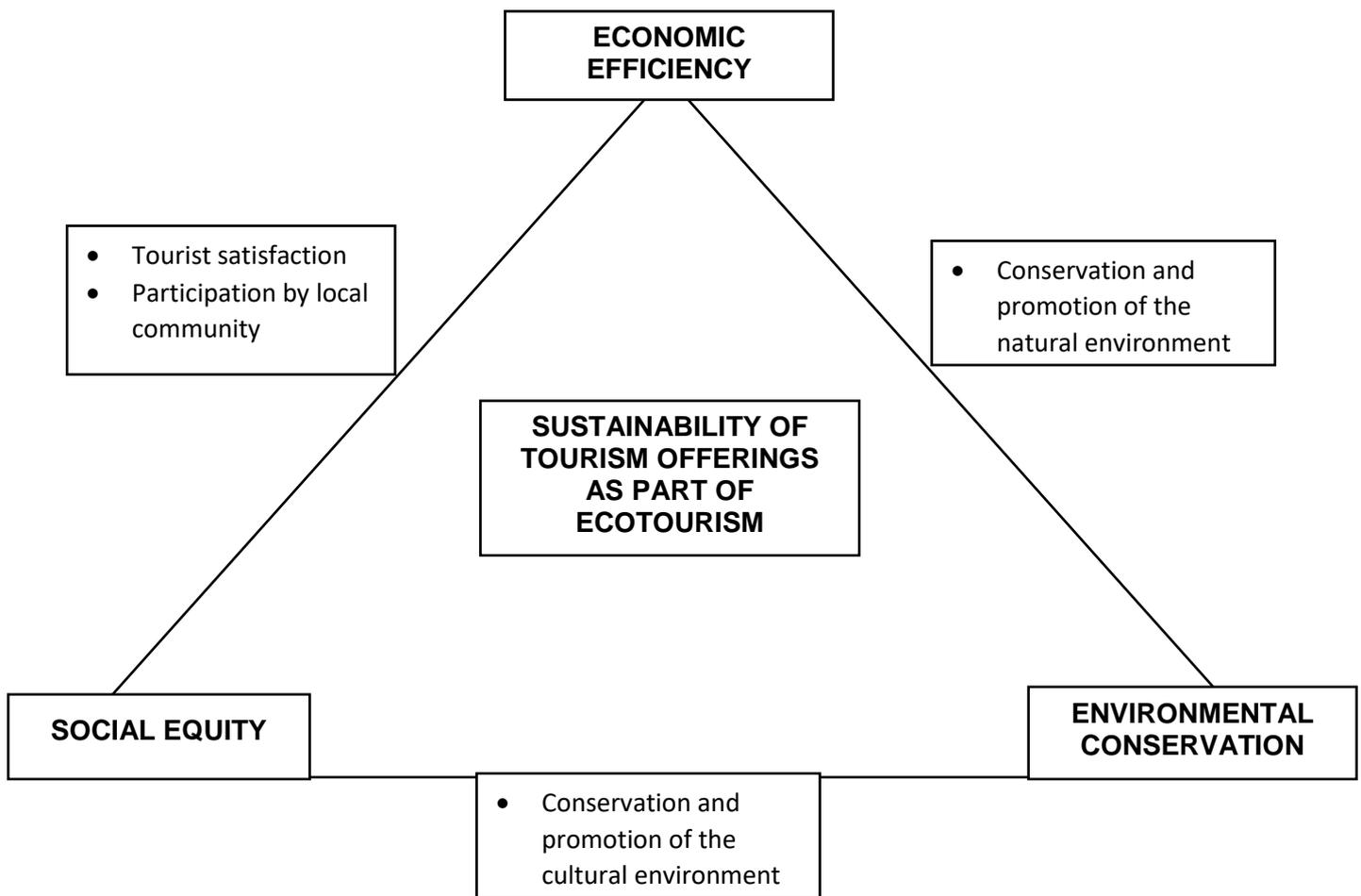


Figure 1.2: Analysis of sustainability of tourism offerings as part of ecotourism

(Source: Author's own compilation)

The term sustainability is made up of three pillars, namely environmental conservation, economic efficiency and social equity (Bostrom, 2012:3). These pillars are also known as the three “P’s” (People, Profit and Planet) or the three “E’s” (Economic, Environment and Equity) (Bostrom, 2012:3). The relationship between these three areas are compatible across all areas of tourism development (Coetzee & Saayman, 2009a:131) and play a major role in building a humane, equitable and socially responsible tourism environment without the overexploitation of resources. These three pillars work together to form a positive integration which ensures that sustainable goals are achieved (Littig & Grießler, 2005:6) (see Chapter 4 for full discussion).

Sustainability goals, often viewed as ambitious and therefore an idealistic approach, are complex and problematic on a global scale (Ioannides, 2001:57). The reason being the unavoidable clash between environmental conservation and social equity. According to Littig and Grießler (2005:6) trade-offs between the natural and social environment involve accessibility and mobility as well as policy formulation. An asymmetrical impact can become a problem where social goals and environmental conservation goals clash. For example, environmental conservation often involves

restricting access to an area which means that the social community is deprived of enjoying the benefits of this area in the short term, resulting in a disregard for sustainable tourism development from the local community and a decrease in economic benefits (Coccosis, Edwards & Priestly, 1996:200). Therefore, it is important to ensure that the local community is allowed participation in the process of sustainable tourism development. This, in turn, will ensure tourism satisfaction as the local community will be acceptable towards sustainable tourism in the long term (Kent *et al.*, 2012:90). Many researchers agree that the local community should be offered the chance to participate in decision-making and development processes (Kent *et al.*, 2012:89; Erkus-Ozturk & Eraydin, 2010:2; Xu, Lue, Chen & Liu, 2009:30). By incorporating the local community as a major stakeholder in tourism development, local economic benefits will be maximised and support for conservation efforts will be obtained (Kent *et al.*, 2012:90).

1.2.2 Adventure tourism

One sector of the ever-growing tourism industry which is enjoying increased awareness amongst researchers in the field as well as the general market is adventure tourism (McKay, 2012; Williams & Soutar, 2009; Cater, 2006). Adventure tourism operates on a close relationship with the local community as well as the environment (McKay, 2012:46). Potentially, the impacts caused by adventure tourism has negative outcomes for both the community and the environment (McKay, 2012:46). Therefore, as the growth in adventure tourism increases amongst the general public, so does the need for implementation of sustainability in this sector (See Figure 1.2) (McKay, 2012:46). The focus of adventure tourism is on smaller groups of tourists, therefore adventure tourism forms part of a niche market within the scope of alternative tourism.

Adventure tourism is best described as a term spanning a variety of definitions where the concept differs from person to person (Van der Merwe, 2009:220). An activity which might seem as part of one person's daily life might be something extreme and far from ordinary for another person (Van der Merwe, 2009:220). Broadly speaking, adventure tourism can be defined as guided commercial tours, where the primary activity takes place outdoors, it relies on general features of the natural environment, requires specialised equipment or guides and is exciting for the participant (Buckley, 2007:1428). Not only is adventure tourism a concept which might differ from person to person, but it also involves a diverse range of skills and expertise (Buckley, 2007:1428). Activities which fall under the adventure tourism umbrella include mountain climbing, caving, sea kayaking, snorkelling, scuba diving, shark cage diving, whale watching, snowboarding, skydiving, abseiling, white-water rafting, skiing, horse riding and off-road driving to name but a few (Buckley, 2007:1428). Different people taking part in the same activity may have different skills, demographics, experiences and expectations but they share the similarity of taking part in the same activity (Buckley, 2007:1428).

Aside from the highly involved activities, adventure tourism also includes more passive activities. Therefore, adventure tourism can be categorised as either hard adventure or soft adventure. Hard adventure tourism products refer to activities with high levels of risk and which requires intense

commitment from the participant and advanced skills (Van der Merwe, 2009:230). Hard adventure activities include white-water rafting, abseiling, scuba diving, bungee jumping, mountain climbing and astrotourism (George, 2014:216) (see chapter three for full discussion).

On the other hand, soft adventure tourism can be defined as all those activities with a perceived risk but contains low levels of actual risk, it requires minimal commitment or skills from the participant and most of the activities are led by an experienced guide (Van der Merwe, 2009:230). Activities included in soft adventure tourism is wildlife-based tourism (marine and land based), whale watching, shark cage diving, bushveld dinners, trekking, nature photography, cycling, bush walking and ballooning (George, 2014:216). Both shark diving and whale watching are part of marine wildlife tourism.

1.2.3 Marine wildlife tourism

Wildlife-based tourism does not only take place on dry land. In recent years wildlife-based tours in marine and coastal environments have become a popular activity (Zeppel & Muloin, 2008:19). Marine wildlife tourism is defined as any form of tourist activity where the primary purpose of the activity involves watching, studying or enjoying marine wildlife (Zeppel & Muloin, 2008:20). The activities included in marine wildlife tourism is wildlife-watching holidays, wildlife boat trips, guided island or coastal walks, observation of marine life from land, visiting marine or coastal nature reserves and visiting marine wildlife visitor centres (Zeppel & Muloin, 2008:20). In addition to this, there has been a rise in interest amongst the market in targeting a specific animal, such as Great White Sharks or Southern Right Whales (Orams, 2013:482). This interest in the targeted animal has created a demand for learning amongst those interested in the animal and as a result, operators offer educational services as part their service package (Orams, 2013:482).

Marine wildlife tourism offers tourists such a wide variety of tourism activities and opportunities that there is a need to categorise these activities. Reynolds and Braithwaite (2001:33) proposed seven categories into which wildlife tourism in general can be categorised, which is applicable to the marine wildlife industry, namely:

- Nature-based tourism with a wildlife component: coming across wildlife while on tour is purely incidental and the main purpose of the trip is on nature, for example a cruise on a yacht
- Locations with good wildlife opportunities: Some accommodation establishments are located within close proximity to a wildlife-rich area, such as a house overlooking the bay
- Artificial attractions based on wildlife: some species are amenable to forming the basis of a man-made attraction where the species are kept in captivity, for example and aquarium
- Specialist animal watching: these tours cater specifically for special interests in a specie or a group of species, for example shark cage diving or whale and dolphin watching
- Habitat specific tours: these tours are based on a habitat which is rich in wildlife and accessed by a specialised vehicle or vessel, such as snorkelling and scuba diving

- Thrill-offering tours: these tours are based on the exhibition of a dangerous or large species which is enticed to exhibit a certain behavioural trait by the operator, such as shark cage diving
- Hunting or fishing tours: this category involves the consumptive use of wildlife, which may be in their natural habitat, semi-captive or in farmed conditions and may involve killing the animal, such as deep-sea fishing.

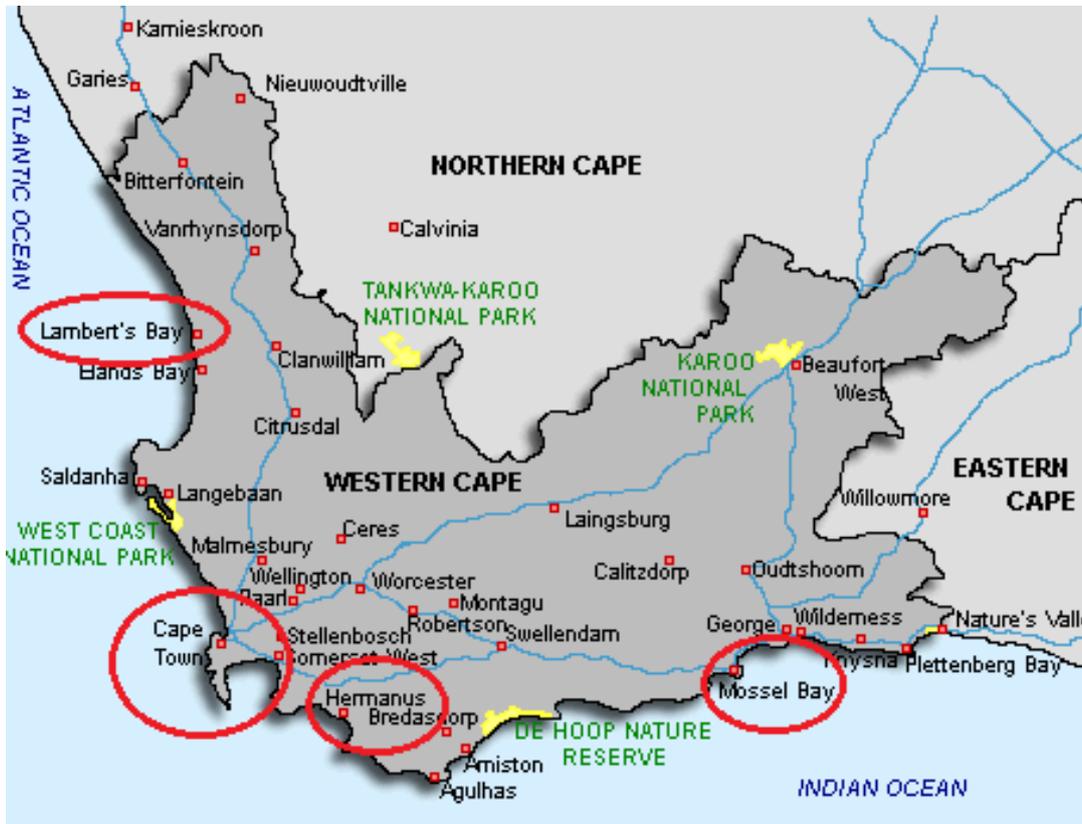
The list illustrates the wide and diverse range of marine wildlife activities and also represents a wide spectrum of tourism markets that is encapsulated by marine wildlife tourism. An analysis of the components of this dynamic industry should take tourists' motivations and attitudes into account in order to ensure that a full comprehension of the industry is reached (Reynolds & Braithwaite, 2001:34). As with any other tourism activity, tourists are motivated by certain forces, whether extrinsic or intrinsic, to take part in such activities (Reynolds & Braithwaite, 2001:34). Reynolds and Braithwaite (2001:34) have identified nine different groups of wildlife tourists according to their exhibition of certain motivational factors. These groups include naturalists, ecologists, humanistic, moralistic, scientists, aesthetic, utilitarian, dominionistic and negativistic (Reynolds & Braithwaite, 2001:34). Aside from the motives driving tourists to participate in these types of activities, the experiences gained from such activities are also important drive-forces behind tourist participation (Orams: 2000:561). According to Orams (2000:561) experiences derived from partaking in adventure tourism activities can include social experiences (meeting new people with shared interests), psychological experiences (adrenaline rush from a dangerous situation and/or an emotional experience) as well as educational experiences (the tourist learns something new about the environment, the animals or himself) (Orams 2000:561). Two marine wildlife sectors which have enjoyed much attention in a South African setting amongst the general market is shark cage diving and whale watching. These sectors have grown in popularity over the past five years and therefore determining the motives and experiences of these sectors are important for the sustainable management thereof.

1.2.3.1 The whale watching sector of South Africa

South Africa has a vibrant whale watching sector. The Southern Right Whales' annual migration forms the Southern Hemisphere to the coastal waters of South Africa has ensured that the sector has grown over the past decade (Barendse & Best, 2014:1358). Whale watching in South Africa is not a new phenomenon since it started in the early 1990's (Turpie, Savy, Clark & Atkinson, 2005:10).

The most popular whale watching attraction in South Africa is the Southern Right Whale, supporting a valuable land-based viewing experience as well as a boat-based whale watching experience in the Western Cape (Turpie *et al.*, 2005:12). These whales migrate to the coastal waters of South Africa annually for mating and calving purposes (Turpie *et al.*, 2005:12). Over 90% of the females born on the coast of South Africa return later to have their first calf (Best, 2000: 43). According to Turpie *et al.* (2005:12) Southern Right Whales tend to concentrate within one nautical mile (1.85 kilometres)

off the coast in sheltered bays such as Lambert's Bay, Mossel Bay, The Cape Town Peninsula including Struis Baai, Pearly Beach, Walker Bay, Kleinmond, False Bay and Hermanus. The Southern Right Whale provides for a valuable whale watching experience due to these whales being easily attracted by boats and their exhibition of a high level of activity on the surface of the water, such as spy hopping between the propellers of the boat (Turpie *et al.*, 2005:12). Map 1.1 shows the congregation sites of the Southern Right Whales along the South African coastline.

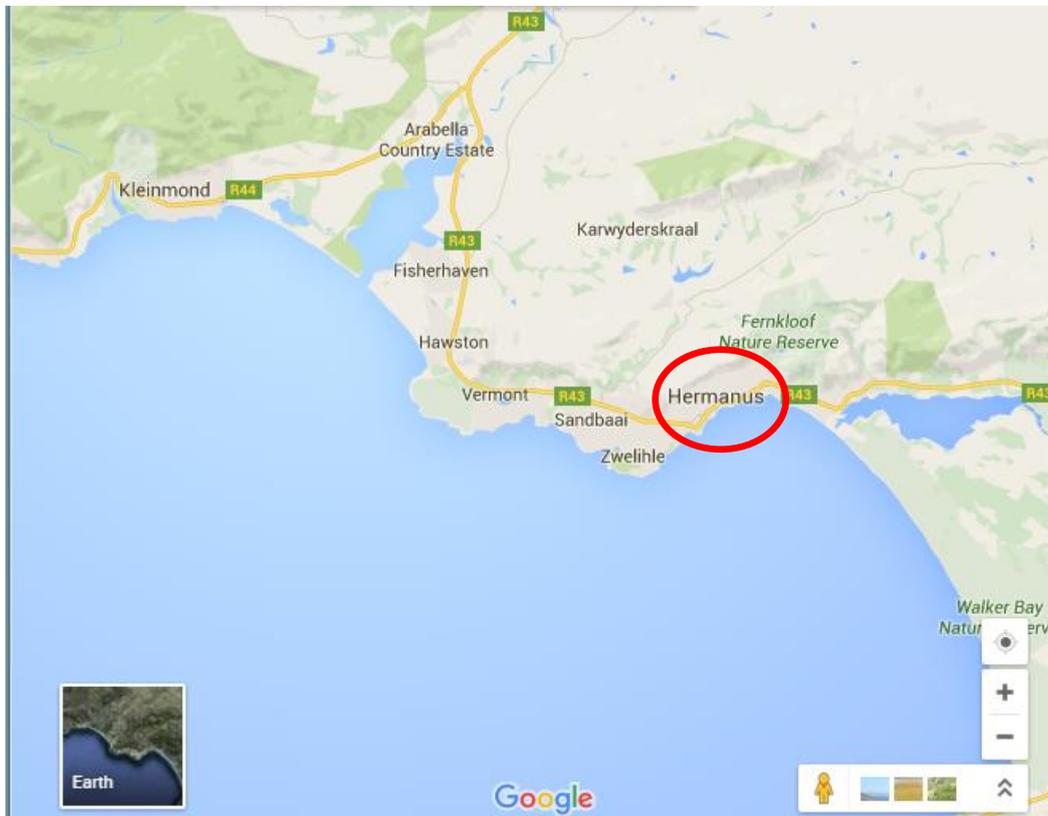


Map 1.1: Southern Right Whales congregation sites, Western Cape

(Source: SACarrental.com, 2015)

In celebration of the whales returning to the coast of South Africa annually, the Hermanus Whale Festival was established in 1991 and is the only eco-marine festival in South Africa (Hermanus Whale Festival, 2015). Hermanus is a small coastal town in the Western Cape province of South Africa, situated between the Botrivier and Kleinrivier lagoons with the small Onrus lagoon in the middle (Map 1.2 shows the geographical location of Hermanus) (Hermanustourism, 2015). The festival is currently in its 24th year of existence and boasts with a visitor number of 100 000 (Hermanus Whale Festival, 2015). Stretching over a three-day period the festival is held in October every year and the focus point of the festival is the Southern Right Whales (Hermanus Whale Festival, 2015). Visitors can enjoy watching the whales play from land as well as go on a trip with one of the three operators in the town (Hermanus Whale Festival, 2015, Department of Environmental Affairs, 2017). According to the Department of Environmental Affairs and the Phakisa operation (Department of Environmental Affairs, 2017) several measures have been put in place in

support of sustainability of the industry. These measures include the development of policies which guides the process of decision making for permit allocation, the promotion of growth of these sectors, education and methods of instilling conservation ethics. These measures also include enforcement from the government to ensure compliance amongst operators in the industry. Operators need to reapply for the permit every five years to ensure that all areas have been complied with (Department of Environmental Affairs, 2017).



Map 1.2: Hermanus, Western Cape

(Source: Google maps, 2015)

1.2.3.2 The shark cage diving sector of South Africa

Sharks are one of the important marine tourism attractions at dive sites around the world, including South Africa, with a contribution of millions of rands towards the local economy (Topelka & Dearden, 2005:109).

Shortly after South Africa passed the national legislation regarding the protection of Great White sharks from all types of fishing exploitation in 1991, shark cage diving was developed (Johnson & Kock, 2006:42). Three methods of ensuring a Great White sighting on a dive trip is identified, namely chumming (baiting), non-chumming and decoy activities (Johnson & Kock, 2006:42). The first method, chumming, involves a mixture of fish-based products that is tethered to a cage diving boat by a rope, which drags behind the boat in the water, emanating a chum slick in the water (Johnson & Kock, 2006:42). Sharks are then enticed to approach the cage, which is immersed in the water just below the surface (Johnson & Kock, 2006:42).

The second method, non-chumming activities, involves less invasive methods, such as observing the natural predatory activity at a particular site (Johnson & Kock, 2006:42). Vessels patrol the area, in search of natural predations and upon detection the vessel will move closer to the shark to provide photographic, videography and viewing opportunities (Johnson & Kock, 2006:42). South Africa has multiple sites where sharks are located through non-chumming activities, including Seal Island and False Bay (Johnson & Kock, 2006:42). The third method involves a decoy, usually a seal-like shape, being dragged behind the boat to induce a simulated breaching attack by the Great White shark (Johnson & Kock, 2006:43).

South Africa's legislation only permits five locations to actively participate in shark cage diving activities, including Seal Island in False Bay, Dyer Island in Gansbaai, Seal Island in Mossel Bay, Quoin Rock in Quoin Point and Algoa Bay in Port Elizabeth (Johnson & Kock, 2006:43; Department of Environmental Affairs, 2017). Map 1.3 shows the geographical locations of the five shark cage diving areas in South Africa.



Map 1.3: Geographical locations of shark cage diving in South Africa
(Source: Wikimedia Commons, 2017)

Gansbaai, being a popular shark cage diving destination has a total of ten operators, each launching a boat in the early morning for the purposes of shark cage diving (Gansbaai.com, 2015), one in Mossel Bay and one in False Bay, resulting in a total of nine licensed operators (Rutzen, 2015; Department of Environmental Affairs, 2017). Many of whom run a research facility on the Great White sharks, its behavioural patterns and aspects of interest (Gansbaai.com, 2015).

1.2.4 Key findings from the literature

For the purpose of this thesis three separate literature analyses were conducted, namely marine tourism management, adventure tourism and sustainability. From the preliminary studies that were conducted, the following aspects can be highlighted as important aspects of discussion.

Firstly, marine tourism management (Chapter 2) is a concept which necessitates research in a South African perspective. Authors such as Orams (2013), Higham and Lück (2008) and Bentz, Dearden and Calado (2013) have conducted research in places such as Australia, New Zealand and Spain on marine tourism and applicable management strategies, however no research could be found from South Africa on this specific topic. Marine tourism management comprises of various elements, including general management and functional management. These management areas are important for the successful management of any operation, but should be adapted for management of the marine tourism sector specifically.

Secondly, adventure tourism (Chapter 3) is a growing sector in South Africa (Giddy & Webb, 2017) and one which is enjoying attention in South Africa especially (Giddy & Webb, 2017; Giddy, 2017; Giddy & Webb, 2015). Adventure tourism can be divided into either hard or soft activities, which can be applied to marine adventure tourism as well. Activities such as whale watching, shark cage diving and snorkelling are classified as soft marine adventure activities, while activities such as surfing, scuba diving and stand-up paddle boarding are classified as hard adventure activities (Van der Merwe, 2009:237; Swarbrooke, Beard, Leckie & Pomfret, 2006:63). Therefore, the adventure activities chosen for this study are both classified as soft adventure activities, because participants are not in need of specific skills and equipment and the perceived risk is higher than the actual risk (Swarbrooke *et al.*, 2006:63).

Thirdly, sustainability comprises of three pillars, namely social equity, environmental conservation and economic efficiency, which have all been discussed in detail (Chapter 4). Each of these pillars should be managed and maintained in order for an operation to be deemed sustainable. Therefore, for the purpose of this research, the viewpoint of the adventure participants, the impacts on the community and the viewpoints of the operators were researched. Furthermore, sustainability is a concept which can be applied to all sectors of the economy, but should be adapted to suit the type of sector in which it is implemented (Coetzee & Saayman, 2009b:131). For this thesis, sustainability is discussed in terms of the marine tourism sector.

From the key findings discussed above, the following diagram can be created. This diagram serves as an indication of what the actual sustainable management framework for marine adventure products comprise.

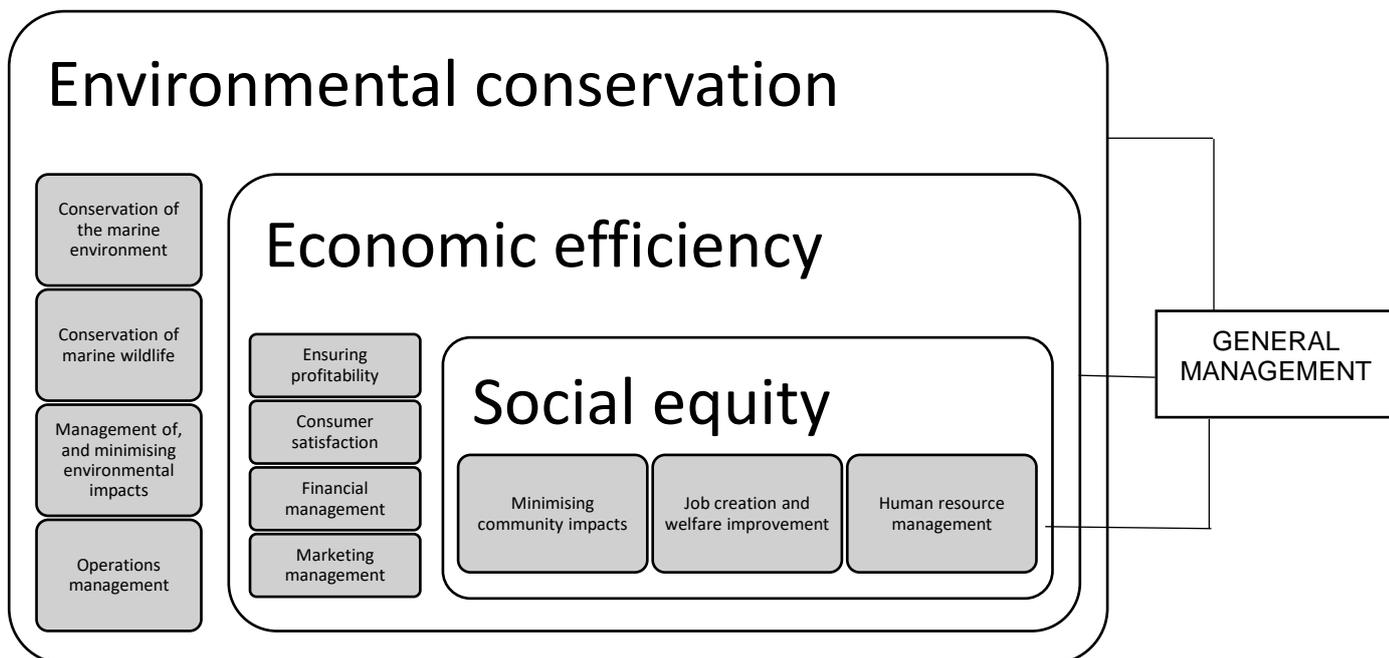


Figure 1.3: Framework for sustainable management of marine adventure tourism products based on the key findings from the literature

(Source: Author's own creation)

1.3 PROBLEM STATEMENT

Viewing and interacting with wildlife in their natural habitat has become an increasingly popular component of the tourism industry (Orams, 2013:481). Not only does it involve land-based wildlife viewing, but also marine-based species such as whales and sharks which form part of marine adventure tourism (Orams, 2013:481; Giddy, 2017:351). One of the most important reasons to the rapid growth in marine wildlife adventure tourism is that humans are fascinated by marine animals (whales and sharks) and want to have a close-up experience with the creatures that trigger their interest (Orams, 2000:562; Cater, 2010:133). The consequences of this is a growth in demand for marine wildlife and adventure tourism operators that provide marine tourism products to the ever-growing demand (Cater 2010). However, the extent to which such marine adventure tourism activities are economically sustainable, their impact on local communities and the marine environment is not clear (Reynolds & Braithwaite, 2001:40). If either one of the following are ignored, namely the marine tourist's experience, the marine tourism operator, the local community and the environment, sustainability of such industry becomes questionable (Reynolds & Braithwaite, 2001:31).

Although whale watching and shark cage diving have been researched in South Africa regarding movements and group behaviour of whales, socio-economic aspects of shark diving, whether or not shark cage diving activities are contributing to shark conditioning, seasonal fluctuations in

occurrence of whales, issues surrounding the introduction of state regulation of the shark diving industry and environmental factors contributing to temporal distributions of whales (Levy, 2017; Barendse & Best, 2014; Penny, Cockroft & Hammond, 2011; Dicken & Hosking, 2009; Johnson & Kock, 2006; Dobson, 2006), it is still lacking extensive information regarding the sustainability of these two marine activities (Techera & Klein, 2013:25; Rhormens, Pedrini & Ghilardi-Lopes, 2017:2). Poor management of the sector is clear, as indicated by reports of illegal activities in whale watchign and shark cage diving (Inadequate information pertaining to frameworks and guidelines for sustainable management of marine adventure tourism, along with the lack of enforcement, are identified as being responsible for various negative tourism impacts in the sector, such as underestimating the distance between the animal and the vessel, unsupervised tourist behaviour, and illegal activities (Trave, Brunnschweiler, Shaeves, Diedrich & Barnett, 2017;216). Furthermore, the lack of a clear and specified framework and guidelines is liekly to result in a decreased efficacy of management tools (Traveller24, 2017).

By establishing a sustainable management framework, it can aid operators in their mission to manage the long-term sustainability of these activities (shark cage diving and whale watching). Therefore, the problem this research would like to address is to develop a sustainable management framework for marine adventure tourism products, specifically for shark cage diving and whale watching.

The following section highlights the goals and objectives which would enable the researcher to answer the research question as stated above.

1.4 GOALS AND OBJECTIVES

The following section states the goal and objectives set for this study.

1.4.1 Goal

To develop a sustainable management framework for marine adventure tourism products in South Africa specific for shark cage diving and whale watching.

1.4.2 Objectives

The following objectives are set to reach the goal of the study.

1. To critically analyse existing literature reporting on marine tourism. This aids in understanding the marine tourism sector and contributes towards the establishment of a sustainable management framework for marine tourism products.
2. To analyse existing literature pertaining to adventure tourism and to offer insight into this sector. The analysis aims to define the term adventure tourism, discuss concepts and theories pertaining to this sector, discuss the types of adventure tourism, identify the characteristics of adventure tourists and the motives of these tourists.

3. To analyse literature regarding sustainability management of marine tourism. This analysis further contributes towards the establishment of a sustainable management framework for marine adventure tourists through analysing the three E's: environmental conservation, social equity and economic efficiency.
4. To discuss the empirical results, as obtained from the data collected, in order to establish a sustainable management framework for the marine adventure tourism sector of South Africa. This framework aids operators in ensuring economic efficiency, social equity and environmental conservation.
5. To draw conclusions and make recommendations regarding the marine adventure tourism sector. Conclusions were drawn from the literature reviews (chapters two, three and four) and the empirical results (chapter five). Comparisons were also drawn between previous literature and the empirical results in order to identify any areas of significance. The sustainable management framework for marine adventure tourism products was developed based on the literature and empirical results. The model was discussed and the significance was analysed. The contributions of this thesis, the limitations of the research as well as future research opportunities were addressed.

Meeting these objectives ensured that all aspects of sustainability within marine adventure tourism was analysed in order to produce an effective framework.

1.5 METHOD OF RESEARCH

Seeing as this study reports on both the literature review pertaining to marine wildlife tourism as well as an empirical study, the following section discusses the method of research to be followed in order to reach the set goal.

1.5.1 Literature study

For the literature review, the focus was placed on secondary data sources that reported on concepts such as travel motives, willingness to pay and experiences. The literature review was performed by means of an Internet search of various academic sources, such as academic journal articles, Google Scholar as well as the Ferdinand Postma Library at the North-West University's Potchefstroom Campus. Furthermore, the World Wide Web, full-text databases (such as EBSCOhost Publishing, Emerald, Academic Search Premier and ScienceDirect) and theses and dissertations from various universities were consulted to have the full impact of literature available surrounding the concepts of importance for this study. Through these resources a clear analysis of the key aspects relating to marine tourism was conducted.

The concepts that were reported on include management of marine tourism, adventure tourism and sustainability. An in-depth analysis regarding management of marine tourism was conducted concerning relevant literature in the field. An in-depth analysis was conducted regarding adventure tourism to analyse all existing sources within this field of research which have been produced across

the world. The concept of sustainability was critically analysed with specific reference to the three E's: environmental conservation, social equity and economic effectiveness.

Since both an intensive literature study as well as an empirical study was conducted for this research both primary and secondary sources were incorporated. The primary data was collected by means of a structured, self-administered questionnaire facilitated to tourists taking part in whale watching trips and shark cage dive adventures and residents of Hermanus. Qualitative research was also conducted by interviewing owners and managers of whale watching and shark cage diving operators.

1.5.2 Empirical survey

The following section discusses the method of research which was followed in order to effectively conduct the empirical analysis of this study.

1.5.2.1 Research design and method of collecting data

For this study both quantitative and qualitative methods were used. A quantitative approach is in the form of distributing two self-administered questionnaires to tourists partaking in whale watching or shark cage diving trips and the residents of Hermanus to determine the social impact of marine tourism activities. Qualitative is used through personal interviews that were conducted with marine adventure operators (shark cage diving and whale watching) in order to collect data regarding their management of operations. The data collected from the surveys and interviews were problem-specific to the research topic and were structured around the key concepts, namely demographic questions, determination of experiences, willingness to pay of tourists to contribute to conservation of sharks and whales, as well as the sustainability and ethical viability of the sector.

Quantitative research methods can be defined as the collection of data involving larger, more representative samples and the numerical calculation of results (Wiid & Diggines, 2015:95). This method holds many advantages for the researcher, as was identified by Slabbert (2004:36) and Maree and Pietersen (2008:155):

- Data accuracy is ensured through large enough samples
- Demographic information such as age, gender, home language and income is collected by means of a structured questionnaire
- Quantitative research is less expensive than other research methods
- Tabulation and analyses of the data is relatively easy to do using statistical software programmes.

Qualitative, on the other hand, is less structured and consist of smaller sample sizes due to the detail of the data collected (Bryman, Bell, Hirschohn, Dos Santos, Du Toit, Masenge, Van Aardt & Wagner, 2014:37). Qualitative data makes use of detailed descriptions by respondents on a specific topic which helps the researcher gain deeper insight into the problem (Bryman *et al.*, 2014:37). Wiid and Diggines (2015:96) drew a comparison between qualitative and quantitative techniques which helps

to identify the differences between the two research methods. The following table shows this comparison (Wiid & Diggines, 2015:96):

Table 1.1: Comparison between qualitative and quantitative research methods

Comparison dimension	Qualitative	Quantitative
Types of research questions	Probing	Non-probing, more straight forward
Sample size	Small	Large
Amount of information extracted from the respondent	Much information is extracted	The amount of information extracted varies
Administration	Interviewers with special skills are needed	Fewer special skills are required of interviewers
Type of analysis	Subjective, interpretive	Statistical, summarisation
Hardware required	Tape recorders, projection devices, video, pictures, discussion guides	Questionnaires, computers, printouts
Ease of application	Difficult	Easy
Researcher training necessary	Psychological, sociological, social psychology, consumer behaviour, research	Statistics, decision models, decision support systems, computer programming, research
Type of research	Explorative	Descriptive or causal
Validity	High	Low
Data presentation	Words	Numbers
Researcher involvement	Researcher learns more by participating and/or being immersed in the research situation	Researcher is ideally an objective observer who neither participates in nor influences what is being studied

(Source: Wiid & Diggines, 2015:96)

The comparison clearly highlights the fact that qualitative and quantitative research methods differ greatly from each other. In order to gain insight on all levels of the research problem for this thesis, which is the necessity of a sustainable management framework for marine adventure tourism products in South Africa, both methods have been employed. By employing both research methods, the researcher was able to gain deeper insight into the management operations of shark cage diving and whale watching through the qualitative method, while the quantitative method ensured the participants' and community members' viewpoints are considered as well.

Furthermore, as the table indicates, research designs can be either causal, descriptive or exploratory. The purpose of a casual study is to indicate causality between variables or occurrences, therefore the aim of casual research is to indicate cause and effect between the dependent and independent variables (Bryman *et al.*, 2014:37). Descriptive research is defined as a statistical method that is used to identify patterns or trends in a particular situation, but does not rely on the causal links between the elements (Maree, 2007:183; Gravetter, Wallnau & Forzano, 2016:6). Exploratory research is employed as a means of exploring an unknown area and is necessary when more information and insight is needed about the research problem (Gravetter *et al.*, 2016:6).

For the purpose of this study, descriptive and exploratory research designs were utilised. A descriptive design was employed to describe the marine adventure tourism sector accurately and thoroughly. This involved both the community members and participants. In order to establish an effective sustainable framework for the sector, it is necessary to know and understand the impacts that whale watching and shark cage diving have on the community (Fennell, 2007:47). It is also necessary to understand the market and what they want (Page & Connell, 2009).

The exploratory research design was employed as a means to conduct qualitative research. An effective sustainable management framework should also address the viewpoints of the operators, what management structures are in place, what sustainable practices are in place and what should be done to improve these structures. Therefore, exploratory research was implemented to gain deeper insight into the sector and to determine the priorities of the sector (Wiid & Diggins, 2015:66; Saunders, Lewis & Thornhill, 2016:174).

For the quantitative survey two questionnaires were distributed. Questionnaire A (Marine adventure participants) was distributed to both shark cage divers and whale watchers. Both groups answered the same questions to ensure that an accurate depiction of the homogeneity of the groups are identified. These questions related to the profiles of the sectors, the experiences of tourists, the economic spending, willingness to pay and their perceptions of the sustainability of the sector. Questionnaire B (Social impact of the Hermanus Whale Festival) was facilitated to the residents of Hermanus in order to gain insight into the perception of the community regarding marine adventure tourism products.

The qualitative survey was conducted by utilisation of a discussion guide. Personal interviews were conducted with marine adventure tourism operators of whale watching and shark cage diving operations in both Hermanus and Gansbaai. The operators who were interviewed were selected based on their willingness to participate.

1.5.2.2 Sample

Two separate quantitative surveys were conducted for the purpose of this study, namely the survey on adventure participants and community impact survey. Qualitative research was also conducted

in the form of personal interviews. The sampling method employed for each survey is discussed below.

1.5.2.2.1 Adventure participants (whale watching and shark cage divers)

A non-probability sampling method with convenience sampling was implemented to target the most appropriate sample of shark cage divers and whale watchers and to ensure the accuracy of data. Non-probability sampling can be defined as any given situation where the probability of a member of the targeted population being included in the sample is not guaranteed but is purely based on personal judgement of the researcher or convenience (Mostert & Du Plessis, 2007:68). Furthermore, Mostert and Du Plessis (2007:68) state that convenience sampling is based on the premise that members of the population are accessible and readily available at the specific time when the survey is conducted. Therefore, convenience sampling was identified as the most appropriate sampling method because participants in both activities are readily available and accessible to the researcher at the location where the activities are offered, during the given time of the survey.

Fieldworkers were trained and informed about the nature of the questionnaires and how they should approach the respondents in order to get optimal results. Each fieldworker received a specific number of questionnaires which he or she had to hand out and collect after the respondent has completed it.

Approximately 300 questionnaires were needed for this research to be viable, allowing for a 5% margin of error. Krejcie and Morgan (1970:607) and Singel (2002) state that where a population of 1 000 000 is concerned, a total of 380 questionnaires are sufficient. Based on these guidelines and the assumed population of 250 000 whale watchers and shark cage divers per season, a total of 300 questionnaires is seen as sufficient (Evans, 2013). Therefore, a total of 350 questionnaires were distributed amongst shark cage dive- and whale watching participants. In the end a total of 303 usable questionnaires were obtained. A total number of 18 marine adventure tourism operators were approached (14 shark cage operators and 4 whale watching operators). Out of all the operators available, only four operators were willing to participate in the survey, therefore four operators were identified for this survey, namely Great White Shark Tours and Marine Dynamics in Gansbaai and Hermanus Whale Cruises and Southern Right Charters in Hermanus.

1.5.2.2.2 Community of Hermanus

Regarding the community survey, the same sampling method was followed as with the survey on marine adventure participants. Therefore, a non-probability sampling method with convenience sampling was utilised. This method was employed in order to attract as large a sample as possible as all members of the community included in the survey were available to the researcher at the given time. Members of the community were approached by fieldworkers to complete the questionnaires.

Hermanus hosts a total population of 49 000 residents (Hermanus.co.za, 2017). Based on the guidelines established by Krejcie and Morgan (1970:607) a total of 250 questionnaires were sufficient for this research, allowing for a 5% margin of error (Krejcie & Morgan, 1970:607; Singel, 2002). In contrast to this, Barnett (1974:35) established an equation that can be used to calculate the sample size, where n is the sample size, N is the population and d^2 is the percentage within which probability is estimated. If probability for this study is calculated at 0.95, N is 49 000 and d^2 is 25. Therefore, the total number of questionnaires necessary for this survey is 397. This number has not been achieved due to unwillingness from community members to participate in the survey. The number of questionnaires collected (250) were, however, all usable.

Fieldworkers were trained and informed about the nature of the questionnaires and how they should approach the respondents in order to get optimal results. Each fieldworker received a specific number of questionnaires which he or she had to hand out and collect after the respondent has completed it.

If any questions were asked which the fieldworker was not able to answer, the researcher was on site to answer any questions. The following factors were taken into account for both surveys (community and marine adventure participants) when potential respondents were approached (Steyn, 2010:89; Neumann, 2006:29; Rosseau, 2003:31; Schiffman, Kanuk & Wisenbelt, 2010:58; Strydom, 2007:192):

- Participation in the survey was voluntary and respondents dedicated their time to the completion of the questionnaire willingly
- The questionnaire was kept anonymous and respondents could withdraw from the survey at any given time
- The purpose of the research was stated clearly before the questionnaire was completed
- The apprehension of failure was removed by informing respondents that there are no wrong answers to the questions
- The fieldworkers were respectful towards respondents at all times and a relationship based on trust, cooperation and mutual trust was built.

1.5.2.2.3 Personal interviews with the operators

In terms of the qualitative collection of data, qualitative research was employed, with non-probability sampling and more specifically, by implementing purposive sampling techniques. According to Palys (2008:1) purposive sampling is synonymous with qualitative research and is characterised by the researcher being able to use judgement to attain a representative sample (Jennings, 2001:139). Purposive sampling is effective in terms of convenience. Purposive sampling, furthermore suggests that the researcher has chosen respondents in a strategic manner to ensure that only those relevant to the study is included (Brymann, Bell, Hirschon, Dos Santos, Du Toit, Masenge, Van Aardt &

Wagner, 2014:186). For the purpose of this study only respondents who are managing a whale watching or shark cage diving operation or who own one have been contacted.

The population consisted of all shark cage dive and whale watching operators in Gansbaai, Mossel Bay, False Bay and Hermanus. As mentioned previously merely four operators out of a total of 18 in Hermanus, Mossel Bay, False Bay and Gansbaai were willing to participate in the survey, therefore four personal interviews were conducted. Interviewees included the owners of Great White Shark Tours, Marine Dynamics, Southern Right Charters and Hermanus Whale Cruises. The interviews were conducted by the researcher by means of recording, at the operators' respective properties.

1.5.2.3 Development of measuring instruments

Two separate questionnaires were designed for the quantitative research, while 18 questions were established for the qualitative interviews. Two different groups of stakeholders were targeted, namely participants in whale watching and shark cage diving and local community members, allowing for the two different questionnaires. The questionnaires were developed based on previous research from Yolal, Gursoy, Uysal, Kim and Karacaoglu (2016), Geldenhuys, Van der Merwe and Slabbert (2014), Daldeniz and Hampton (2013), Saayman and Slabbert (2004), Oberholzer, Saayman, Saayman & Slabbert (2010) and Reynolds and Braithwaite (2001).

Quantitative

Questionnaire A: adventure participants (whale and shark cage diving)

Section A contained demographic details such as age, gender, home language and marital status. The data from this section of the questionnaire was used to determine the market profile for marine adventure tourists (Geldenhuys *et al.*, 2014).

Section B contained socio-economic details such as spending on certain aspects (accommodation, food and beverages) during their trip as well as the size of the travel group and number of nights spent in the area. This section also included aspects regarding willingness to pay for the protection and conservation of the animal. A Likert-scale type question regarding motives to participate (where one represents "I do not agree at all" and five represents "I agree completely") was asked, containing concepts such as to get away from a routine, to spend time with friends and family, to photograph marine life and to experience thrill and excitement (Saayman & Slabbert, 2004).

Section C reported on the experiences and satisfaction levels of tourists, including tourists' feelings and memories and a Likert-scale type question (where one represents "I do not agree at all" and five represents "I agree completely") containing aspects such as the uniqueness of the experience, duration, intensity and control and management aspects of the activity (Reynolds & Braithwaite, 2001). Respondents had an opportunity to make any other recommendations or comments.

According to Cooper (2010:8) it is very important for the researcher to conduct a pilot study to make sure that all objectives of the research is met and to identify and eliminate any errors with the instrument. This was achieved by distributing ten questionnaires amongst tourists participating in whale watching and shark cage diving. This aided the researcher in identifying any errors with the questionnaire, such as language errors, numbering errors, errors with questions and sampling errors. The responses of these ten tourists are captured and reported on in Chapter 5. For ethical purposes all questionnaires were kept anonymous.

Questionnaire B: community impact (residents of Hermanus)

Section A: Demographic details such as age, income bracket, gender, home language and marital status were asked. Other questions such as amount of years respondents was part of the local community and job occupation were also asked. Respondents had to indicate their answers from a list provided with each question that was based on various Likert scales (Oberholzer *et al.*, 2010).

Section B: This section included attitudinal questions (for example, participation in whale watching and shark cage diving activities); and opinion questions, concerning physical, biological, environmental, personal, social, cultural, economic and values factors related to marine adventure tourism products. The social impact of both the Hermanus Whale festival and the marine adventure activities were measured. Respondents were also offered the chance to make recommendations regarding the sector for marine adventure tourism products (Yolal *et al.*, 2016).

The pilot study was conducted before the community impacts survey was conducted by asking the organisers of the Hermanus Whale Festival to complete the questionnaire. The reason for asking the organisers was due to the fact that the survey aimed at identifying the impacts that whale watching activities have on the community. The festival organisers were also interested in the results from the survey. The organisers were therefore given an opportunity to make recommendations and give their inputs on the questionnaire, as well as to comment on the length of the questionnaire and user-friendliness.

Qualitative

Personal interviews: marine adventure tourism operators

These interview questions were developed for operators and owners in the sectors for shark cage diving and whale watching. Operators and owners were asked questions pertaining to the three principles of sustainable management, namely economic efficiency, social equity and environmental conservation, as indicated below:

- Economic efficiency: the length of time they have been established in the sector, how many boats they have in operation as well as the number of staff members they have employed, social equity, the average price per person per trip (Daldeniz & Hampton, 2013).

- Social equity: training provided for staff, relationship with the Hermanus Whale Festival and what the operation is doing to educate people on whales, sharks and the marine environment (Daldeniz & Hampton, 2013).
- Environmental conservation: sustainable practices their company implements and which practices, in their opinion, might be improved, or which practices should be implemented (Daldeniz & Hampton, 2013).
- Marketing: they were asked about marketing activities and methods used, website operations, the target market they serve and whether any marketing shows are being attended (Daldeniz & Hampton, 2013).

The reason for the personal interviews were to establish the viewpoint of operators in terms of sustainability of the sector by incorporating all three elements of sustainability (economic efficiency, social equity and environmental education). The discussion guidelines for the interviews were previously used by Daldeniz and Hampton (2013) and Lucrezi, Saayman and Van der Merwe (2013). It was therefore not necessary to test the questions again.

1.5.2.4 Survey

The survey was divided into three sections, namely the survey on whale watching and shark cage diving, the social community of Hermanus and the personal interviews with the operators and owners of shark cage diving and whale watching operations.

1.5.2.4.1 Adventure participants (whale and shark cage divers)

The first survey, which was quantitative in nature and took place at various locations, specifically four operators that gave permission for the survey to be conducted at their premises. Four operators in Gansbaai and Hermanus were identified and approached with the request of accessing their clientele. Potential respondents who participate in these trips were approached by fieldworkers. All fieldworkers were trained beforehand on the goals and objectives of the research and how to approach potential respondents.

Gansbaai is famous for the numerous Great White sharks that reside in the waters just off Danger Point Peninsula (Gansbaaiinfo, 2015). Gansbaai was founded as a small fishing village on the Cape Whale Coast in the Western Cape Province and is still seen as that by local residents (Gansbaaiinfo, 2015). The fishing sector is the economical drive force in this little town, despite of the rapidly developing tourism industry (Gansbaaiinfo, 2015). The major tourism activity taking place in Gansbaai is shark cage diving and tourists flock from all over the world to experience the thrill of an up-close encounter with a Great White shark (Gansbaaiinfo, 2015).

Participants of shark cage diving could be accessed on any given time during the year because this is not a seasonal activity, as is the case of whale watching. Whale watching operators are only operational during spring months (August to November) when the whales are on the South African

coastline (Johnson and Kock, 2006:40). Therefore, this survey was conducted over the period of the Hermanus Whale Festival, during the first weekend in October 2016. This allowed for large numbers of whale watching participants to be approached for survey purposes.

1.5.2.4.2 Community impacts

Secondly, a social community survey was conducted which targeted the local community of Hermanus. The survey was quantitative in nature. This ensures that research was conducted on all three legs of sustainability, namely economic efficiency, environmental conservation and social equity (Bostrom, 2012:3). The survey was conducted through the distribution of self-administered questionnaires, employing a descriptive research design. These questionnaires were distributed by fieldworkers, whom received training beforehand regarding the goals and objectives of the research.

Hermanus was chosen as the location for the community impact survey because this is where the Hermanus Whale Festival is held annually, as well as the fact that this town is where the majority of whale watching activities take place along with shark cage diving activities. The festival is in celebration of the Southern Right Whales along the South African coastline, and focus is placed on whale watching activities (Hermanusonline, 2015). The specific time of the festival was chosen as the time frame for the survey because the social impacts of both the festival and marine adventure activities are measured by the questionnaire. The coastal town near Cape Town, is situated along the Cape Whale Route 120 kilometres from Cape Town International Airport (see map 1.2 under section 2.2) (Hermanusonline, 2015). Known as the land-based whale watching capital of the world, Hermanus is famous for the Southern Right Whales who inhabit the coastal waters of the town from June to November each year (Hermanusonline, 2015). Tourists are exposed to a mild climate, long stretches of sandy beach and an abundance of bird and marine animal life (Hermanusonline, 2015). Marine life in the area, other than the Southern Right Whale, include Great White sharks, African Penguins, Cape Fur Seals and Dolphins, the complete Marine Big Five (Hermanusonline, 2015).

1.5.2.4.3 Personal interviews (qualitative)

The qualitative survey, which aimed at collecting qualitative data from the marine adventure tourism operators was conducted through personal interviews. The researcher asked each operator to give his opinion on a series of questions (as stipulated in questionnaire B) by the researcher. A total of four interviews were conducted with shark cage diving operators and whale watching operators (as stated in section 1.6.2.2), as these operators were the only operators willing to participate in the survey. Operators were asked to respond to questions in relation to their expertise in the sector and sustainability issues. The interviews were conducted over the period of the Hermanus Whale Festival, during the first weekend in October 2016.

1.5.2.5 Empirical Results

The data on all three surveys were captured in Microsoft Excel®, after which the statistical services of the North-West University, Potchefstroom, was approached for processing the data. The data was analysed with the software Statistical Package for Social Sciences (SPSS, 2017). By processing the data, the researcher was able to interpret the information and report on the findings in chapter five of this thesis. The steps taken to analyse the data in Chapter 5 included 1) analysis of qualitative results, 2) analysis of community impacts, 3) analysis of marine adventure participants and 4) a cluster analysis and cross-tabulations.

1.5.2.5.2 Quantitative results

Descriptive statistics and frequency tables were utilised in order to determine the profile of the residents and marine adventure participants by analysing the demographic details captured. The environmental and social impacts of whale watching and shark cage diving were determined through an exploratory factor analysis (EFA) and three factors came to light, as discussed in Chapter 5.

EFA's were then used to determine the motives, experiences and satisfaction of participants of whale watching and shark cage diving. Three community impacts were identified, while four motives to participate and five factors contributing to participants' experience were identified.

Furthermore, a one-way analysis of variance (ANOVA) was conducted on the motives of marine adventure participants. A hierarchical cluster analysis, with Ward's methods of Euclidian distances and Tukey's honest significance test was therefore used to identify six clusters of participants in whale watching and shark cage diving. Cross-tabulations were drawn between the demographic details (dependent variable) and the six clusters (independent variable) in order to further define the six different clusters for these activities.

In the following section a description of each of the tests used in order to achieve the goal of this study is provided.

Descriptive statistics and frequency tables

According to Kleinbaum, Kupper, Nizam and Rosenberg (2014:17) a descriptive statistic can be defined as a single numerical measurement computed from a set of data, designed to describe a particular aspect, or characteristic, as is the case in this study, of the data set.

A frequency table, on the other hand, is used to indicate the count and percentage of the categories or variables (Bryman *et al.*, 2014:318). A frequency table would list the different categories, or variables, with an indication of the number of respondents and the percentage for each category. The percentage and number of respondents in each category therefore indicates the frequency with which respondents' answers are classified in each category (Bryman *et al.*, 2014:318).

Exploratory factor analysis (EFA)

According to Child (2006:1), a factor analysis is defined as an “orderly simplification” of measures which are interrelated through the use of mathematical procedures. In addition, Kim and Muller (1978:11) state that factor analyses are used for exploratory or confirmatory research, seeing as an EFA groups data together, in categories, which are specific to certain factors. In essence, an EFA is seen as a way to simplify the research process by lessening the data with which the researcher should work (Child, 2006:1). A factor analysis is used for three main reasons (Gerber & Finn, 2013:254; Malhotra, Mavondo & Hooley, 2013:622; Malhotra, 2007:610):

- To examine a set of variables that are grouped under specific factors and therefore determining the correlation between those variables
- To identify a smaller set of uncorrelated variables which can replace the original set
- To determine a manageable number of variables from a larger set of variables to use in following analyses.

For the purpose of this research, an exploratory approach was followed in determining the motives of participants, experiences and community impacts. Exploratory research is defined by Davies and Hughes (2014:12) and Bradley (2007:38) as a way in which research is conducted to discover the existence of patterns, factors, or components that is not based on previous knowledge. The findings are therefore new and ‘explored’ for the first time. The use of EFAs therefore aids this study as it contributes to achieving a greater understanding of what motivates marine adventure participants to participate in the activity, what determines their experiences and what drives the impacts of tourism on the local community.

Analysis of variance (ANOVA)

An analysis of variance (ANOVA) is described as a test used to analyse the variance between group means to determine whether or not the means differ (Swanepoel, Swanepoel, Van Graan, Allison, Weideman & Santana, 2015:353). Another definition offered for ANOVA is the use of the dependent variable to examine its mean value in comparison with the independent variable’s mean value, which is furthermore predicted from the levels of knowledge of the independent variable (Malhotra *et al.*, 2013:521; Cooper & Schindler, 2006:454).

An F-ratio is used to identify the variance between the groups of variables (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). The independent variable will influence the variability between the groups and the larger the F-ratio is, the greater the variability between the groups will be (Swanepoel *et al.*, 2016:359). A small variance between the independent variables will be indicated by the F-ratio being greater than one ($F > 1$). An F-ratio smaller than one, however, indicates that there is no significance between the variables. This is due to the error variance being larger than the variance as a result of the manipulation of the independent variable (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). A large F-ratio would therefore have a significant effect on the variables

compared to one another. The F-ratio being equal to or smaller than one ($F \leq 1$) would therefore indicate no significance between the variables (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). A significant difference, however, is indicated by the F-ratio being equal to, or smaller than 0.05 ($F \leq 0.05$) (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

In terms of this research, a post hoc test was conducted to determine whether or not any significant differences can be identified between the groups of factors analysed, such as the impacts of marine adventure tourism, motives to participate and experiences. Tukey's Honestly Significant Different test (Tukey's HSD test) was used to determine the differences between the groups (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

Tukey's HSD test is based on the honestly significant difference test, where the q-distribution ensures the largest set of mean differences of the same population are evaluated by making use of similar sampling distribution (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

Statistical significance

Tests are conducted to determine whether or not results are statistically significant. This helps the researcher to determine whether or not results can be generalised to the population from which the sample was taken (Bryman *et al.*, 2014:325). Furthermore, statistical significance also determines how confident the researcher can be that the finding exists in the population and the risk taken in suggesting that the finding exists in the population (Bryman *et al.*, 2014:325). Confidence and risk is therefore the core components of statistical significance. The level of statistical significance is, therefore, the level of risk that a researcher is prepared to take when suggesting that a finding exists in the population. The conventional level of risk taken in suggesting the finding does exist in the population is five chances in one hundred (5:100) that the researcher might falsely make such a suggestion. This indicates that in the case of one hundred samples drawn, five of those samples might exhibit a relationship that does not exist in the population. The sample drawn from the population might be one of those five samples, but the risk is relatively small (Bryman *et al.*, 2014:325).

The level of significance is indicated by means of probability (p) being smaller than 5 in 100 samples ($P < 0.05$). If the researcher suggests that $P < 0.1$, it is therefore indicated that the researcher accepts the possibility that ten in one hundred samples might show a relationship where none exists in the population (Bryman *et al.*, 2014:325). For the purpose of this research the probability is accepted to be five in 100 samples ($P < 0.05$). An example of a test used to determine the statistical significance of a finding is the chi-square test, which is discussed below.

The chi-square test

The chi-square test is used to indicate the level of confidence in whether or not a relationship exists, or an association can be made, between two variables (Bryman *et al.*, 2014:327). The test is based on the cross-tabulations of two variables, for example the cross between gender and motives to

participate in marine adventure activities. The chi-square test would, therefore, indicate whether a relationship exists between gender and motives (Bryman *et al.*, 2014:327).

The chi-square can be determined by an easy calculation that involves adding up the differences between the actual and expected values for each cell in the table (Bryman *et al.*, 2014:327). The expected value of the cell is what would occur if no relationship exists between the variables used. A chi-square value can further be interpreted by its level of statistical significance. Whether or not a chi-square value is statistically significant is dependent on its magnitude and the number of categories of the two variables being measured (Bryman *et al.*, 2014:327).

Qualitative data analysis

The interviews with owners and operators of shark cage diving and whale watching operations were audio recorded at the operators' respective properties. The interviews lasted between 40 and 60 minutes and were transcribed verbatim by a third party in Microsoft Word ©. The four operators' responses were compared and the similarities or differences were identified.

Operators were asked 18 questions relating to demographic details of the operation, marketing related issues, sustainability issues and managerial issues. The results are discussed in Chapter 5. A thematic analysis technique was employed to identify, analyse and describe patterns or themes (Bryman *et al.*, 2014:350). Thematic analysis is similar to the concept of content analysis, but is focussed on identifying meaning in a particular context (Bryman *et al.*, 2014:350). With this technique it is important for the researcher to use informed judgement on what is important and what is not.

Braun and Clarke (2006:96) suggest five steps for implementing thematic analysis. These steps have been implemented for the purpose of this thesis and is set out as follows:

- Transcription: The interview is transcribed with an appropriate level of detail and checked against the recording for accuracy
- Coding: All data items have been studied carefully, themes have been identified and extracts have been collated
- Analysis: The data have been analysed so that it makes sense, rather than being paraphrased or described
- Overall: Enough time was spent analysing the data and each phase of the analysis was given equal attention
- Written report: The written report contains the themes identified as important and a discussion on the relevant results subtracted from the data. The written report for this study is conducted in Chapter 5, section 5.2

1.6 DEFINING THE CONCEPTS

The following section provides a description of key concepts that are discussed throughout this chapter and which is applicable to the remainder of this thesis.

1.6.1 Marine adventure tourism

Adventure tourism has seen an immense increase in interest amongst tourists in recent years (Swarbrooke *et al.*, 2003). It is necessary to first define the term 'adventure tourism' and to understand the concept it consists of before the term 'marine adventure tourism' can be fully understood. According to George (2014:216) and Williams and Soutar (2009:418) adventure tourism refers to any leisure activity taking place outdoors and it contains elements of personal risk, adrenaline rushes, challenges and excitement. Even though the market for adventure tourism may seem homogenous, it is a widespread sector which encompasses a variety of different sectors and characteristics (George, 2014:215). Activities included in the adventure tourism sector is wildlife-based tourism, shark cage diving, scuba diving, whale watching, snorkelling, horse-back riding, abseiling, white-water rafting, off-road driving, ballooning, mounting climbing, caving, cycling, bungee jumping and skydiving (George, 2014:216). It is clear that many marine activities fall under the category of adventure tourism. Therefore, marine adventure tourism activities are those activities where the participant is exposed to high levels of actual or perceived risk, is personally challenged and experiences a rush of adrenaline. In both cases of whale watching and shark cage diving these elements are evident.

1.6.2 Marine wildlife tourism

Wildlife tourism is defined as viewing and interacting with wildlife in a natural setting, where tourists rely on a tour operator to predictably find wildlife and to provide a way for tourists to clearly view these animals along with their behavioural aspects and biology (Higginbottom, 2004:3; Orams, 2013:481). The range of settings where this definition is applicable varies on a continuum ranging from zoos to wilderness parks, natural forests, the ocean and remote natural areas (Valentine & Birtles, 2004:15; Orams, 2013:482). It is within this definition and along this continuum where marine wildlife tourism is located. Marine wildlife tourism includes various activities where the viewer experiences one of the ocean's animals in its natural setting, such as shark cage diving, whale watching and dolphin viewing (Orams, 2013:482).

1.6.3 Tourist experiences

The experience which a tourist gains from taking part in a certain activity has an immense impact on the overall satisfaction drawn from the activity (Saayman, 2009:92). The tourism experience is made up of certain facets, namely the beginning of the journey, services experienced at the destination, tourism activities and the journey back home (Triantafillidou & Petala, 2016:68). Although the experience is a major influencer on the tourist's total satisfaction, certain factors has an impact on

the experience of the tourist, for example the tourist's attitude towards the activity or service beforehand, the tourist's perception of the service, expectations formed, the desired outcome as well as the quality of the performance by the operator (Saayman, 2009:93).

1.6.4 Sustainable management

Sustainability is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987:7). Development within the tourism sector impacts on three different areas, namely economic, social and environmental. Within this context, development should be sustainable in order to ensure that future generations have access to all the resources we enjoy today (Coetzee & Saayman, 2009a:124). According to Choi and Sirakaya (2005) sustainable tourism development should contribute towards the upliftment of community members' quality of life, it should benefit the economy, it should offer protection benefits for the environment as well as offer tourists a high-quality experience. Therefore, three arguments can be highlighted within the scope of sustainability:

- sustainability is a long-term strategy for the protection and conservation of the environment;
- it should hold both inter- and intra-generational welfare benefits; and
- it should be perceived as universally valid that sustainability does not take into account the country's level of development, socio-cultural or political conditions, but rather focus on conducting whichever development takes place as sustainable as possible.

When taking the above-mentioned into account, the importance of sustainable management becomes apparent. Sustainable management is based on three concepts, namely economic efficiency, environmental conservation and social equity (Coccosis, Edwards, & Prieslty, 1996). Once these concepts are addressed within a managerial scope sustainability can be ensured for the environment, economic impacts and the social community (Coccosis, *et al.*, 1996).

1.6.5 Framework

The Merriam-Webster Dictionary defines a framework as a "basic conceptual structure (as of ideas)" (Merriam-Webster Dictionary, 2017a). The Oxford Dictionaries define framework as "a basic structure underlying a system, concept, or text" (Oxford Dictionaries, 2017). A framework can thus be accepted as a basic structure which can be implemented in a specific field which provides guidelines on certain concepts. For the purposes of this thesis a framework is seen as a basic structure which provides guiding principles on the sustainable management of marine adventure tourism products.

1.7 CHAPTER CLASSIFICATION

The following section provides a brief outline of each chapter. The thesis is divided into a total of six chapters.

Chapter 1: Introduction, problem statement, objectives and method of research: The first chapter of this thesis discussed the background of the study towards developing a framework for sustainability of marine adventure tourism products, focussing on shark cage diving and whale watching. Furthermore, the problem statement along with the objectives and the method of research were highlighted.

Chapter 2: An analysis of marine tourism: This chapter aims to report on aspects of marine tourism, marine wildlife tourism and management concepts of marine tourism. Existing literature is discussed in detail by referring to the what, where, how and why of the literature. Furthermore, concepts and definitions pertaining to marine tourism, wildlife tourism and marine wildlife tourism is discussed. Emphasis is placed on already-existing management frameworks in sectors such as ecotourism, marine tourism and wildlife tourism.

Chapter 3: Adventure tourism: The aim of this chapter is to analyse the definitions, concepts and theories of adventure tourism. This analysis involves a discussion on relevant literature pertaining to the sector as well as identifying the different types of adventure tourism and the characteristics and motives of adventure tourists.

Chapter 4: Sustainable tourism management: The third chapter highlights the literature pertaining to the concept of sustainability. A critical analysis is conducted in order to gain insight into the term 'sustainability', what it means for tourism in general and how it is to be implemented successfully. Concepts that are reported on include social equity, economic effectiveness and environmental conservation.

Chapter 5: Empirical results: In this chapter the empirical results and findings as obtained through the various analyses performed on the data is discussed. The profile of marine adventure tourists is determined, as well as the experiences gained by the sector and aspects contributing to the satisfaction of marine adventure tourists. The results are visually portrayed by means of relevant diagrams, graphs and tables.

Chapter 6: Conclusions and recommendations. This chapter reports on the conclusions drawn from Chapters 2, 3, 4 and 5. Conclusions are drawn based on the literature reviews (Chapter 2, 3 and 4) as well as the empirical results (Chapter 5). The sustainable management framework is drawn up and discussed in this chapter. Furthermore, recommendations are made regarding the enhancement of sustainability for these two sectors, as well as future ventures in the field of marine wildlife and marine adventure tourism. The limitations of the research are also highlighted in this chapter.

Chapter 2

An Analysis Of Marine Tourism

But more wonderful than the lore of old men and the lore of books is the secret lore of the ocean

~H.P. Lovecraft

2.1 INTRODUCTION

Humanity has, since the dawn of time, harboured an interest in the oceans, whether for fishing purposes or leisure (Orams, 1999:3). The ocean makes up a total of 71% of Earth's surface and 97% of the total water mass is contained in the ocean (Hawai'i Pacific University, 2016). According to the Hawai'i Pacific University (2016), merely 1% of Earth's water is fresh water and 99% of the living space on Earth is ocean.

In the case of South Africa, its coastal shoreline is approximately 3 000 kilometres in length, stretching from the mouth of the Orange River bordering Namibia, to the border of Mozambique in Kosi Bay (SAMSA, 2015:6) and therefore borders three provinces of the country (KwaZulu-Natal, Limpopo and Mpumalanga). Marine tourism has been one of the greatest contributors to tourism in South Africa (Hall, 2001:601) and this sector consists of multiple subsectors, such as marine wildlife tourism, marine adventure tourism, leisure and recreation tourism, marine ecotourism and cultural tourism accessed in coastal towns (Orams, 1999:2). These sub-sectors can be divided into two categories. The first category includes those operators or companies who are directly associated with the marine environment (scuba diving, whale watching, shark cage diving, sea kayaking, deep-sea fishing and snorkelling). Secondly, those indirectly associated with it include companies that are not solely dependent on the marine environment but whose livelihood is associated with it (such as boat maintenance companies, coastal resorts, suppliers of scuba equipment, windsurfer and surfboard rental agencies, fishing equipment suppliers and island ferry services) (Orams, 1999:2).

In South Africa, as in many other parts of the world, marine tourism includes aspects such as ocean and coastal water sports, hotels and restaurants, beach resorts, recreation, fishing boat operators, whale watching operators, shark cage diving operators, cruise ships and charter yacht companies (Van der Merwe, Slabbert & Saayman, 2011:457). These activities, amongst many others, provide economic benefits, job creation, infrastructure development, conservation of marine life, improvement of environmental management, as well as protection and preservation of marine environments (Van der Merwe *et al.*, 2011:458).

Shark cage diving and whale watching are two popular marine adventure activities found in South Africa (Cagua, Collins, Hancock & Rees, 2014:515). The country is fortunate to play host to the migrating humpback whale for almost six months of the year and sharks can be found throughout

the year roaming the coast line of South Africa. Sharks often found are the Great White Shark, Whale Shark, Tiger Shark and Bull Shark (Zambezi Shark), to name but a few.

Whales migrate to the South African coast for the purposes of mating and rearing their calves, offering tourists from all over the world wonderful opportunities to view these animals in the wild. Sharks congregate along the coast as well, offering tourist equal opportunities of spotting this marine predator or diving with them. This increase of these two species is due to the active participation of South Africa in Whale and White shark conservation.

The aim of this chapter is to conduct an analysis of marine tourism and the management of marine tourism activities with an emphasis on shark and whale adventure tourism. This analysis is divided into two sections, namely marine tourism and marine tourism management. Marine tourism discusses concepts pertaining to the history of marine tourism, marine tourists, motivations, sub-sectors and recreation opportunities and wildlife- and ecotourism management. The second part, marine tourism management, includes a discussion on the aspects of importance when managing marine tourism and marine wildlife tourism management, Orams's strategies (1999:11) to managing marine tourism and frameworks for marine tourism management. The outline of this chapter is presented in Figure 2.1.

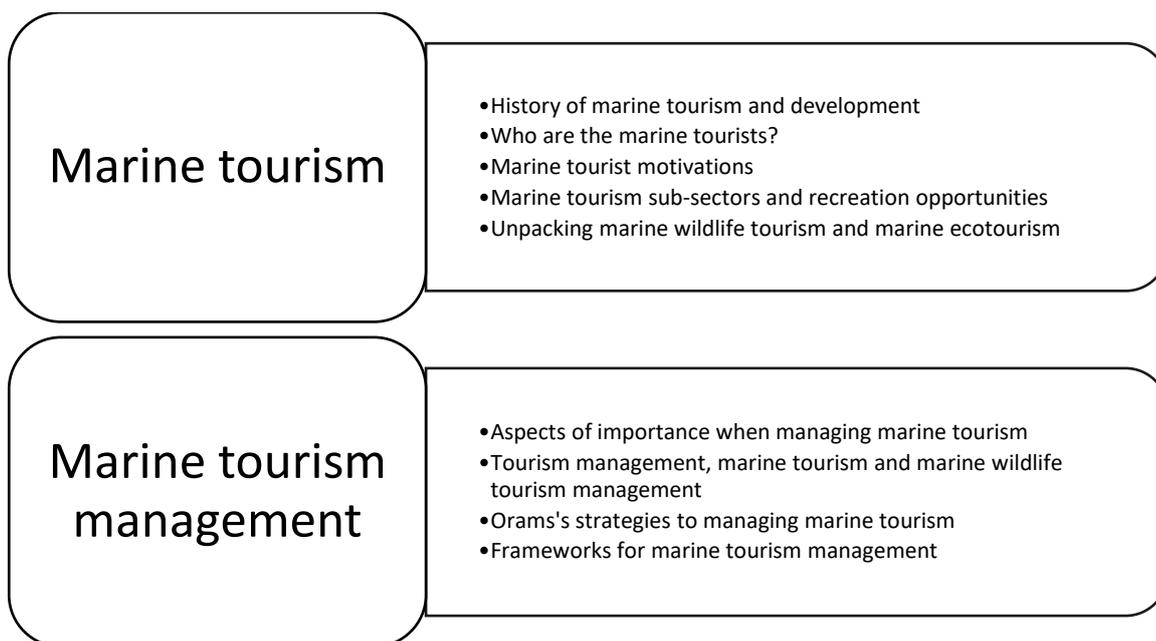


Figure 2.1: Outline of chapter
(Source: Author's compilation)

2.2 MARINE TOURISM

The first section of this chapter discusses marine tourism by analysing literature pertaining to the history, definitions, sub-sectors and recreational opportunities. Furthermore, marine wildlife tourism and marine ecotourism are discussed.

2.2.1 History and development of marine tourism

According to Wongthong and Harvey (2014:138) the world's coastline stretches the length of more than 1.6 million kilometers, with over a third of the world's population living within 100 kilometers of the coastline. This proves that populations along the coast is nearly three times more dense than that of inland populations (Wongthong & Harvey, 2014:138). According to Lück (2007) the marine environment encompasses two-thirds of the total surface of the planet, of which merely 5% have been explored (National Ocean Service, 2017). For more than 60 years though, the focus of tourism development was concentrated on the beach and coastal areas (Orams, 1999:11). This has been proven by the slogan of the four 'S' of tourism, namely Sun, Sea, Sand and Sex (Orams, 1999:11). More recently however, this slogan has evolved to include a fifth 'S', namely Surf. The inclusion of the fifth 's' is indicative of a great development which has occurred in the tourism industry, namely the development and expansion of marine tourism. The industry has expanded from focussing on merely beaches, to the inclusion of deep sea fishing, shark cage diving, whale watching, surfing and scuba diving, amongst others, all for recreational purposes (Hall, 2001:601).

According to Orams (1999:8) marine tourism occurs in or around an extraordinary body of water. This has contributed greatly to the increase in popularity, because humans are fascinated with that which is unknown to them. For thousands of years, humans have been drawn to the coast for various reasons, such as swimming, relaxing, exploring new destinations, or socialisation (Orams, 1999:11). The early eighteenth century saw the start of this development when various resorts were established throughout Europe (Orams, 1999:12). The growth in interest amongst tourists in the use of coastal resources, such as resorts, have resulted in a growth and expansion of coastal and seaside resorts throughout the rest of the world since then (Orams, 1999:2).

Higham and Lück (2008:1) states that marine environments is not only a venue for exploration and relaxation, but humans are dependent on the ocean for various reasons, such as subsistence, transportation, communication and trade. It is therefore no wonder that tourists' attention have shifted to marine environments in pursuit of experiences. This shift has influenced the expansion of the industry to encompass various activities, including marine wildlife activities (whale watching, dolphin watching and marine ecotours), marine ecotourism activities (boat-based whale watching, swimming with dolphins and snorkelling) as well as marine adventure activities (scuba diving, shark cage diving, surfing, whale watching and stand-up paddle boarding) (Orams, 1999:12).

2.2.2 Defining marine tourism

Marine tourism is closely related to the concept of coastal tourism (Hall, 2001:602). Where coastal tourism involves the full spectrum of tourism, leisure and recreational activities taking place in the coastal zone and offshore waters, marine tourism incorporates all these concepts as well as ocean-based tourism (Hall, 2001:602). To gain a clearer understanding of the two concepts, one can think of coastal tourism as inclusive of coastal tourism development, infrastructure which supports coastal

development as well as recreational tourism activities (such as swimming, boating and fishing) (Hall, 2001:601). On the other hand, marine tourism includes deep-sea fishing, yacht cruising, diving and wildlife attractions in the marine environment (Hall, 2001:602).

The earliest definition of marine tourism to the knowledge of the researchers is that of Basiron (1997:3) who states that marine tourism is the temporary short-term movement of people to destinations, which is not their normal environment and the participation in activities (such as whale watching and shark cage diving) taking place in a marine setting. The most used definition, though, of marine tourism is that of Orams (1999:9) who states that marine tourism includes 'those recreational activities that involve travelling away from one's place of residence to a destination where tourists have as their host or focus the marine environment'. Orams (1999:9) further defines the marine environment as those waters that are saline and affected by tides. This definition is significant because it emphasises the fact that both shore-marine and coastal tourism should include shore-based activities (such as whale watching from land, yachting events and cruise ship supply) as well (Hall, 2001:603). Saayman (2017a) defines marine tourism as the international or domestic travel to participate and experience water-based areas and/or activities.

Foyle and Lough (2007:18) further adds that marine tourism should be classified as the tourism sector that is based on tourists participating in either active or passive leisure pursuits or undertaking a journey on or in coastal waters and shorelines. This definition can briefly be put as those activities that take place in the marine environment (Page & Connell, 2009:645). It can, therefore, be accepted that the following definition of marine tourism is appropriate, based on the work of Basiron (1997:3), Orams (1999:9), Foyle and Lough (2007:18) and Page and Connell (2009:645): "marine tourism involves people travelling to a destination other than their area of residence where the primary focus is placed on the marine environment and associated activities."

In addition to this, marine tourists are perceived as those tourists who participate in these activities. As stated by Orams (1999:42), marine tourists are diverse and their behaviour is largely dependent on the type of activity in which they participate. Marine tourists include those travelling to marine destinations for the purpose of scuba diving, shark cage diving, whale watching, deep-sea fishing and boating, amongst others. Marine tourists are often perceived as tourists with a higher than average income, owing to the fact that the equipment and activities often involve higher costs (Daly, Fraser & Snowball, 2015:33). Examples of this include equipment for scuba diving-, boating- and fishing gear. According to Seymour (2012:129) domestic marine tourists have an average age of 34 years and they have either a degree or a diploma from a tertiary institute. Geldenhuys (2012:81) concurs by stating the average age of domestic marine tourists is 39 years of age, they have a tertiary education qualification and they are married. Furthermore, Lück (2015:28) identified similar age categories amongst tourists attending marine mammal tours in New Zealand. The author states that the majority of tourists are below the age of 40 years and they are well educated.

Besides the profile of marine tourists, identifying the motives that drive these tourists can further enhance our understanding of the industry. Primarily, marine tourists have the following motivations to participate in marine activities (Jeong, 2014:298; Isa & Ramli, 2014:412; Duman & Matilla, 2005:313):

- They want to escape everyday life or a routine life
- They want to take a break at a new or different destination
- They are often introspective and the marine environment provides such opportunities
- They want to have a novelty experience, such as cage diving with sharks or being close to whales
- They want to learn something new
- They want to participate in marine activities, such as whale watching, diving and shark cage diving
- Relaxation is important to marine tourists
- They want to experience the ocean water.

Apps, Dimmock, Lloyd and Huveneers (2016:236) state that tourists participating in shark cage diving are particularly motivated by the fact that they want to be able to observe the shark in its natural habitat, because it is an adrenaline rush, or because it is a 'bucket list' activity. Rawles and Pearson (2005) also state that whale watching participants in Scotland are much more environmentally motivated as well as being motivated by being close to whales. Furthermore, authors such as Apps *et al.* (2016:236), Rawles and Pearson (2005), Luksenburg and Parsons (2014) and Bentz, Lopes and Calado (2016:78) agree that whale watching tourists are highly motivated by aspects such as experience on previous trips, the absence of crowds or the limited number of people who can go on the boat, environmental aspects, the animals themselves and being close to the animals.

To gain a full understanding of the diversity of marine tourism as well as the complexity of marine tourists, the following section discusses the sub-sectors of marine tourism.

2.2.3 Marine tourism sub-sectors

The marine tourism industry consists of different sub-sectors and activities (Lück, 2008a). Four sub-sectors, which dominate the marine tourism industry, have been identified by Papageorgiou (2016:45), Foyle and Lough (2007:18) and Gallagher and Pike (2011:159). These sub-sectors include cruising tourism (such as the MSC Cruises, the Princess Cruises and the Royal Caribbean International), nautical tourism (scuba diving, snorkelling, whale watching and shark cage diving), coastal tourism (sunbathing, swimming and coastal horse riding) and maritime events or festivals (this sector is characterised by the focus which is placed on events and festivals taking place in the marine environment). Each sector of the industry offers a unique experience with merely one similarity being the marine environment. Figure 2.2 summarises the four sub-sectors of marine tourism by providing a definition as well as examples of activities categorised under each sector.

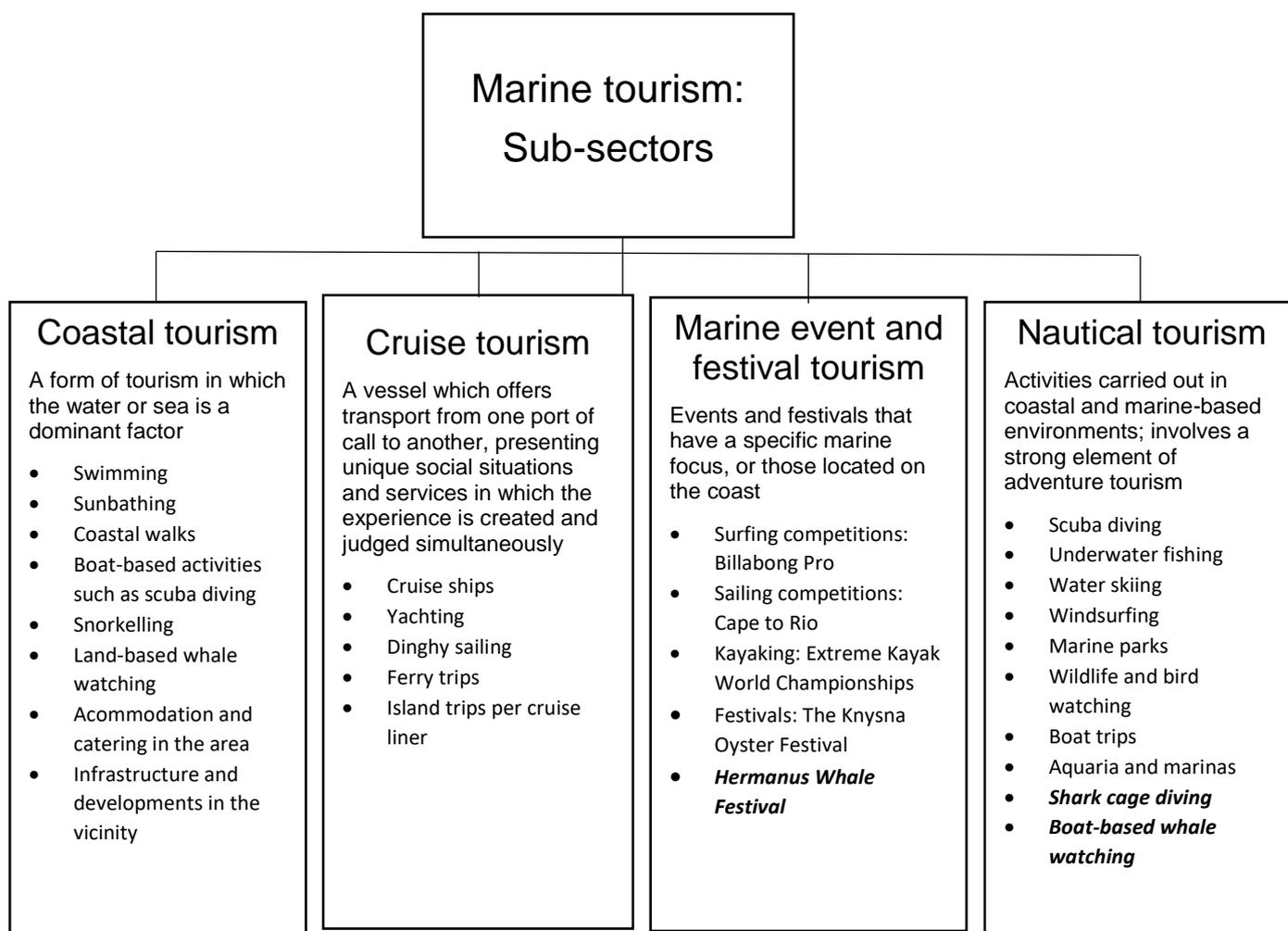


Figure 2.2: Sub-sectors of marine tourism

(Source: Schoeman, 2015:41; Papageorgiou, 2016:45; Brejla & Gilbert, 2014:157; Foyle & Lough, 2007:18; Diakomihalis, 2007:420; Orams, 1999:9).

Firstly, coastal tourism has been said to embrace the full range of tourism, leisure and recreational activities which take place in the coastal zone (Hall, 2001:602). According to Hall (2001:602) coastal tourism encompasses accommodation in the vicinity, restaurants, infrastructure, developments and all coastal activities, such as sunbathing, swimming, recreational boating fishing, whale watching, snorkelling, diving and marine-based ecotourism (Orams, 1999:2; Hall, 2001:603).

Secondly, a cruise can be defined as *making a trip by sea in a liner for pleasure, usually calling at a number of ports* (Dowling & Weerden, 2017:2). Between 2008 and 2014 the sector has outpaced the general leisure travel market in the USA by 22%, while the global market for cruising has evolved from 18 million passengers in 2009 to 24 million in 2016, resulting in a 33% growth (Dowling & Weerden, 2017:2). The destination which receives the highest number of cruise ships is the Caribbean and the Mediterranean, while destinations such as Asia, Australasia and the Pacific is enjoying an increase in attention from this industry (Dowling & Weerden, 2017:3). Cruise liners, such as MSC, Royal Caribbean Cruise Lines, Carnival Cruise Lines and Norwegian Cruise Lines

have increased in popularity, even though the sector includes other forms of cruising as well (Dowling & Weerden, 2017:3). Examples include yachting, sailing and ferry trips (Papageorgiou, 2016:45).

Thirdly, the sub-sector classified as marine event and festival tourism includes a variety of events that take place at a marine environment or in the coastal zone (Foyle & Lough, 2007:18). The focus of such events is the marine environment, or a specific aspect of the marine environment, such as the Hermanus Whale Festival (Foyle & Lough, 2007:18). This festival is an annual festival that celebrates the arrival of the Southern Right Whales along the coastline of South Africa. Other marine focussed events include the Billabong Surf Pro in Jeffrey's Bay, the Cape to Rio sailing competition and the Knysna Oyster Festival.

The Meriam-Webster Dictionary (2017b) defines the term *nautical* as an adjective relating to, or associated with, seamen, navigation, or ships. The term *nautical* is derived from the Ancient Greek word *naus*, which means *boat* (Lukovic, 2013:9). In the modern language though, nautical, or navigational, refers to a set of practical and theoretical skills needed by a skipper of any vessel to sail across the ocean successfully (Lukovic, 2013:9). The name *nautical tourism* therefore indicates a combination of tourism activities and sailing across any water body. The definition of tourism states that it is any activity undertaken by an individual involving that individual travelling from his/her permanent residence to a different destination for more than 24 hours but less than one year, for any reason other than the prospect of employment (George, 2015:7). When combining this definition with that of the term *nautical*, a definition which emphasises the element of travelling, a new definition can be established.

Nautical tourism as a sub-sector is dominated by activities which take place in the coastal and marine environments, stretching from coastal waters, where snorkelling takes place, to the deep blue sea, where shark cage diving, boat-based whale watching, scuba diving and boat trips take place (Brejla & Gilbert, 2014:157). This sector is where shark cage diving and boat-based whale watching mainly takes place or are classified under. One can also experience sharks and whales from the coastline and therefore forms part of coastal tourism. As evident, this sub-sector has a strong element of adventure tourism (adventure tourism is discussed in Chapter 3) because of certain activities, such as shark cage diving, scuba diving and boat-based whale watching which has strong elements of perceived risk, perceived danger and requires guides during participation (Saayman, 2009:230). Nautical tourism can therefore be defined as "travelling for the purpose of recreation or leisure activities on any water body, such as the ocean, using navigation".

The distinguishing characteristic of this sector is the fact that nautical tourism primarily involves boat-based activities or navigational tools operated on a water body (Lück, 2013:3). Both whale watching and shark cage diving activities mainly take place from a boat, which transports participants to a site where these marine animals can be observed. These activities are undertaken for recreational or leisure purposes and involve the participant to travel from the shore to deeper waters for three to four hours (Constantine & Bejder, 2008:49). In the case of whale watching, the captain and

crewmembers of the ship, along with the guide, will locate any whale activity and tourists will be transported to a safe distance from which these animals can be viewed in their natural habitat (Dyer Island Cruises, 2017). With shark cage diving the operators often have an approximation of where the sharks are most active, the captain will steer the boat towards that spot, from where the crew and tourists will wait until a shark is spotted.

Lukovic (2013:10) states that various factors can stimulate the establishment of nautical tourism at a specific location from where the sub-sector can grow and expand. These factors include the following (Lukovic, 2013:10):

- Location: nautical tourism takes place at a specific location that involves a specific set of stimuli and initiating factors, such as climate and development in the area
- Interest: there must be an interest in the form of tourism in the area for nautical tourism activities to succeed, such as an interest in shark cage diving. Demand from the market will stimulate the supply of the activity, such as demand for shark cage diving can stimulate the establishment of shark cage diving operators
- Economic development: the activity should be viewed as a highly profitable activity that can drive economic development in the area
- Tourism development: the activity should offer opportunities for the destination to develop the local tourism industry
- Social development: the social community in which the activity is offered should benefit equally from the activity regarding wealth accumulation, job creation and infrastructural development

In addition to the above sectors, Foyle and Lough (2007:19) state that marine-based activities, for example, those listed in Figure 2.2, can be classified into four groups, namely *non-specialist leisure pursuits*, *shore-based activities*, *motorised water-based activities* and *non-motorised water-based activities*. Figure 2.3 represents these categories in comparison with the marine-based activities. The category *non-activity* is added to this list to accommodate Hall's (2001:602) suggestion on accommodation, catering, infrastructure and developments as part of coastal tourism. The categories are discussed as follows (Foyle & Lough, 2007:19):

- Non-specialist leisure pursuits: these activities include amongst others, swimming, coastal drives, scenic boat trips and island visits, cruise ship visits, aquaria, museums and heritage and maritime events and festivals
- Shore-based activities: such as sea cliff climbing, coastal horse riding, kite boarding, shore-based angling, wildlife and bird watching
- Motorised water-based activities: these activities include boat trips for wildlife watching purposes, fast, adventure or speed boat trips, jet skiing, power boating, motor cruising, whale watching, shark cage diving, and deep-sea fishing

- Non-motorised water-based activities: these include windsurfing, sea kayaking, surfing, rafting, snorkelling and dinghy sailing.

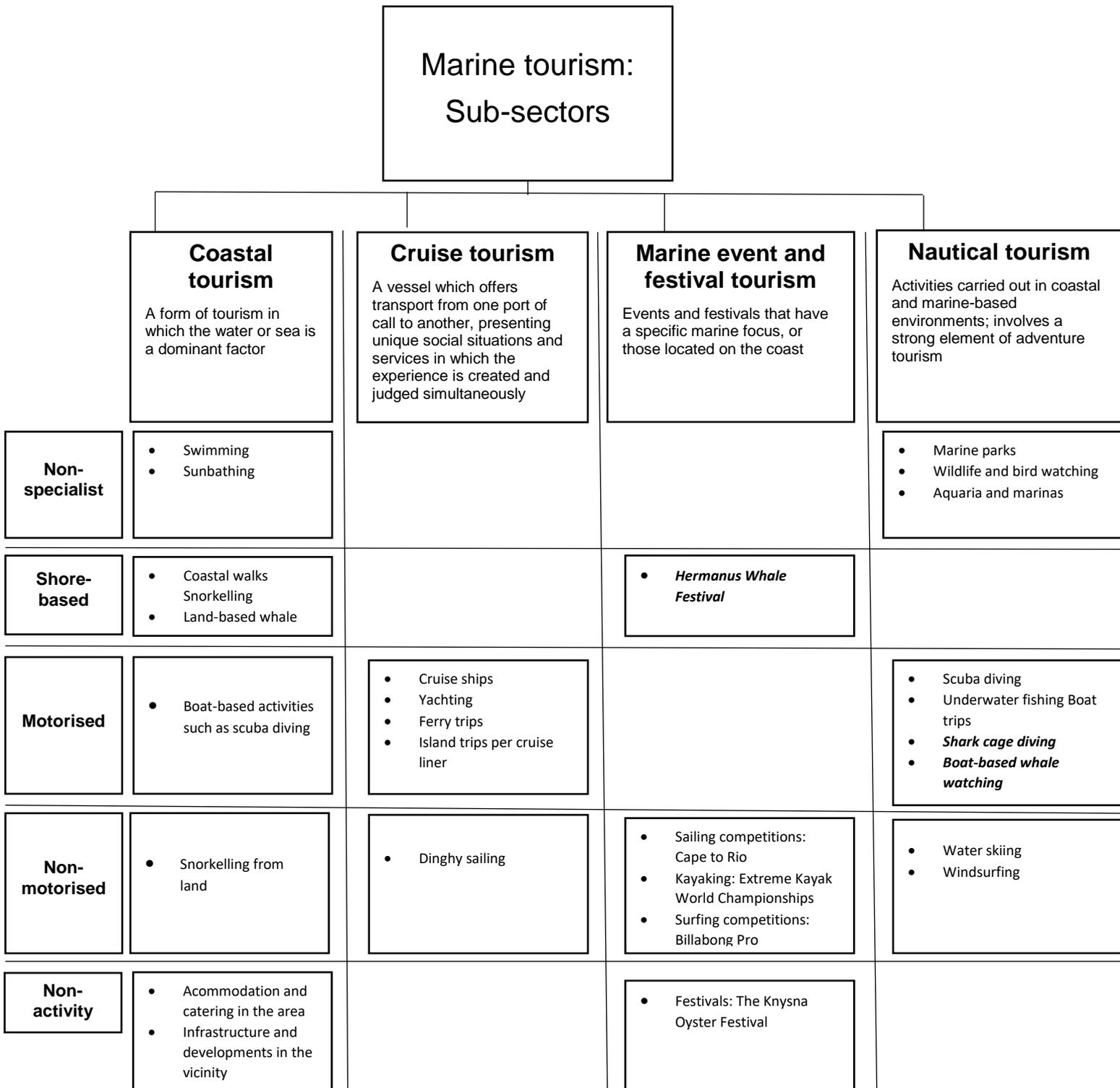


Figure 2.3: Marine-based activities in comparison with the marine tourism categories

(Source: Adpated from Schoeman, 2015:41; Papageorgiou, 2016:45; Brejla & Gilbert, 2014:157; Foyle & Lough, 2007:18; Diakomihalis, 2007:420; Orams, 1999:9) .

2.2.4 Marine tourism recreational opportunities

Regarding the recreational opportunities of marine tourism, Clark and Stankey (1979) developed a spectrum of marine recreation opportunities. This spectrum is used to define the diverse range of recreational opportunities, as evident by Table 2.1 offered by the marine environment (Orams, 1999:44). Originally, the model was developed to clarify the recreational opportunities of forests and natural areas. It is, however, made applicable to the marine environment. The spectrum is represented graphically in Table 2.1 (Orams, 1999:44).

Table 2.1: The spectrum of marine recreation opportunities

Characteristics	Class I: Easily accessible	Class II: Accessible	Class III: Less accessible	Class IV: Semi- remote	Class V: Remote
Experience	Much social interaction with a high degree of services and support; crowded	Often social opportunities	Some contact with others	Peace and quiet; close to nature; safety and rescue services available; occasional contact	Solitude, tranquility, self-sufficiency and close to nature
Environment	Many human influences and structural elements; low-quality natural environment	Human structures and influences are visible close by	Few human structures, only some are visible	Evidence of some human activity	Isolated, high-quality natural environment, few human influences
Locations	Close to- or in human areas	Intertidal to 100 meters offshore	100 meters to 1 km offshore	Isolated coasts and 1	Uninhabited coastal

	Beaches and intertidal areas			to 50 km offshore	areas to 50 km offshore
Examples	Sunbathing Swimming Beach games Eating Beach walks	Swimming Snorkelling Fishing Jet skiing Non-power boating Surfing Paragliding Windsurfing	Boat-based whale watching Shark cage diving Sailing Deep-sea fishing Snorkelling Scuba diving	Scuba diving Submarining Offshore equipped power boating Larger sailboats Whale watching Shark cage diving	Offshore sailboats Live-aboard boats Remote sea-kayaking

(Sources: Clark & Stankey, 1979; Kaltenborn & Emmelin, 1973; Orams, 1999:45)

According to Orams (1999:44), the spectrum of marine recreational opportunities is divided into five classes where the degree of remoteness increases as the degree of human impacts decrease. The strongest influencing factor on the categorisation of marine tourism activities is the distance of the activity from the shore. This will ultimately have an impact on the type of activity that tourists undertake, the experiences available and the type of environment in which the activity is undertaken (Kaltenborn & Emmelin, 1993). The five classes of the spectrum are divided according to the level of accessibility and remoteness.

- **Class I: Easily accessible.** Tourists can undertake a variety of activities on the shore or environments highly influenced by human presence. Examples include sunbathing, swimming, restaurants and beach walk
- **Class II: Accessible.** Human presence often influences this environment, but less so than class I environments. Activities in this class take place offshore in the intertidal section. Examples include swimming, snorkelling, fishing and jet skiing
- **Class III: Less accessible.** Some contact with other people can take place, but activities in this class involve the tourists travelling inshore between 100 meters and 1 km. Examples include deep-sea fishing, scuba diving, whale watching and shark cage diving
- **Class IV: Semi-remote.** Activities are taking place in isolated coastal waters, such as scuba diving, sailing and power boats, are classified as semi-remote. Tourists are still able to see lights

from the shore or some infrastructural elements, but the experience is one of being close to nature

- **Class V: Remote.** These experiences are characterised as feelings of solitude, tranquillity and being close to nature. Activities, such as liveaboard holidays, offshore sailing and remote sea kayaking, takes place in uninhabited coastal waters, usually 50 km or more from the shore.

As evident, the spectrum covers a wide array of activities, ranging between two extremes. Regarding marine tourism activities, it is useful due to the simplification offered, ensuring the range of activities and the sector can be easier understood (Orams, 1999:44). The role of each activity is therefore better understood regarding what is offered and the experience that can be gained from each.

Table 2.2 provides a classification of shark and whale watching as marine tourism products. The table explains the subsector in which these activities are categorised, the activity group and the position on the spectrum of marine recreational opportunities where each activity lies more comprehensively.

Table 2.2: Shark cage diving and whale watching classification

MARINE TOURISM		
	SHARK CAGE DIVING	WHALE WATCHING
SUB-SECTOR	Nautical tourism Adventure tourism	Boat-based whale watching: nautical tourism; adventure tourism Shore-based whale watching: coastal tourism
ACTIVITY GROUP	Motorised water-based activities	Boat-based whale watching: motorised water-based activities Shore-based whale watching: shore-based activities
POSITION ON SPECTRUM OF MARINE RECREATION OPPORTUNITIES	Less-accessible or semi-remote	Boat-based whale watching: Semi-remote and less-accessible Shore-based whale watching: Easily accessible

(Sources: Clark & Stankey, 1979; Orams, 1999; Foyle & Lough, 2007; Brejla & Gilbert, 2014:157; Papageorgiou, 2016:45)

This research specifically focusses mainly on boat-based whale watching and shark cage diving, therefore the classification will exclude land-based whale watching, but this is still indicated in Table 2.2 above. As evident in Table 2.2, both these activities (boat-based whale watching and shark cage

diving) take place in less-accessible or semi-remote coastal areas, between one and fifty kilometres from the shore. Furthermore, both are classified as motorised water-based activities because both make use of a motorised vessel to reach the location and both form part of the sub-sector nautical tourism and adventure tourism (see Figure 2.3).

2.3 MARINE WILDLIFE TOURISM

Higginbottom (2004:2) defines wildlife tourism as tourism that is based on people's encounters with non-domesticated animals, such as lions, giraffes and elephants, amongst others. The author (Higginbottom, 2006:4) states that such encounters can take place in the animals' natural environment, where the tourist might photograph or view the animal, or in captivity where activities such as feeding, handling and photographing animals can take place. Higginbottom (2004:2) proposes that wildlife tourism entails attractions at fixed sites, on tours, experiences related to tourist accommodation, or unguided tours by tourists themselves. Four main categories of wildlife tourism can be identified (Higginbottom, 2004:3):

- Wildlife-watching tourism: tourists can watch animals in their natural habitat or interact with free-ranging animals
- Captive-wildlife tourism: tourists can view animals in a fabricated confinement, such as a zoo, a wildlife park, sanctuaries, aquaria or wildlife exhibitions
- Consumptive wildlife tourism: such as hunting and fishing tourism, takes place when humans hunt, kill or utilise parts of an animal for personal gain
- Non-consumptive wildlife tourism: is defined as humans having an interest in the animal without removing, killing or utilising parts of the animal for personal gain

For the purposes of this study, the category of wildlife-watching tourism is important, for shark cage diving and whale watching is categorised in that category. According to Higginbottom (2004:4) South Africa is known as a destination which promotes wildlife-watching tourism due to a large variety of natural reserves. These reserves are fenced off, but animals can move around freely, make use of natural resources with virtually no human influence and is established for the purpose of conservation and protection of fauna and flora (Higginbottom, 2006:4).

Added to the above, marine wildlife tourism is defined as "any tourist activity where the primary focus is placed on watching, studying, or enjoying marine wildlife" (Zeppel & Mulion, 2008:20). Burgin and Hardiman (2015:210) also add that marine wildlife tourism do include consumptive and non-consumptive use of marine wildlife. Therefore, both whale watching and shark cage diving activities are classified as marine wildlife tourism.

Marine wildlife tourism is a relatively new concept, even though activities such as whale watching have been conducted since the early 1950's (Bentz *et al.*, 2013:874). Activities associated with marine wildlife tourism include attractions at fixed sites, such as aquaria, experiences that are

available in accordance with marine accommodation establishments such as scuba diving, shark cage diving and snorkelling, guided marine safaris such as whale watching, dolphin watching, or marine ecotours and tours embarked on by independent travellers, such as fishing and snorkelling (Higginbottom, 2004:2). In order to understand the complexity of marine wildlife tourism, Duffus and Dearden (1990) proposed a conceptual framework. Figure 2.4 portrays the framework of the core components of non-consumptive wildlife (as this study only deals with non-consumptive use, consumptive use was not included) use as established by Duffus and Dearden (1990).

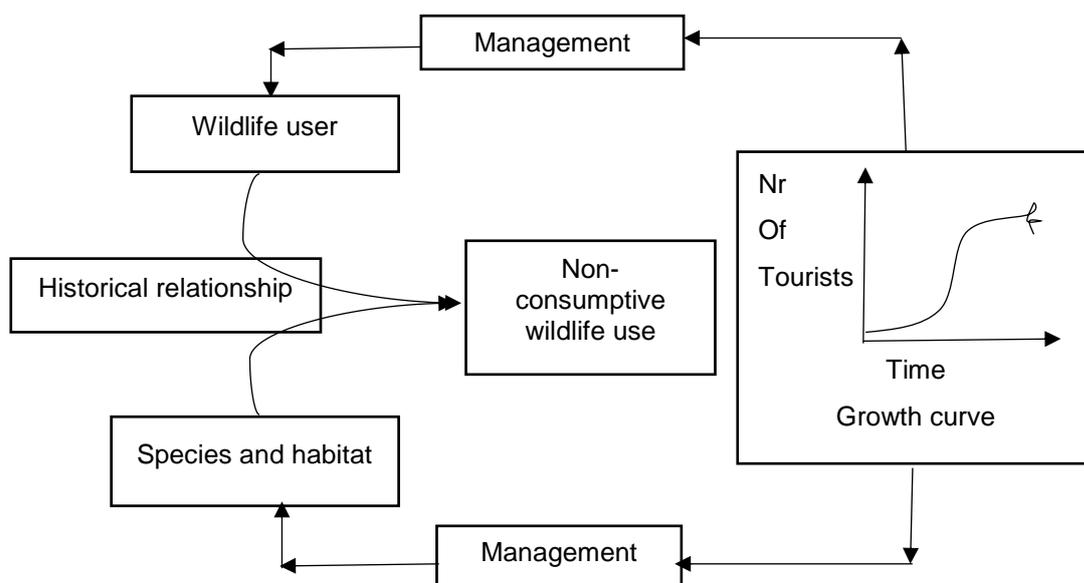


Figure 2.4: Core components of non-consumptive wildlife use

(Sources: Duffus & Dearden, 1990; Dearden, Topelka & Ziegler, 2008:67; Catlin & Jones, 2010:387).

This framework highlights three important aspects of marine wildlife tourism, namely the wildlife tourist, the species on which focus is placed and the historical relationship between the two aspects. Concepts important to the aspect of the wildlife tourist include benefits, motives and experiences. The species on which the focus is placed, for example whales or sharks, will determine the nature of the experience, largely. It will also affect the management of the activity. Poorly managed wildlife attractions can cause negative impacts on the environment and the animal, while well-managed attractions can be sustainable (Higginbottom, 2004:4). Lastly, the relationship between wildlife and the tourist will be greatly influenced by the manner in which the activity is conducted, the laws and regulations enforced, as well as the benefits that tourists derive from the activity (Catlin & Jones, 2010:387). From this conceptual framework in Figure 2.4, it is clear that marine wildlife tourism is complex in nature.

Higginbottom (2004:4) further defines the environment in which wildlife-watching tourism can take place according to where the encounter takes place. These environments include land (big five animal safaris or game drives), coastal (land-based whale watching), marine not in water (marine eco-tours and boat-based whale watching), marine underwater (scuba diving and shark cage diving),

freshwater not in water (fly-fishing) and freshwater in water (freshwater scuba diving) (Higginbottom, 2004:4). For the purpose of this study, however, focus was placed on marine not in water (due to boat-based whale watching taking place in this environment) and marine underwater (due to shark cage diving taking place in such an environment). Therefore, an analysis of marine wildlife tourism was conducted by attempting to define and explain the core components of the sector.

2.3.1 Marine ecotourism

Often used as an interrelated term, marine wildlife tourism envelopes a component of ecotourism in the sense that similar defining principles are identified (Bentz *et al.*, 2013:874). These principles include both taking place in a natural setting; both are managed and developed sustainably, both can benefit the local community and both provide resources for conservation (Bentz *et al.*, 2013:874).

Finding a comprehensive definition of ecotourism upon which all researchers agree is not an easy task. Many definitions exist which offer an explanation for ecotourism, activities involved therewith and the subsets included in this industry. It is well known that ecotourism should include an element of education, it should be nature-based and it should be managed in a sustainable manner (Geldenhuys, 2009:4). Marine ecotourism, therefore, includes all three elements, nature-based, a learning orientation (education) and sustainable management, with the difference being the environment in which it is conducted, which activities are included and how these activities are managed.

According to Garrod and Wilson (2003:1) marine ecotourism can be classified as a subset of both marine nature-based tourism and marine sustainable tourism. In order to formulate a clear definition of marine ecotourism, this section discusses the three characteristics of the term *ecotourism*, namely nature-based, learning orientation and sustainable management. These three elements contribute to the final definition created for marine ecotourism. The elements for creating the definition of marine ecotourism are represented in Figure 2.5. A short analysis would aid understanding of where and how these elements fit in with the term, as discussed below.

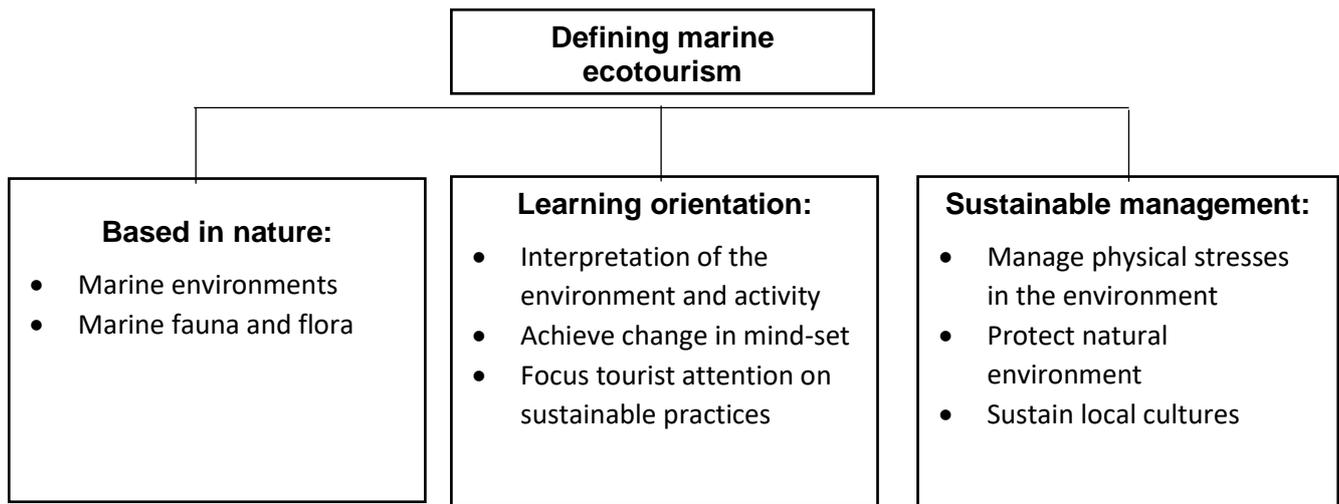


Figure 2.5: Elements of the definition of marine ecotourism

(Source: Author's own compilation)

Nature-based as an element of marine ecotourism

It is clear from this term that any activity deemed an *ecotourism activity* should be based on the natural environment (Garrod & Wilson, 2003:1). This element refers to the fauna or flora of an environment and the relationship that is established with nature. In some cases, both fauna and flora can form part of the activity, as is the case of a game drive. During a game drive, tourists are exposed to both the fauna (animals, such as the Big Five) and the flora (such as a rare plant) in an area. In terms of marine tourism, scuba diving is a suitable example seeing as divers are exposed to both underwater marine animals and plants, such as coral.

Learning orientation as an element of marine ecotourism

The second element that should be included in the definition is that of a learning element. Tourists, or participants, can be exposed to an element of learning by means of the process of interpretation. Through this process, certain concepts will be explained to tourists, characteristics of the activity, or on which it is based, can be highlighted and attention can be drawn to certain aspects of the activity, such as an animal or a plant (Tilden, 1977:4). The aim with an interpretational programme is to achieve a change in the minds of tourists and the way they perceive the natural and cultural environment of an area. Ultimately, the tourist's' attention should be focussed on achieving a more sustainable perception of the environment (Moscardo, 2003:114; Tubb, 2010:477), .

Sustainability as an element of marine ecotourism

Sustainable principles and practices should be implemented and applied by both the operator and the tourist (Garrod & Wilson, 2003:3). It is the operator's responsibility to ensure that physical stresses of the environment are managed, such as waste and energy minimisation, as well as other environmental impacts. This can include minimising the amount of carbon monoxide from the whale-watching vessel and ensuring that all passengers are aware of where the dustbins are on-board and

that litter is not thrown into the ocean. Operators of marine ecotourism should not only aim to protect the natural environment though, they should also aim to sustain local cultures and ways of living (Garrod & Wilson, 2003:3). See Chapter four of this thesis for a discussion on the concept of sustainability.

From the brief analysis of the elements important to the term *ecotourism* it is clear that marine ecotourism should be based on similar concepts as land based ecotourism. Therefore, the following definition can be developed:

Marine ecotourism can be defined as “activities taking place in a natural marine environment, where the focus is placed on the fauna and/or flora of the environment, where an educational experience is offered and where principles of sustainability is implemented in order to ensure the long-term survival of the marine environment”. From this definition, both whale watching and shark cage diving is further classified as marine ecotourism tourism. This is because whale watching takes place in a marine environment not in water (participants view whales from the boat) and shark cage diving takes place in a marine underwater environment (participants submerge themselves underwater in a cage in order to view sharks in their natural environment). The focus of these activities is to educate tourists while conserving the animals and the environment and ensuring the sustainable use of marine resources (Saayman, 2008:8). These two activities also form part of marine adventure activities, which are discussed in chapter three of this thesis.

Marine ecotourism activities are operated differently from others, depending on the type and nature of the activity. That being said, various operators can be identified, such as specialist operators and opportunists (Garrod & Wilson, 2003:4). A specialist operator places focus on a specific species, such as whales in the case of a whale watching operator. Specialist providers may, in some cases, choose to focus on more than one species, such as whales, dolphins and sea birds, depending the abundance of species found in the area (Garrod & Wilson, 2003:4).

On the other hand, operators may also incorporate marine species into their sightings purely based on opportunity, where certain species become an incidental part of the experience offered. For example, a whale-watching trip can incorporate a sighting of a flock of penguins. This will give tourists a chance to learn something new about these endangered seabirds and focus their attention on something else for a while which will expand the offer and positively impact the experience (Ballantyne, Packer & Falke, 2011a:1243). Opportunistic sightings will mainly occur in areas where species are found on a migratory basis, such as the case of Hermanus’ Southern Right Whales along the western coastline. In practice though, it is a common phenomenon amongst operators to incorporate multiple species into their offerings to ensure that a quality experience is offered and to utilise marine resources to its fullest (Garrod & Wilson, 2003:4).

2.4 MARINE TOURISM MANAGEMENT

The second section of this chapter focus on the management aspects regarding marine tourism. The aspects that are discussed include tourism management in general, important aspects of marine tourism management and different marine tourism management frameworks. The goal is to identify important aspects for sustainable management of these sub-sectors that can be implemented by whale watching and shark cage diving operators.

2.4.1 Key aspects pertaining to tourism and marine tourism management

The following diagram (Figure 2.6) is an illustration of the most important aspects for the successful management of marine tourism. These are planning, organising, control, leading, financial management, marketing management, operation management, human resource management and marine environmental management. These activities incorporate various elements which is unique to the sector.

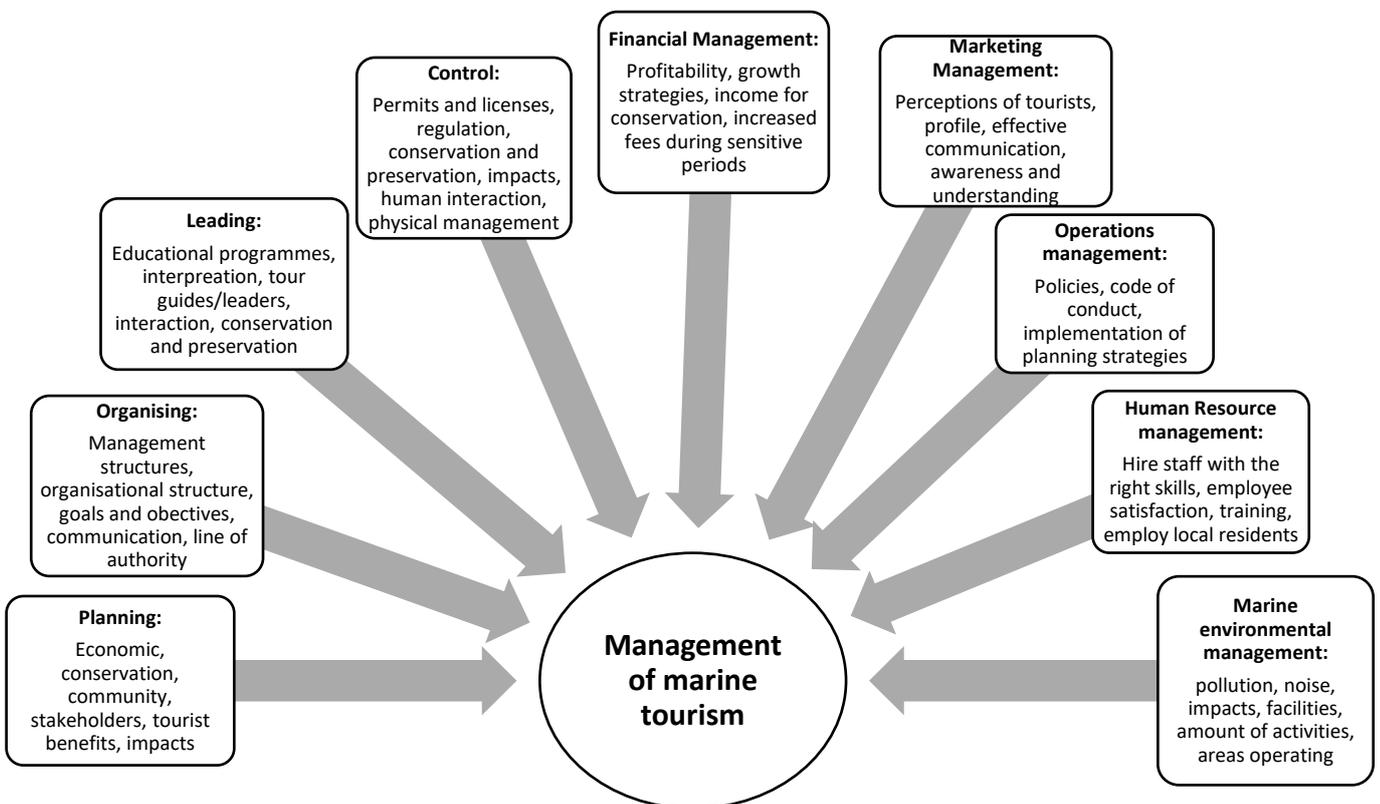


Figure 2.6: Management aspects of marine tourism management

(Sources: Platt, 1995; Orams, 1999; James, 2001; Reynolds & Braithwaite, 2001; Orams, 2002; Garrod & Wilson, 2003; Higham & Lück, 2008; Curtin, 2010; Ballantyne, Packer & Sutherland, 2011b; Bentz *et al.*, 2013; Daly, *et al.*, 2015; Papageorgiou, 2016; Gallagher & Pike, 2011; Luksenburg & Parsons, 2014)

Before one can start to identify the management aspects of marine tourism though, it is necessary to define the management aspects of tourism in general. Tourism management can be defined as the “process which allows people to work together in order to achieve organisational objectives in an environment conducive to constant change (Kreitner, 1989:9). From this definition, management of tourism can be divided into two stages, namely general and functional management (Saayman, 2009:21). General management is made up of the four functions of management, namely planning, organising, leading and control, while functional management includes financial management, human resource management, marketing and facility management (Saayman, 2009:21). One very important aspect in terms of tourism management is the effective and efficient management of limited resources (Saayman, 2009:21)

2.4.1.1 General management

The following aspects of general management are discussed.

Planning: Planning involves the management of concepts such as increasing economic impacts, planning for conservation and preservation of the environment and the local community, planning for stakeholder management, planning tourist benefits and planning for minimisation of environmental and social impacts (Platt, 1995; Orams, 1999; James, 2000; Reynolds & Braithwaite, 2001; Bentz *et al.*, 2013).

Planning is facilitated at the starting point of the management process and will determine the “what” and “how” of planning. This process will help to determine the plan of action needed to achieve the objectives of the company (whale or shark cage tourism) (Du Toit, Biggs & Pollard, 2011:22). According to Du Toit *et al.* (2011:29) the following benefits associated with proper planning can be identified:

- Planning provides direction for successful management of a company. Shark cage diving and whale watching product managers will be able to determine the exact direction in which they wish the business to move.
- Planning can reduce the negative impacts which changing environments or systems might have on the company seeing as a future-oriented view is implemented through planning. Managers should continuously scan the internal and external environment for changes and to take on an approach of action instead of reaction
- The promotion of coordination is facilitated effectively because planning provides the opportunity for all members of the company to be aware of the goals and objectives as well as their role in the company
- Cohesion is ensured because management can view the company as an entirety, not as separate departments. For example, a shark cage diving operator can have a holistic view of the

company by incorporating marketing activities, financial activities, operational activities and human resource activities into the company's planning efforts

- Control is facilitated through planning seeing as the operator can measure the performance of the company against the goals and objectives set during the planning phase

Planning can furthermore be separated into three levels, namely top, middle and lower level management (Saayman, 2009:117). For each level a different type of planning approach is followed. On the operational level (lower level management) planning activities are concerned with day-to-day activities of the company and will include planning conducted by departmental managers or supervisors. Example of such activities include managing functional problems, monitoring levels of supervision and creating opportunities for feedback from and to the workers (Saayman, 2009:118). In terms of whale watching or shark cage diving, lower level management will have to make decisions pertaining to the number of trips undertaken per day and the time when these trips will commence. Decisions pertaining to this should not be made lightly though, but should rely on sources such as the weather report to determine when the best time will be to conduct a trip on the ocean.

Next, middle management, or tactical tourism management will deal with decision being made on the medium and short term (Saayman, 2009:117). By taking it a step further, the tactical manager is concerned with identifying the strengths and weaknesses of the company pertaining to the service that is being provided (Saayman, 2009:117). A shark cage diving operator might, for example, identify attention to detail as a strength of the company seeing as little things such as supplying water and towels on the boat, are being considered.

At the highest level of management, strategic decisions will be made pertaining to all aspects of the business (Coetzee, 2009:117). The top-level manager will be tasked with planning for the company as a whole on the long-term (Coetzee, 2009:117). Strategic management for whale watching operators will include planning for the off-season, or the season during which the whales are not on the South African coastline.

Organising: Organisation refers to the ability of the company to establish goals and objectives, the organisational structure of the company, lines of authority and lines of communications (Saayman, 2009:144). These areas of management are not seen or experienced by the participants, but adds to the successful management of the sector. It also serves as guidelines and offer directions to daily operations and management of the company.

Mechanisms are developed to implement the plans developed in the first stage of the management process. The point of departure of this stage is to develop vision, mission goals and strategies of the organisation. The organisational structure of the company will aid the division of tasks and responsibilities in the companies (Du Toit *et al.*, 2011:171). Amongst others, the following benefits can be identified (Saayman, 2009:144):

- Roles are clearly divided in the company and staff members know who is responsible for which tasks
- The line of authority is clearly identified
- Channels for communication is identified
- The company's resources can be focussed on the objectives set during the planning phase

A company's organisational structure can be defined as a formal system of work relationships which aims to divide and coordinate tasks amongst members of the workforce in order to achieve the common goal of the company (Saayman, 2009:145). A company's organisational structure is that part of the company which is unknown to the public and will consist of the hierarchy of management, stretching from the directors of the company, to middle and lower level management, to the employees working in the company. The organisational structure of the company has a big influence on the employees of the company and will in return have an influence on the level of service offered by the company. The reason for this is the fact that employees come into direct contact with tourists, or marine activity participants and will have an influence on the overall experiences of the participant (Saayman, 2009:145).

Leading: Leading incorporates concepts such as establishing educational and interpretation programmes, making use of tour leaders/guides, leading the interaction between the tourist and the environment/animal and conservation and preservation programmes (Orams, 1999: Reynolds & Braithwaite, 2001; Curtin, 2010; Garrod & Wilson, 2003:244).

This is defined as a process of influencing employees to work together in order to reach predetermined objectives of the company. Terms used to describe leadership include traits, behaviour, influence, relationships, roles and interaction patterns (Du Toit *et al.*, 2011:171). The main tasks of a leader are to establish the direction of the company, to develop a vision and mission strategy and to align people by offering motivation and ensuring the team follows the established direction of the company (Saayman, 2009:164). Leaders should be able to manage the complexities of policies, processes and procedures implemented and to deal with any changes in the company (Saayman, 2009:165).

Furthermore, the role of a leader in the company can be outlined as follows (Saayman, 2009:170):

- A leader should co-ordinate group activities and ensure that policies are adhered to
- The leader should decide in which way activities should be carried out
- Goals, objectives and policies are established by the leader, such as environmental-friendly policies in the day-to-day running of the operation and while out at sea
- The leader should provide readily available information for employees and customers if and when needed

- The leader should represent the group and act as a spokesperson for the group and the channel of communications
- The leader should determine the specific aspects of the group and the structure of the operation
- Implementing and using reward power and coercive power to control the group. For example, implementing an employee of the month system where employees are rewarded for good work and service delivery
- Interpersonal conflict amongst employees and customers should be resolved by the leader
- Setting an example for employees according to which the service should be delivered
- Decisions are made by the leader, which relieves employees of the responsibility of making an accurate decision for the group or the operation
- Providing a positive environment and creating a platform for beliefs, values and service standards according to which the operation is run.

Control: Control serves to ensure that permits and licenses are implemented and paid for within the sector, regulatory strategies should be implemented (such as regulation of litter, overcrowding and adherence to laws), conservation and preservation should be contributed towards, human participation should be controlled, environmental and social impacts should be minimised and resource management should be controlled (Platt, 1995; Orams, 1999; Reynolds & Braithwaite, 2001; Garrod & Wilson, 2003:244).

This is the final step in the management process and will provide feedback on activities conducted as well as influence the first step in the management process, in other words the planning step (Du Toit *et al.*, 2011:27). According to Du Toit *et al.* (2011:27) the process of control involves the manager following up on planned activities, ensuring that necessary activities are indeed carried out and that the goals and objectives of the company are indeed reached.

Control is implemented in an operation to ensure that the plans as established during the planning phase are indeed carried out and that they remain relevant (Du Toit *et al.*, 2011:28). For example, the manager of a shark cage diving operation will ensure that plans and policies for the sustainable operation of the business is adhered to by implementing a system according to which employees should work, such as not throwing litter onto the ocean and ensuring participants are seated while the boat is moving.

Du Toit *et al.* (2011:28) further highlights the importance of control as a way of limiting the accumulation of error. The more a business is being controlled in terms of the target market, business practices and the environment in which it operates, the less of a chance there will be of errors or hazards occurring. Control can also aid the operation in coping with an increased number of participants as well as increased costs. If control is implemented correctly and resources are allocated efficiently, costs can be minimised, such as the costs pertaining to maintenance of the boat and the cage for a shark cage diving company (Du Toit *et al.*, 2011:28).

Specific areas within a company can be highlighted where control should be implemented. These areas include physical resources, financial resources, information resources and human resources (Du Toit *et al.*, 2011:29). Physical resources should be controlled by means of regularly taking stock of the inventory of resources, such as the number of wetsuits that are in working condition and the number of masks to be used by participants of shark cage diving (Du Toit *et al.*, 2011:29). Human resources should be controlled by recruiting, selecting and placing the most appropriate candidates for a specific position in the company, such as selecting a skipper with prior experience and the necessary, up to date qualifications. In terms of controlling financial resources, returns on investment should be monitored closely to identify any shortcomings in income of the operation. Furthermore, working capital should be monitored constantly and payment of salaries and wages should also be monitored to ensure that employees are paid on time and that maximum benefit is reaped from productivity in the operation (Du Toit *et al.*, 2011:29).

2.4.1.2 Functional management

In addition to the above mentioned general management tasks, four functional areas of tourism management also exist. The functional areas of management include the following (Du Toit *et al.*, 2011; Saayman, 2009):

Operations management: This function of the management process includes facilitating and executing the transformation process. This function is directly concerned with providing a service aimed at realising the previously set objectives of the company (Du Toit *et al.*, 2011:29). Marine tourism operations will include aspects such as the introduction of a new service offered by a single operator. For example, a shark cage dive operator offering marine eco-tours or whale watching trips as an additional tour.

Human resource management: This function involves the process of finding, developing and keeping the correct members on the staff to form a qualified workforce that will ensure the provision of a quality service delivered to tourists. Human resources in marine tourism involves the management of crewmembers working on a boat, such as the skipper and tour guides on-board a whale-watching vessel. These staff members are in direct contact with the marine tourists and can contribute greatly towards providing a high quality and sustainable service.

Marketing management: The marketing function of the company consists of ensuring the transference of services from the supplier to the market. In terms of marine tourism, this involves the provision of leisure and recreation activities at a coastal destination to meet the needs of the market.

Financial management: This involves the acquisition of sufficient financial resources for the business to operate at the lowest possible cost, while investing in assets to return and manage the profits of the company. Marine tourism operators should consider the costs of operations, such as

fuel for the boat and the costs of equipment maintenance, while ensuring conservation and sustainability is complied with.

Functional areas of tourism management will be implemented in various ways, depending on the nature of the operation. Whale watching, for example, is seasonal by nature and operators will therefore focus marketing activities during the high-peak season, namely June to December. Finances should be managed in such a way that the operation can survive the remaining six months of the year, if other services are not offered during these months. Another service that can be offered is marine eco-tours, where tourists are taken out to sea to view marine animals such as dolphins, penguins, birds and seals. For a shark cage diving operation, operational management will include attracting the sharks in such a manner that humans are not feeding the sharks. Chumming should therefore be used only to attract sharks and not for the purposes of aggravating the shark.

2.4.1.3 Marine environmental management

Activities such as whale watching and shark cage diving involve direct contact with the physical environment, which often serve as the main attraction (Swarbrooke *et al.*, 2006:194). According to Swarbrooke *et al.* (2006:194) tourism activities often have a positive impact on the environment and conservation. Due to several negative impacts on the environment though, the following impacts should be managed (Swarbrooke *et al.*, 2006:194; Coetzee & Saayman, 2009b:141; George, 2015:410):

- Development of facilities: the development of facilities, such as the site where shark cage divers and whale watchers meet, can cause a number of problems, such as degradation of the natural environment.
- Waste: waste, such as papers, plastic and left-over food, should be controlled and disposed of appropriately. Ways in which waste can be managed aboard the ship include provision of a dustbin, rules and regulations instated which involve a fine if not adhered to, recycling and removal of litter encountered in the ocean.
- Damage to the environment: boats anchoring for the purpose of shark cage diving can cause damage to reefs. Captains should therefore pay attention to the area in which anchors are dropped.
- High volume activities can cause disruption in the feeding and breeding patterns of whales and sharks: if a high volume of activity takes place in a certain area the natural patterns of whales and sharks can be disrupted. Therefore, the government has instated permits which allows operators to practice in a certain area. The rules and regulations should be adhered to by operators to ensure animals are not disrupted. This includes remaining 100 meters away from whales, not touching the animals, not feeding the animals and ensuring participants do not attempt to swim with the animals.

- Conservation of biodiversity, ecosystems and landscapes: it remains the responsibility of operators to ensure that appropriate measures are implemented to promote restoration of the environment, such as removal of pollutants in the ocean, paying consideration to the capacity of the environment in which activities are operated and respecting the integrity of vulnerable ecosystems (such as Dyer Island where sea birds are nesting) and protected areas are claimed.
- Promotion of education and awareness: the operators should ensure to educate participants and the public on the principles of environmental conservation and sustainability, such as recycling, whale and shark behaviour and the importance of the marine environment.
- Monitoring impacts: operators should monitor the impacts that their operations have on the environment constantly. It is important for operators to continually try and reduce their impacts, such as noise and waste pollution, to ensure that the marine environmental impacts are managed.

From the above points it is therefore clear that management of whale watching and shark cage diving operations do not only include general and functional management, but environmental management as well. Environmental management can greatly influence operations. For example, during 2017, sharks in Gansbaai have disappeared for as much as 6 weeks on end due to an increase in predators in the area. According to Rotherham (2017) sharks disappeared due to three reasons. Firstly, a pod of orca whales was found along the coastline. These whales are natural predators of the great white shark. Secondly, illegal shark fishing took place in the area which impacted the numbers of great white sharks significantly. Thirdly, a speed boat hit a great white shark in December 2016, but according to Marine Dynamics (Rotherman, 2017) this is a common observation in the area. If proper environmental management principles have been implemented by operators, such as boats paying attention to the area in which they travel and reporting shark and whale poaching, two of the three reasons could be avoided.

2.4.1.4 Different marine tourism management frameworks and models

The following section reports on relevant marine tourism management frameworks and models. These include Platt's marine tourism management model, Orams's strategies (1999:91) to managing marine tourism and various frameworks for the management of wildlife tourism, planning and managing wildlife tourism, decision-making for coastal zones and sustainable coastal tourism management.

2.4.1.4.1 Platt's marine tourism management model

Marine tourism is a small sector in relation to the collective sectors of the tourism industry, but the resources are vast and the use of marine resources are negligible (Bentz *et al.*, 2013:874; Orams, 1999:71). Whale watching and shark cage diving are both marine adventure activities where the focus is placed on marine animals, in other marine resources. In contrast to this though, the benefits which marine tourism poses to local communities are large. From this, it can be derived that efficient

management of the marine tourism sector will benefit the local community, local economy and the tourism industry largely, in the long run. Numerous authors (Orams, 1999; Bentz *et al.*, 2013; Daly *et al.*, 2015; Papageorgiou, 2016; Gallagher & Pike, 2011; Luksenburg & Parsons, 2014) have attempted to analyse, explain and offer improvement strategies for the management of marine tourism. Literature on the management of marine tourism, however is lacking but in dire need of attention due to the increased interest shown across the world in such activities.

The two most emphasised aspects in research on marine tourism management include the conservation and protection of marine environments and the provision of a high quality recreational, or leisure, experience for tourists (James, 2000:496). These services can include marine adventure activities, such as shark cage diving, whale watching, speed boating and deep-sea fishing, as well as leisure activities such as the provision of clean beaches and facilities. According to Platt (1995:267) a general model for marine tourism management will include the interrelationship between natural systems, management systems and socio-cultural systems. These three concepts make up the multi-dimensional environment of tourism management and can be adapted to apply to marine tourism management as well (Platt, 1995:267). Figure 2.6 is a visual diagram of this model for management of marine tourism.

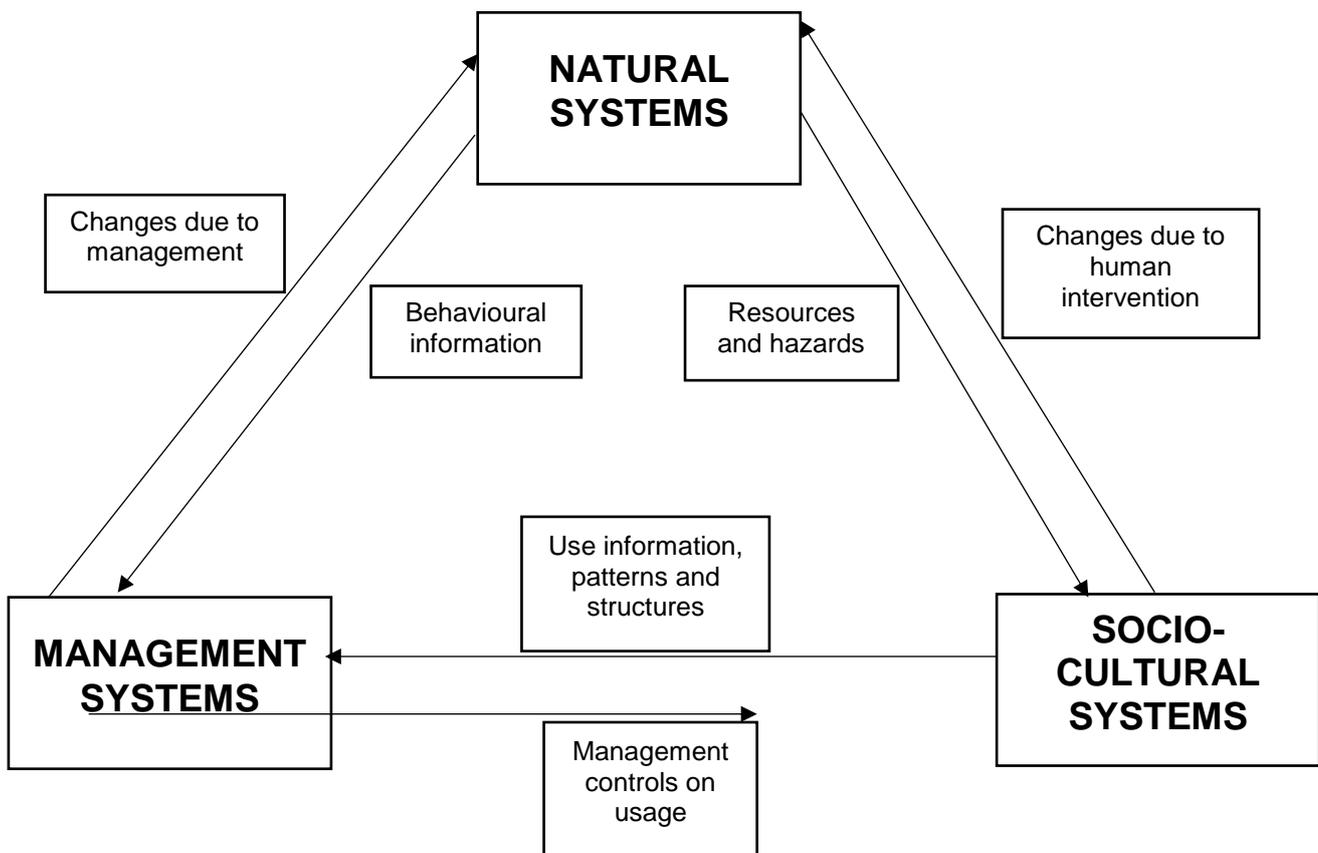


Figure 2.7: A model of marine tourism management

(Source: adapted from Platt, 1995).

Firstly, the natural systems of the marine tourism environment consist of the water (ocean), the interactions between the water, the ecological processes and the physical processes (James, 2000:497). This will include the water, marine animals, plants and the natural processes associated with these, such as the migration of Southern Right whales or the movements of Great White sharks. Secondly, the socio-cultural system incorporates the human interaction with these natural systems (James, 2000:497). This will include humans participating in the activity as well as the local community whom make a living from these activities. The local community as well as tourists will participate in marine tourism for a variety of reasons, including recreation, escape and adventure or thrill. Thirdly, the management systems of marine tourism include the interaction of stakeholders, including government bodies, non-government organisations, policies, regulations and programmes (James, 2000:497). Because management of marine tourism encompasses a complex and diverse range of aspects, environmental management is of utmost importance to ensure that the interaction between humans and the environment is efficient and will remain sustainable in the long run.

In concurrence, Orams (1999:72; 1996:33; 2002:59) and Kuo (2002:89) propose four strategies for the effective management of marine tourism. According to the authors (Orams, 1999:72; Orams, 1996:33; Kuo, 2002:89) these strategies range from having no control over activities or sectors at all, to those involving complex combinations of structures, namely physical, economics, regulation and education. Orams (1999:72) states that regulatory and physical strategies are used for controlling the behaviour of tourists through external manipulation, while economic and educational strategies are proposed for the improvement of sustainability and management of marine tourism. Each aspect is discussed in detail below.

2.4.1.4.2 Orams' strategies to managing marine tourism

Orams framework for marine tourism consist of four different strategies. The first strategy that needs discussion relates to **regulatory management strategies**. According to Orams (1999:72) regulatory management strategies are traditional methods of practicing control over tourist activities taking place at a destination. In a marine context, these regulatory strategies can be used to restrict visitor actions and numbers, access and times. The method for indicating regulatory strategies is usually through signs, notices and written material. For example, beaches have signs posted that informs visitors that no alcohol, pets, or glass is allowed on the beach. For beaches with strong tides, either such signs are used to inform visitors of the tides or that no swimming is allowed at the beach.

Regulatory management techniques have three primary purposes, namely to protect the safety of tourists, to reduce conflict between tourists and to protect the marine environment form negative impacts and degradation (Orams, 1999:77).

One example of marine tourism regulation is the restriction on litter in the marine environment (Chen, 2015:397). Governments across the world (such as South Africa, UK, USA and EU) have

implemented regulations aimed at restricting and minimising marine litter. South African marine tourism operators such as shark cage diving and whale watching operators, communicate these restrictions to all participants either verbally or through written notices. Furthermore, operators should abide by regulations surrounding the sustainable management of waste. According to the Government Gazette no. 35783 (2012:49) operators should recycle and reuse waste appropriately and should ensure that at least 50% of all sewage, waste water and solid waste are disposed of in line with the international norms and standards by the year 2015.

Other regulatory strategies for management of marine tourism include restricting operators to a specific area in which activities, such as shark cage diving, can be performed by providing operators with permits. According to South African regulation, shark cage diving activities in Gansbaai is only allowed in an allocated area just off the Coast of Dyer Island. The reason for this is that the area is a marine protected area and therefore no tourists are allowed to enter without permits, swim or participate in activities without a permit. Shark cage diving will therefore cause no harm to humans in the area. Another reason is that by restricting cage diving activities to a specific area, the sustainable use of the area is ensured through the allocation of a specific number of permits and licences to operate.

The second strategic management aspect is **physical management**. Orams (1999:77) states that physical management strategies include human-made structures that control human activity through restriction of movement or the type of activity that is undertaken. Examples in the marine environment include the use of a boardwalk to concentrate the movement of beach visitors to a specific area, which minimises impact on the environment (Orams, 1999:77). Shark cage diving is an activity where multiple physical management strategies are implemented, such as the use of a cage. Participants are not allowed to enter the water outside the cage, nor are they allowed to reach through the barriers of the cage. This is not only for safety purposes for the participants, but also for the safety and conservation of the sharks. Secondly, shark cage diving vessels are moored to buoys in a designated area where they can conduct the activity. Thirdly, whale-watching operators are restricted to a maximum approach distance of 50 meters to the whales.

Thirdly, **economic strategies** are those that offer a monetary incentive, or disincentive, for the modification of people's behaviour (Orams, 1999:78). Such a strategy can be implemented to positively affect the behaviour of tourists or operators. For example, the South African government implemented a system that requires whale watching and shark cage diving operators to have a permit and a licence to operate and conduct the activities. This restricts the numbers of operators in South Africa, therefore protecting the animals and the marine environment from over utilisation. Furthermore, Orams (1999:78) suggests that other economic strategies can be implemented as well, such as increased fees during times when animals are particularly sensitive to tourists. For example, during whale season on South Africa a higher price can be charged for whale watching or marine

eco-tours that will allow for a lower number of visitors taking part, while the operator is still making enough money to cover costs.

Lastly, Orams (1999:79) suggests that **educational strategies** should be implemented as well. This includes methods that can reduce the incidence of inappropriate tourism behaviour through the encouragement of changed behaviour and the increase in visitor enjoyment and understanding. Such strategies involve explaining aspects of the marine environment to tourists, such as the behaviour of whales during mating season, or the hunting strategies of great white sharks. Not only will this improve the tourists' understanding of the marine environment or the animals, it will also encourage them to behave in a responsible and sustainable manner.

Aside from these management strategies, it is also important to review important management techniques for working with marine wildlife, as is the case with shark cage diving and whale watching. Managing the tourist interaction with marine wildlife requires strict practices to ensure that the animals are left undisturbed while providing a satisfactory experience for the tourist (Orams, 2002:2282). Orams (2002) identifies three approaches for the management of marine wildlife interaction, namely prohibition, management and ignore (Orams, 2002:288). These approaches have been identified as ways in which the interaction between tourists and marine wildlife, such as whales and sharks, can be managed for the conservation and protection of these animals. These categories are discussed below (Orams, 2002:288).

Category 1: Prohibition

Prohibition is the most common approach to managing wildlife interactions and involves restricting tourists and operators in terms of certain activities. For example, shark cage dive operators are not allowed to operator in areas that are in close proximity to designated swim areas. Another concept where prohibition is implemented successfully in marine tourism is the feeding of animals. Shark cage diving operators is a good example, because the South African government has banned chumming and feeding sharks as a method of attracting the sharks to the boat. Instead, operators are allowed to create a chum slick, comprising of seawater mixed with fish intestines and blood. The sharks will then smell this and, out of curiosity, be attracted to the boat.

Participants of shark cage diving and whale watching are not allowed to touch the animals. This prohibition ensures the safety of both the animal and the tourist. Sharks and whales are dangerous and wild animals that can cause harm, as well as become conditioned to view humans as a source of food. This can result in changed behaviour on the part of the animal, such as sharks attacking humans and whales coming too close to humans (Orams, 2002:289).

Category 2: Manage

The second strategy Orams (2002:289) highlights is *manage*. The author suggests that by following this approach operators are managing the interaction between marine wildlife and tourists. For example, a whale-watching operator is, by law, not allowed to approach whales closer than 300 meters (Marine Living Resources Act, 1998:55). However, if the whale approaches the vessel, as does happen in most cases, there is no fault on the side of the operator. This approach permits a certain level of interaction, but under very strict conditions, such as the permission for tourists to dive with sharks but they are not allowed to be outside the cage, nor should any limbs or parts of the tourist's body be outside the cage at any given time.

By managing the tourist-wildlife interaction, potential risks associated with this interaction can be minimised (Orams, 2002:289; Higham & Lück, 2008:6). Risks that can result from the tourist-wildlife interaction include conditioning of the animals, disruption of migratory patterns and exploitation of animals (Johnson & Kock, 2006:43). Another impacting factor is the occurrence, density and frequency of vessels, which can affect and alter the behaviour of whales and sharks (Higham & Lück, 2008:6). For example, spinner dolphins and whales in Alaskan waters were found to show resting behaviour less frequently as the number of vessels increased to the area (Higham & Lück, 2008:6). When whales and dolphins portray resting behaviour, they are most sensitive to boat interactions and therefore most vulnerable as well (Higham & Lück, 2008:6). In order to manage such impacts successfully though, activities, such as shark cage diving and whale watching, should be based upon an understanding of the potential impacts that can derive from a close interaction with whales or sharks (Orams, 2002:289). This understanding should then be transferred into actions, where the operator ensures negative impacts are eliminated or minimised, for example, using a chum slick to attract sharks to the vessel instead of feeding them, ensuring that whales are approached in the correct fashion, or ensuring that vessel traffic is kept to minimum (Higham & Lück, 2008:6).

Category 3: Ignore

The third approach, according to Orams (2002:289), is to *ignore*. Ignore management approaches to tourist-wildlife interaction means that the operator encourages practices such as touching the animals, feeding them and being close to them (Orams, 2002:289). The risks associated with conducting such practices are ignored and, thus, impacts are enhanced (Orams, 2002:290; Higham & Lück, 2008:6). For example, shark cage dive operators who feed sharks as a method of attracting them to the boat is ignoring the laws surrounding feeding sharks. This can result in negative impacts, such as conditioning of sharks to see humans as food. Vessels being navigated erratically can also result in animals, such as whales and sharks, trying to elude the vessel (Orams, 2002:290; Johnson & Kock, 2006:43). Higham and Lück (2008:6) state that whales and sharks trying to evade vessels being navigated unpredictably and erratically behave similarly to animals trying to avoid a predator. This research is directly linked with boat-based whale watching activities, rather than land-based

activities. Whales behaving in this fashion feel threatened due to the vessel targeting them directly, which derives from times when humans used to hunt whales for meat using harpoons (Higham & Lück, 2008:7). Therefore, regulations are put in place, such as limiting the distance at which a vessel can be from a whale. If an operator chooses to ignore these regulations, however, the impacts which tourism activities, such as shark cage diving and whale watching, have on marine animals will be diverse and detrimental (Higham & Lück, 2008:6).

2.4.1.4.3 Frameworks for marine tourism management

Before a comprehensive sustainable management framework for marine adventure tourism can be established, it is necessary to conduct an analysis into already existing marine tourism frameworks (Dimmock & Musa, 2015; Foley *et al.*, 2014; Marafa & Chau, 2014; Higginbottom, 2004; Reynolds & Braithwaite, 2001).

Reynolds and Braithwaite (2001) propose a conceptual framework that classifies the main components of wildlife tourism while indicating the role and relationship between the components. The value of various components, such as conservation, animal welfare, visitor satisfaction and profitability of the industry are often in contrast with each other, necessitating a trade-off. The proposed model specifies the complexity of trade-offs and compromises that are specific to wildlife tourism which, if managed correctly, can assist operators and managers with efficient management of the industry (Reynolds & Braithwaite, 2001:40). Different methods of managing the wildlife experience include a differential taxation system, education and self-regulation. Although, the authors (Reynolds & Braithwaite, 2001:40) have emphasised the need for a multidisciplinary approach of techniques which will improve the effectiveness of the particular operation, instead of a generalised management technique.

Higginbottom (2004:5) establishes a framework for planning and managing wildlife tourism, with the goal of sustainability and maximising benefits. Higginbottom (2004:5) states that the concept of sustainability is widely adopted by governments and business sectors worldwide, but needs proper planning and management. The author (Higginbottom, 2006:5) advises that proper planning and management of wildlife tourism requires consideration of both the impacts of tourism on the natural environment (in this case the marine environment), the community (or the host), the tourism industry and the tourist. It is further proposed that the concept of triple bottom line sustainability should be implemented on a wider scale, thus focussing on economic growth, environmental sustainability and social equity (Higginbottom, 2004:5).

Marafa and Chau (2014) established a framework and a guideline that can be implemented by decision-makers of coastal zones in general, for the sustainable management of these areas. Because both shark cage diving and whale watching activities take place in the coastal zone, this is an important framework which should be taken into consideration for the purpose of this study. The framework and guidelines were established by taking into account the coastal environment's

multifaceted nature and the authors suggest that an integrated approach to coastal and marine tourism management should be developed which considers both present and future tourism interests (Marafa & Chau, 2014:9). The framework highlights five important aspects for sustainable management of coastal zones (Marafa & Chau, 2014:9). Firstly, all government levels must be involved with the coastal management plan, both during the creation and implementation phases. Secondly, the authors state that protected areas along wetland areas should be recognised. Thirdly, conservation should be a main goal in order to ensure the sustainable use of coastal resources. Fourthly, the authors state that multiple-use management systems are appropriate for coastal resource systems. Lastly, a multi-sector involvement approach is important and essential to sustainable utilisation of coastal resources. Sectors that can be involved include non-government organisations, academics, the government and civil societies (Marafa & Chau, 2014:9). Aspects highlighted by the authors, such as government involvement, conservation and sustainable use of resources are important for the management of all sectors of marine tourism. This include marine adventure tourism where the use and management of marine resources, such as whales and sharks are of dire importance to the activity and the survival of the industry.

In terms of sustainable coastal tourism management, Marafa and Chau (2014:7) suggest another framework that focusses on the four C's; compromise, commitment, control and cooperation. The guidelines, as set out by the authors (Marafa & Chau, 2014:8), are indicated in Figure 2.8 below. Firstly, compromise can be achieved through reaching a balance between tourism development and environmental conservation. Secondly, by recognising that sustainable development and sustainable tourism requires action instead of a rhetoric approach, commitment can be achieved. Thirdly, control can be practiced by establishing a plan for the effective regulation of scale and pattern of development taking place. Lastly, cooperation can be achieved through recognition of the need for partnerships within the local and international dimension of coastal and marine tourism.

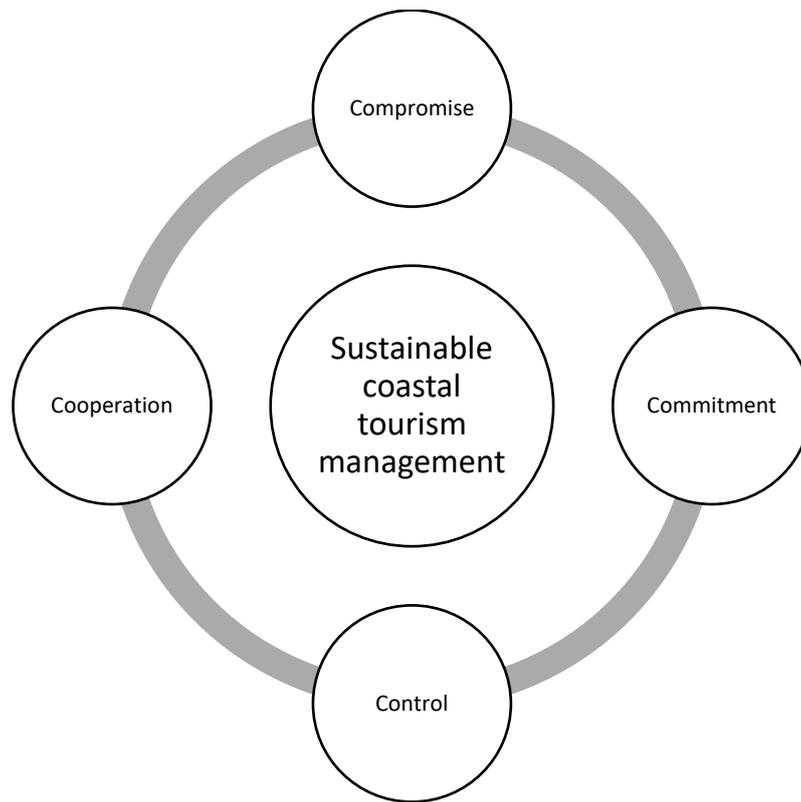


Figure 2.8: Framework for sustainable coastal tourism management

(Adapted from: Marafa & Chau, 2014).

Marafa and Chau (2014:8) suggest further guidelines for the effective implementation of this framework. The authors suggest that sustainable tourism management is in line with sustainable development, therefore sustainable tourism should be planned and implemented according to the following (Marafa & Chau, 2014:8):

- Tourism is an economic activity which can benefit all communities and should be managed accordingly
- The physical and cultural environments have intrinsic values which outweighs its value as tourism assets, especially where these environments support a population at the coast
- The scale and character of development should respect the character and capacity of the area
- Tourism development should be sensitive to the needs and aspirations of the community. Foley *et al.* (2014:21) concurs that economic and social information is of dire importance for the effective and efficient decision-making, management and regulation of marine tourism sectors. The authors agree that the construction of a decision-making framework, the involvement of the government as well as stakeholders in the marine and coastal environment is needed to ensure efficient management thereof (Foley *et al.*, 2014:21). The framework, developed by Foley *et al.* (2014), includes a user-friendly template for the comparison and analysis of marine socio-economic data, represented across time, space and industries. Furthermore, the authors developed a strategy for marine tourism in the Atlantic Area that aims to revitalise and improve

the economic contribution of the sector. The framework identifies four priority areas in which the need for marine socio-economic data is identified, namely business indicators, physical indicators, population indicators and social indicators (Foley *et al.*, 2014:10). Within these four, the creation of a socially inclusive and sustainable model for regional development has been identified as the most important area (Foley *et al.*, 2014:22). Recommendations include the development of a database on economic and social data for marine and coastal regions.

Dimmock and Musa (2015) created a framework for the collaborative management and sustainability of scuba diving tourism. The authors highlighted the central elements of scuba diving tourism, examined the key components of scuba diving tourism as well as the challenges posed to the sustainability of the industry in order to reach the study's goal. Therefore, the study took into account the scuba divers themselves, the marine environment, the host community and all associated industries and communities. The authors highlight the need for an adaptive management structure and leadership in order to encourage a future-focussed perspective and the integration of stakeholder concerns in order to manage the sustainability of the scuba diving tourism sector efficiently (Dimmock & Musa, 2015:1). It is suggested that a systems approach to scuba diving tourism is the most effective way to ensure the improvement of policies and management practices. The authors highlight once more the importance of integrating social and environmental systems as well as the needs and issues of stakeholders for the management of scuba diving tourism (Dimmock & Musa, 2015:15).

2.4.1.4 Shark cage diving and whale watching specific management aspects

Nel and Peschak (2006:4) highlight management and mitigation strategies for shark cage diving during a workshop regarding White shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. During this workshop, the following conclusions pertaining to the white shark cage diving industry have been reached (Nel & Peschak, 2006:4):

- No evidence exist which supports the statement that shark cage diving operations pose a risk to bathers in Cape Town, specifically
- A degree of conditioning can result from cage diving operators who do not comply with the regulations and whom allow sharks to feed on the bait. However, it is highlighted that this conditioning appears between the shark and the diving vessel and conditioning can therefore not be linked to bathers
- Negative conditioning can occur if shark diving operators abide by the regulations and do not allow sharks to gain any reward, for example, the animal will lose interest in the boat and move away
- It is recognised that a perception of the link between shark cage diving and shark attacks are detrimental to shark conservation, tourism, as well as the long-term viability of the shark cage diving industry

- A problem is identified with shark cage dive operators not complying with permit regulations. This non-compliance is mostly driven by client expectations, such as participants wanting to see sharks portray aggressive behaviour.

During this workshop (Nel & Peschak, 2006:5) important recommendations were made for the regulation and management of the shark cage diving industry of South Africa. Firstly, a limited daily bait allowance should be set for operators to limit rewards gained by sharks. Secondly, an independent observer programme should be established in order to monitor compliance with rules and regulations on the vessel. Thirdly, a greater awareness should be created amongst tourists about cage diving regulations, such as the inclusion of a code of conduct on the operator's website, boat and brochures. Fourthly, tourists should be able to report non-compliance of operators. Lastly, not all areas where great white sharks are found along the coast should be opened for cage diving purposes. The authors (Nel & Peschak, 2006:5) state that some areas should remain closed to cage diving operations in order to compare shark activity.

According to Bentz (2015:38) the regional government of the Azores published a code of conduct pertaining to shark cage diving activities on the island which aids the management of shark diving activities. The code of conduct addresses five sections, namely activity preparation, human safety, wellbeing of the sharks, attitude and miscellaneous concerns (Bentz, 2015:37). The table below represents the five categories with the recommendations made for each.

Table 2.3: Code of conduct for shark diving activities at the Azores

CATEGORY	RECOMMENDATIONS
Activity preparation	<ul style="list-style-type: none"> • Master divers should be present for every trip undertaken • The operator has the responsibility to evaluate the experience and preparedness of the clients
Human safety	<ul style="list-style-type: none"> • Number of divers may not exceed four, plus one dive master at a time • Feeding and touching sharks are forbidden • The type of chumming used to lure sharks are defined as a chum slick • The minimum approach distance is stated • Shark diving is only allowed during daytime
Wellbeing of the animal	<ul style="list-style-type: none"> • No flash photography is allowed • A distance of 100 meters should be kept between boats

	<ul style="list-style-type: none"> • Noises should be avoided • If the animals display signs of disturbance, divers should leave the water immediately • Dives with animals displaying reproductive activity is not permitted
Attitude	<ul style="list-style-type: none"> • The attitude of the operator, clients and the animals should be respectful
Miscellaneous	<ul style="list-style-type: none"> • No smoking or alcohol consumption is allowed on the boat • No waste may be discharged into the ocean • The government will do inspections of the activity on a regular basis • Operators should collect data on the dive sites, observed species, number of animals, sex, behaviour and size of the animals

(Source: Bentz, 2015:37).

The code of conduct is presented as a set of guidelines that should be implemented by all operators on the island. These guidelines serve as a management strategy for the operations on the island and has been developed for the shark cage diving sector specifically (Bentz, 2015:37). Some concepts can, however, be generalised to the sector for whale watching, with minor adaptations. For example, guidelines pertaining to the maximum approach distance a vessel can be from a whale should be instated. Furthermore, operators and clients are not allowed to touch or feed the animals, no waste should be discharged into the ocean, no smoking or alcohol consumption should be allowed on the boat and the attitude of the operators, clients and animals should be respectful.

According to Cunningham *et al.* (2012:143) whale watching can be viewed as an ecotourism product, it holds the potential for regeneration of local communities and promotes conservation and sustainable practices, while being a profitable sector. A study conducted by the authors aimed at exploring whaling and whale watching to determine the viability of both industries in terms of sustainability and to determine why they can co-exist in some cases. The study was conducted in Japan and Iceland, where the majority of the world's whaling practices are based and positions these two countries as examples to examine the sustainability frameworks and political rhetoric associated with these activities (Cunningham *et al.*, 2012:143). The authors found that whale watching as a sector has grown with 4 million tourists from 2001 to 2008, with a revenue contributing to US\$2.1 billion per year. The study emphasises the fact that whaling and whale watching can, indeed, co-exist and that both sectors are based on sustainable practices. Global public opinion dictates, though, that whale watching is favoured above whaling (Cunningham *et al.*, 2012:143).

2.4.1.5. Management of marine visitor-wildlife encounters

Research has also focussed extensively on the management aspects pertaining to the visitor-wildlife experience (Valentine & Birtles, 2004:15; Burns & Howards, 2003; Curtin, 2005), but literature pertaining to the aspects specifically important for successful wildlife tourism management is lacking. The following studies have attempted to identify management aspects of wildlife tourism, which include marine wildlife tourism.

Ballantyne, Packer and Hughes (2009) determined that the implementation of policies, planning and essential management strategies, such as marketing and financial management, are also essential, as discussed above in section 2.4.1.2. Part of marine wildlife tourism management is the element of conservation of the environment. As a means of ensuring conservation management, operators offer interpretation programmes for participants (Ballantyne *et al.*, 2009:2). The primary aim of these programmes is to raise awareness of the complex and fragile relationship between humans and the natural environment, as well as highlighting the positive impacts which could derive from conservation (Ballantyne *et al.*, 2009:2). By teaching participants of wildlife activities, such as whale watching and shark cage diving, participants are educated in the ways in which they can contribute to the marine environment and the conservation thereof, thereby facilitating a change in mind set and encouraging people to conserve and protect the marine environment in their day-to-day lives (Mason, 2000).

Furthermore, marine conservation management involves operators encouraging participants to make financial contributions toward the conservation and protection of the environment, or animals (Ballantyne *et al.*, 2011a:1243). One way of doing this is through interpretation programmes, as mentioned above. By educating people in the various manners in which their financial contributions can be used positively, people will feel more motivated to make a monetary contribution for the purpose of conserving and protecting, either a specific species, or the environment in general. The income generated from participants in marine wildlife tourism activities can be used in various manners, such as supporting research of a specific species, rehabilitation of animals, growth and rehabilitation of in a specific marine environment.

Curtin (2010) states that one important aspect which should be managed for marine wildlife tourism is the experience which tourists receive. Three important factors were highlighted in Curtin's (2010) study, namely tangible benefits of the tourist experience, the importance of a tour leader and tourists' perceptions of the environment and social impacts (Curtin, 2010:219). The author (Curtin, 2010:219) identified that the skills and experience of the tour leader is largely related to the experience of the tourist. These tourists' desire to see wildlife overrides their doubts pertaining to the service. Leaders (sharks cage dive instructors and whale watching tourist guides) are identified as the crucial interface between the environment and the tourists' experience, therefore the management of tour leaders play a major role in the management of wildlife tourism (Curtin, 2010:233).

In addition to conservation management and the wildlife experience, Reynolds and Braithwaite (2001:31) advises that information on the needs, desires and opinions of marine wildlife tourists are important. Operators should be well aware of how important wildlife is to the welfare of humans and for the identification of the economic and social benefits of wildlife resources (Reynolds & Braithwaite, 2001:31). This represents a strong relationship to marketing management for the sector. The authors (Reynolds & Braithwaite, 2001:31) further propose that important aspects of the management of marine wildlife tourism is being able to manage the welfare of animals, visitor satisfaction, economic profitability and to be able to manage the trade-off between these aspects.

2.5 CONCLUSION

This chapter had two goals, namely to analyse the sector of marine tourism and to analyse management aspects which are of importance for marine tourism. The first section focussed on the marine tourism sector, with specific focus on whale watching and shark cage diving. The marine tourism sector is a prominent and ever-growing sector in South Africa, which comprises a variety of different sub-sectors and activities. This chapter identified four various sub-sectors which make up the sector for marine tourism, namely cruise tourism, nautical tourism, coastal tourism and marine event and festival tourism. Seeing as shark cage diving and whale watching features prominently in this chapter, it was identified that both these adventure activities can be classified as nautical tourism, due to the nature of each.

Furthermore, it was determined that shark cage diving and whale watching can further be classified as marine ecotourism, which is a category of marine wildlife tourism. The relation between marine wildlife tourism and marine ecotourism was proven, as well as the relationship between marine ecotourism and sustainability. These concepts complement each other perfectly, seeing as all three areas focus on enhancing the visitor's experience, educating visitors, conserving and protecting the environment and ensuring sustainable development and management of resources. It is therefore concluded that shark cage diving and whale watching is classified as marine ecotourism activities.

Furthermore, various management aspects have been discussed, including those pertaining to tourism management in general, wildlife tourism management and marine tourism management. Consensus is reached amongst researchers in terms of sustainable management practices that should be implemented in these sectors, such as proper planning, regulation of the industry and prohibition of certain acts and activities. It can be highlighted that marine tourism management needs a multifaceted approach to management, which includes planning, organising, leading, control, financial-, marketing-, operations- and human resource management.

Chapter 3

Adventure Tourism

The ocean is a central image. It is the symbolism of a great journey

~Enya

3.1 INTRODUCTION

Over the past decade the tourism industry has become more complex and the market more segmented as a result of the increase in niche tourism markets (McKay, 2012:31). One such niche market in the tourism industry which has experienced immense growth is adventure tourism (McKay, 2012:31). Many tourism consumers are demanding novel, challenging and exciting adventure activities while on vacation (Williams & Soutar, 2009:247). Adventure tourism is increasingly playing an important role in the economy of South Africa as well as international countries (Cater, 2006:318; Buckley, 2010; McKay, 2012:31).

Areas such as national parks, protected areas and the coastal areas are usually selected as adventure tourism sites (McKay, 2012:32). The South African landscape offers endless opportunities for outdoor adventure activities due to its natural state (Rogerson, 2007:228). The benefit for South Africa, therefore, lies in the fact that the South African landscape offers enormous opportunities for adventure tourism development seeing as this type of alternative tourism largely focuses on elements of the natural surroundings, which already exist (Giddy & Webb, 2016:351). This is indicative of the fact that adventure tourists deliberately seek a form of adrenalin-filled activity, usually in an exotic or outdoor location, thus setting adventure tourism apart from other forms of tourism (Williams & Soutar, 2009). The purpose of this chapter is, therefore, to contextualise adventure tourism for the purpose of this study. The discussion aims to define the term *adventure tourism* by discussing relevant concepts and theories, the characteristics of adventure tourists are discussed as well as the adventure tourism industry in South Africa. Figure 3.1 indicates the contents of this chapter.

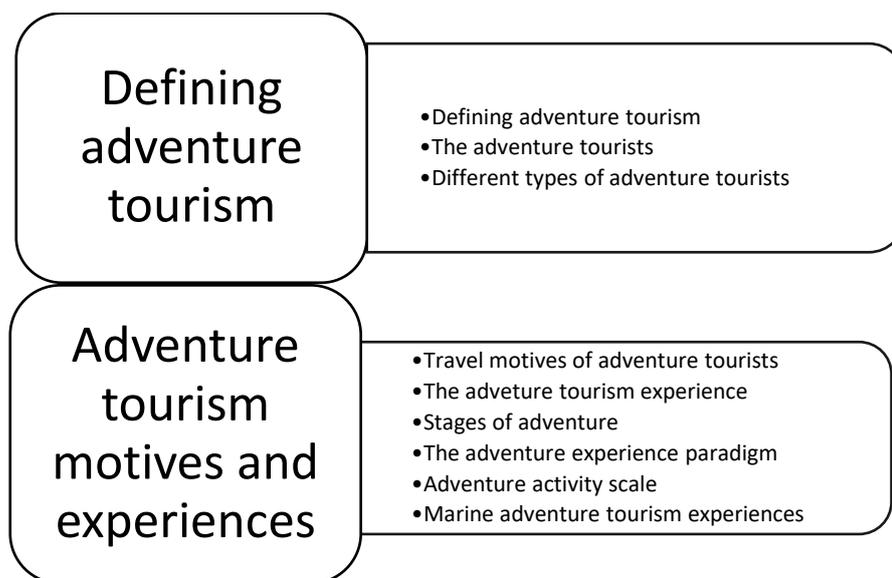


Figure 3.1: Outline of Chapter

3.2 DEFINING ADVENTURE TOURISM AND ADVENTURE TOURIST

Adventure tourism is a growing niche market in the South African tourism industry and one which places a strong emphasis on sustainability, conservation and protection of environments, both cultural and natural. Over the last couple of years, the adventure tourism industry has enjoyed much attention as a research topic (Buckley, 2007:1429). The reasons for the attention is the fact that adventure tourism has become much more commercialised and tourists are travelling all over the world in search of adventure activities, such as shark cage diving and whale watching. According to McKay (2012:32), adventure tourism can be defined in various manners. Broadly, the term refers to a guided tour which takes place outdoors, a natural environment and tourists will take part in an activity which utilises the characteristics of the environment, such as animals, the elements and landscapes (Beedie, 2005:38; Williams & Soutar, 2005:248). These activities require the use of specialised equipment and, in some cases, the participant should be in possession of a specific set of skills, such as the case of scuba diving (Beedie, 2005:38). The activity involves an element of excitement for the participant and often tourists will experience a rush of adrenaline, especially during activities such as skydiving and scuba diving (Buckley, 2007:1429).

According to Millington, Locke and Locke (2001:65), adventure tourism can be defined as a leisure activity which takes place in an unusual, sometimes exotic and remote, wilderness setting. These activities tend to be associated with high levels of risk by the participant. Adventure tourists can be defined as those tourists who engage commercial operators to take them on a guided adventure tour, which typically takes place in an outdoor setting, where physical activity and specialised equipment is required (McKay, 2012:32). Adventure tourists have high expectations regarding risk, excitement, tranquility and a sense of being tested in a personal manner (Millington *et al.*, 2001:65). Adventure tourists are often described as individuals who are explorers of unspoilt and exotic parts of the world in search of personal challenges (Millington *et al.*, 2001:65).

Adventure tourism is unique in the sense that even though the activity follows the same pattern, such as whale watchers being briefed on safety concerns, boarding the vessel, finding the whales and returning to the mainland, the experience will never be the same. Adventure tourism has a way of bringing together travel, sport and outdoor recreation while being considered as a niche market (Beedie & Hudson, 2003:626). The natural elements, such as the weather, ocean and other aspects such as the personality of the tourist as well as his motivations, will influence the experience (Buckley, 2007:1429).

Adventure tourism can be further explained by defining seven terms, as identified from the literature. These terms provide a holistic view of adventure tourism by summarising the important concepts which make up the industry (Orams, 1999:31; Buckley, 2007:1428; Rogerson, 2007:228; Van der Merwe, 2009:227).

- Recreation: includes leisure activities which take the participant, or tourist, out of his normal routine, such as going to the cinema
- Outdoor recreation: this involves activities of leisure and relaxation that takes places in nature, or outdoors, such as sunbathing
- Adventure recreation: adventure recreation is recreational activities which take place in an outdoor setting, but encompasses a certain level of skill and risk, such as scuba diving
- Exploration and discovery: part of the adventure experience is the fact that participants can explore new destinations and settings, along with the fact that new personal and recreational discoveries can be made
- Wilderness: a nature-based setting which is largely uninfluenced by human involvement
- Ecotourism: a concept which encompasses environmental factors, social factors, economic factors as well as conservation efforts
- Wildlife tourism: wildlife tourism includes all activities where the primary goal is to view or interact with animals in their natural habitat

3.2.1 Different types of adventure tourism

There are many ways in which adventure activities can be viewed. Researchers have attempted to divide adventure tourism activities according to a continuum which aims to explain the difference in behaviour amongst adventure tourists (Van der Merwe, 2009:230). The continuum includes soft adventure tourism on the one side, and hard adventure tourism on the other. Activities will move from one point of the continuum to the other based on the risks, experience and skills required. On the one side, soft adventure is the term used to describe adventure activities which have little to no real risk involved, no prior experience is needed and no special qualifications either. Soft adventure activities include snorkelling, whale watching and open-vehicle game drives (Van der Merwe, 2009:237). Soft adventure tourists participate in such activities for reasons involving the escape of daily routines and to experience a new environment or destination. Soft adventure tourism activities

have a far wider appeal to the population than harder adventure tourism activities are considered to have (Van der Merwe, 2009:237). The reason being that softer adventure tourism activities are perceived as 'safer' and are easier to come by.

On the other hand, harder adventure tourism activities require a specific set of skills and involve specialised equipment. These activities have high levels of danger and risk and require an intense commitment from the participant (Van der Merwe, 2009:230). Activities such as scuba diving, white-water kayaking, mountain climbing, abseiling, mountaineering and sky diving are representative of this category (Van der Merwe, 2009:238).

Table 3.1: Soft versus hard adventure tourism

SOFT ADVENTURE TOURISM	HARD ADVENTURE TOURISM
<p>PROFILE</p> <p>Beginners; enjoy activities with low risks and danger; limited to no previous experience; tourists participate in multiple activities per trip</p> <p>WATER-BASED EXAMPLES</p> <p>Snorkelling; whale watching; shark cage diving; marine eco-tours; sailing; canoeing; paddling; jet boating; kayaking; fishing; motorboat rides; surfing; paddle boats</p> <p>LAND-BASED EXAMPLES</p> <p>Camping; biking; horse riding; wilderness tours; animal watching; bird watching; photo safaris; hiking; team building; safaris; quad biking; backpacking; obstacle courses; archery; sandboarding</p> <p>AIR-BASED EXAMPLES</p> <p>Flights; micro-lighting; helicopter flights; zip lining; low-rope courses; ballooning</p> <p>COMBINED EXAMPLES</p> <p>Charity challenges; gap-year travel; hedonistic experiences; spiritual</p>	<p>PROFILE</p> <p>University educated; special skills are required; requires much experience; high levels of risk and danger; tourists participate in one activity per trip</p> <p>WATER-BASED EXAMPLES</p> <p>Scuba diving; sea kayaking; abseiling; power boating; kite surfing; white-water rafting</p> <p>LAND-BASED EXAMPLES</p> <p>Cave exploring; rock climbing; mountain climbing and biking; off-road biking; extreme snowboarding; climbing expeditions; cross-country trekking; bouldering</p> <p>AIR-BASED EXAMPLES</p> <p>Parachuting; skydiving; hang gliding; wind surfing; cliff jumping; bungee jumping</p> <p>COMBINED EXAMPLES</p> <p>Adventure racing; conservation expeditions</p>

enlightenment; wildlife watching; cultural experiences	
--	--

(Source: Van der Merwe, 2009:238)

Adventure tourism, both hard and soft, does not only occur in marine environments. Land-based adventure activities, air-based activities and combined activities can be identified as well, as portrayed in Table 3.1.

It is clear that whale watching and shark cage diving can be classified as soft adventure tourism activities. The reasons being that whale watching and shark cage diving does not pose an immediate danger for the participant, but the perceived risks and danger are high. Furthermore, the participant does not need to undergo any specific training prior to engaging in the activity and no special equipment is needed.

Another method for describing adventure tourism is to divide the activities into different quadrants. Activities are divided into the relevant quadrants based on the level of risk and danger and the technical skills needed (Van der Merwe, 2009:230). Each axis is representative of a different element of the experience. The x-axis represents the level of independency of the activity. In other words, the degree to which activities and the experience are arranged on behalf of the tourist. On the y-axis represents the level of challenge associated with the activity. Four quadrants are identified across the two continuums, namely high adventure, adventure competition, recreation and leisure (Swarbrooke *et al.*, 2006:32). Figure 3.4 indicates the adventure quadrants.

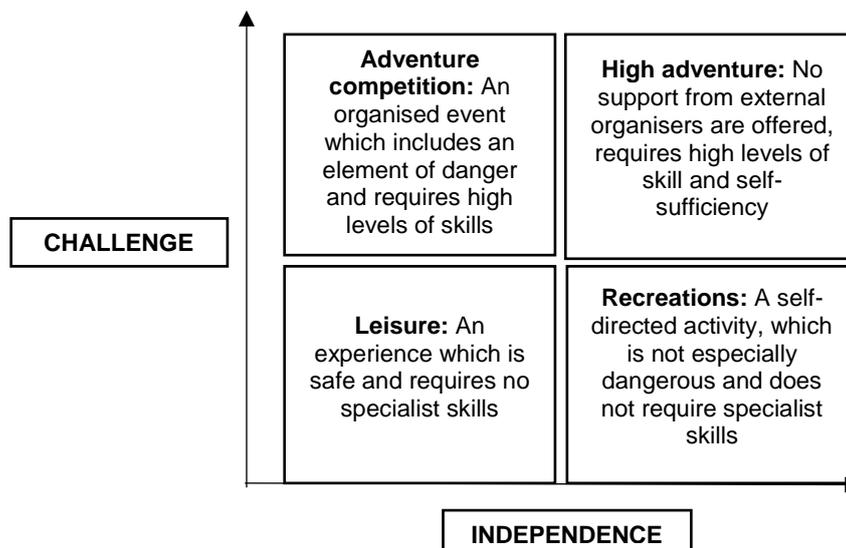


Figure 3.2: Adventure quadrants

(Source: Swarbrooke *et al.*, 2006:32)

Two quadrants can be divided into the category entitled soft adventure, which includes leisure and recreation activities (Swarbrooke *et al.*, 2006:32). The first quadrant, entitled *leisure*, is where the tourist will experience low levels of both independence and challenge. The activities are deemed safe and no special skills are required. An example of activity in this category is an adventure theme park, such as Aquaventure Waterpark in Dubai, or boat-based whale watching. The second quadrant, *recreation*, involves higher levels of independence but low levels of challenge. Activities categorised in this quadrant is mostly self-directed and therefore not dangerous and do not require special skills. For example, canoeing, snorkelling and shark cage diving can be classified as recreational activities.

The quadrants which make up the category for hard adventure include *adventure competition* and *high adventure*. Adventure competition involves high levels of challenge, but low levels of independence. It is an organised event which includes danger and high levels of skills, for example, the UCI World Championships Mountain Bike Championships and the Formula Windsurfing Open Hellenic National Cup. The category for high adventure includes both high levels of challenge and independence. Participants receive little to no support from organisers and requires high levels of skills and self-sufficiency (Swarbrooke *et al.*, 2006:33). For example, mountain climbing and scuba diving.

3.2.2 The adventure tourists

Adventure tourists are considered as very different from the traditional sense of what a tourist is characterised by. By realising the difference between the two types of tourists, resources can be utilised correctly and product development, service quality evaluation, image development as well as promotional activities will benefit (Van der Merwe & Saayman, 2008:154).

In recent years, it has come to light that adventure tourism does not merely attract youth travellers, but this sector spans a wide array of markets and age groups, dependent on the goal of the participant. The determining factor remains the lifestyle which is lived by the participant instead of the age group in which he or she falls. Age is no longer a determining factor, but rather the need to seek adventure, escape or a particular lifestyle (Van der Merwe & Saayman, 2008:154). Therefore, it can be assumed that a person in his mid-fifties might enjoy activities such as river rafting and scuba diving, while a young man in his twenties might prefer a more relaxed activity such as sun bathing.

According to Williams and Soutar (2009:415) as well as Active-tourism (2002:1) adventure tourists tend to be young, educated and active adrenaline seekers with a significant amount of money to spend on their adventure endeavours. On the other hand, Kumar (2009:13) rather believes that tourists are merely looking for adventure while travelling and that they want to see the destination as residents see and experience it. In more recent years, however, it has come to light that tourists are much more educated than initially believed. This means that they are well aware of the experience that can be anticipated and are affluent novelty seekers. Tourists are no longer seen as homogenous and predictable in their choices regarding travel. The “new” tourists can no longer be quantified as being interested in warm destinations but rather the quality of services rendered is held in much higher regard, along with aspects such as responsible and ethical practices and technological advancement (Swarbrooke *et al.*, 2006:58; Saayman 2017a). According to Figure 3.3 portrays the basic characteristics of adventure tourists (Swarbrooke, *et al.*, 2006:59).

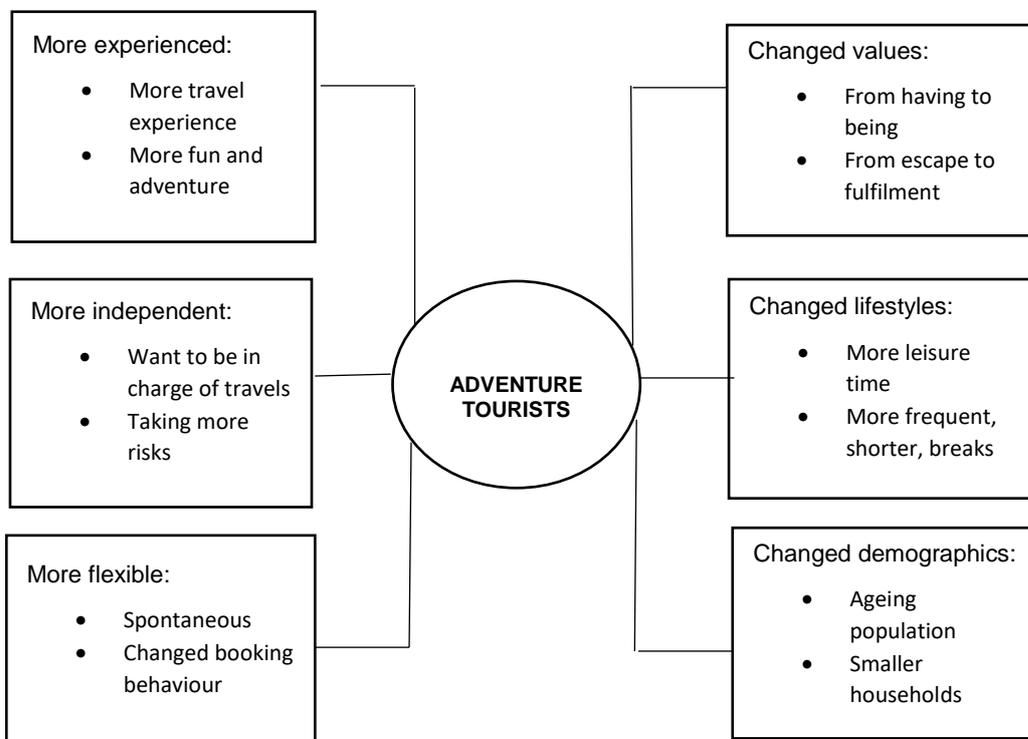


Figure 3.3: Characteristics of the “new” adventure tourist

(Source: Swarbrooke *et al.*, 2006:59).

From the figure above it is clear that adventure tourists are those who have had more experience in travelling as well as more adventure experiences. They are independent travellers who like to be in charge of their schedules and enjoy taking risks. These travellers are more flexible, spontaneous and show changed booking behaviour. As for the values, these travellers' values have changed from "having" to "being", all in the hopes of finding fulfilment, rather than merely an escape. Adventure tourists are often those who have more leisure time, therefore more time to travel which is spent taking shorter breaks on a more frequent basis. As for the demographics, this has changed due to an ageing population as well as smaller households (Swarbrooke *et al.*, 2006:59). According to Raj (2007) "new tourists" are participants and not spectators anymore. Raj (2007) suggests that "new" tourists want to get off the beaten path and mingle with the residents. These tourists prefer to experience high levels of involvement in the organisation of the trip they are undertaking, rather than travelling for the sake of leisure and recreation (Raj, 2007). Saayman (2017b) adds that "new" tourists are independent, they prefer to be active in the creation of their own experiences, they want to be part of the product or experience and not just stand by and watch, they actively seek memorable experiences, they make use of the internet more frequently and therefore know the different applications and platforms, they are much more critical towards marketing and being socially and environmentally responsible and they consume and purchase only when necessary. According to Saayman (2017b) the features of the "new" tourists has changed since that of Swarbrooke *et al.* (2006:59) has been developed and can be portrayed as depicted in Figure 3.4 (Saayman, 2017b).

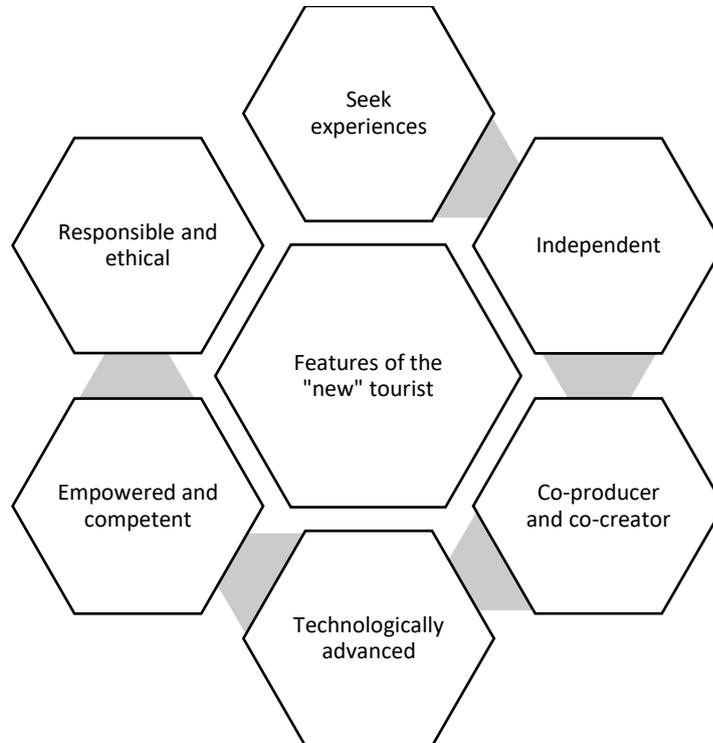


Figure 3.4: Features of the "new" tourist

(Source: Saayman, 2017b).

The characteristics of adventure tourists can, therefore, be analysed regarding demographics; behaviour, activities enjoyed, needs, motivations and methods of travelling. These are discussed next:

- **Demographics:** The typical adventure tourist is young, between the ages of 25 and 55 years, educated and an active thrill seeker who is willing to spend significant amounts of money on adventure related activities (Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5). These tourists are married and their decisions on which destinations to visit is based on the scenery and destination attributes. The largest percentage of the adventure tourism market are highly educated people who possess a tertiary qualification, professional qualifications, or special training (Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5). According to Swarbrooke *et al.* (2006:60) it has been recorded that the average age of adventure tourists is between the ages of 40 and 45 years. Therefore, supporting the premise that lifestyle, rather than age, is a determining factor and holds a much higher influence on the choices made by travellers (Swarbrooke *et al.*, 2006:60).
- **Behaviour:** According to Sung (2004:262) and Pomfret and Bramwell (2014:3) adventure tourists like to operate independently while taking advice and recommendations from friends, peers, reviews and testimonials into account.
- **Activities enjoyed:** Adventure tourists enjoy activities which offer a thrill. These activities are often fitness or health oriented and takes place in a natural setting (Schott, 2007:262; Pomfret & Bramwell, 2014:5).
- **Needs:** The needs of the adventure traveller have changed to seeking destinations and activities which offer an adventure experience, often found in unexpected tourist destinations (Weber, 2001:372). According to Pomfret and Bramwell (2014:5), adventure tourists are driven by the need to experience something 'out of the ordinary' and unique, such as shark cage diving.
- **Motivations:** Due to a changed work-life balance, adventure tourists are often motivated by the desire to get away from a routine lifestyle, which is once again found in unexpected destinations. They prefer to travel environmentally-friendly and are conscious about the environment, religions, communities and ethnicity (Weber, 2001:372; Buckley, 2012a:962; Pomfret & Bramwell, 2014:6; Giddy & Webb, 2016:353) (motivations of adventure tourism are discussed in detail under section 3.3).
- **The method of travelling:** Adventure travellers can be found travelling solo, as a couple, as part of a group or as honeymooners. These travellers do seek other travellers who enjoy similar activities as they do though (Weber, 2001:372).

From this analysis, a general idea can be gained regarding the adventure tourist, what drives them as well as how these tourists have evolved. In the next section of this chapter, the types of adventure tourism are discussed and further insight would be gained regarding this sector.

3.3 TRAVEL MOTIVES OF ADVENTURE TOURISTS

Adventure tourists, as with any other tourist, will have a certain motivation which has influenced their decision to participate in an adventure activity. Tourists usually have an expectation toward the activity which they will take part in, the level of service they will receive from the operator and the particular destination where the activity takes place (Askama & Kieti, 2003:75). Travel motives can be defined as a set of needs which can cause the tourist to take action to participate in a particular activity and thereby making certain decisions (Swanson & Horridge, 2006:673).

In an attempt to define and explain the motives and experiences of tourists in general, Maslow (1943) established a five-stage hierarchy of needs, Iso-Ahola (1989) established the seeking and escaping dimensions of tourists, the theory of Sunlust and Wanderlust was developed by Gray (1980) and the push and pull theory was developed. These theories can be defined as follows:

- **Maslow's five-stage hierarchy of needs:** Maslow states that a person has first to meet the needs of four other stages, namely psychological needs (food, water, sleep, oxygen), safety and security (freedom from fear and anxiety, physical and psychological fulfilment); love and belonging (affection, giving and receiving love), esteem (evaluating yourself, others and having the ability to cope with the demands from life while achieving personal goals) and self-actualisation (developing one's potential, achieving a certain level of self-fulfilment as well as the feeling of being one with the universe) (Maslow, 1943; Saayman, 2006:35).
- **Iso-Ahola's seeking and escaping dimensions:** Tourists' motivation for leisure can be explained using two fundamental forces, namely *seeking personal and social rewards* and *escaping from personal and social environments*. These forces are based on the concepts of intrinsic and extrinsic rewards. Intrinsic rewards are found in leisure activities seeing as participants derive satisfaction from aspects such as the challenge or the excitement received from the activity (Orams, 1999:32). Extrinsically speaking, the adventure activity offers the participant an opportunity to escape the routine lifestyles and working environments (Iso-Ahola, 1989; Orams, 1999:32).
- **Push and Pull theory:** A clear distinction can be made between factors which describe the travel behaviour of tourists (Kim, Oh & Jogaratnam, 2007:74). Kim *et al.* (2007:74) describe push factors as "the desire of the tourist to travel", such as excitement, relaxation and escape, while pull factors are defined as "the choice of the destination" and includes scenery, cultural aspects and water activities. The concept of push factors is said to enhance the decision of where the tourist will travel to, while the concept of pull factors enhances the decision of how the tourist will be travelling (Kim *et al.*, 2007:74).
- **Sunlust and Wanderlust:** The motivations for travelling can be classified according to two basic reasons, as stated by Gray (1980). These reasons are "sunlust" and "wanderlust". Gray (1980), according to Orams (1999:32), have incorporated the curiosity motive of tourists into this theory when he states that people will either travel due to need to experience a particular element of a

destination. According to Gray (1980), Sunlust can be described as being dependent on the existence of better and differing attractions than those which the tourist is familiar with because it delivers another specific experience or service (Gray, 1980). On the other hand, wanderlust can be described as the inner motivation which a tourist has for leaving all that is known behind in exchange for experience new and different cultures and to have entirely new experiences (Gray, 1980).

- **Intentional/unintentional motivation framework:** In criticism on previous motivation frameworks and models Saayman (2017b) compiled the intentional/unintentional motivation framework. This is based on the fact that not everyone participates intentionally in activities. For example, if you travel to a destination to see whales it would be your primary (intentional) reason. However, if you travel to a destination for other reasons say business but you are aware that it is whale watching season then the motive would be secondary intentional. But if you travelled for business and was totally unaware of whale watching opportunities then it is unintentional. It is therefore important to understand what were the key motives for visiting a destination or attraction.

Tourists' motives for participating in a particular activity influence the experience which they will have to a great extent (Gursoy, Chen & Chi, *et al.*, 2014:811). The relationship between motives and experiences is a multi-faceted and complex relationship, where the reasons for the tourist's participation will either be satisfied or not (Gursoy *et al.*, 2014:811). The theory established by Manning (2011), Pearce (2006), Todd, Graefe & Mann (2002:107), namely the expectancy theory, clearly identifies motives as being determined by the attractiveness of the outcomes of participation in a tourism activity and the expectation resulting thereof (Todd *et al.*, 2002:107). According to the authors, this theory will result in the perception of the desired outcomes which is gained from participation, will harbour a positive attitude with the tourist, therefore resulting in a positive experience. Furthermore, this theory also states that tourists will have more than one motive for participation in tourism activities (Todd *et al.*, 2002:107; Meyer, Thapa & Pennington-Grey, 2002:292). The experiences derived from participating in the activity might have a completely different outcome from what was expected.

Aside from the theories discussed above, fear and risk are two important motivational elements for adventure tourists. According to Kollmus and Agyeman (2010:249), the term 'motive' can be defined as the reason for a certain behavioural characteristics portrayed or the strong internal stimulus on which this behaviour is based. Venkatesh (2006:89) on the other hand, states that "the need to see the unseen and know the unknown" is what drives people to new places and exactly which motivates them to visit new destinations. The same concept can be applied to adventure tourism. The need to experience a sense of thrill, fear, or risk is the central aspect which motivates them to participate in adventure activities.

Adventure tourists have a strong pull towards fear and elements of risk (Van der Merwe, 2009:229). In the corporate industry, people tend to minimise risks as much as possible, such as safety and security risks or financial risks. With adventure tourism, the same trend is seen where adventure operators tend to minimise the risk associated with the activity as much as possible, such as the risk of drowning while doing white-water rafting (Van der Merwe, 2009:228). Adventure activities take place where risk is increased and competence decreased, while peak adventure occurs where the two concepts meet (Van der Merwe, 2009:228).

Another aspect which adventure tourists pursue is the element of fear. According to Cater (2006:31) adventure tourism is characterised by an element of fear. Every adventure activity is based on the irrational dreads, reverences and superstitions of the participant, making this a truly unique and authentic market segment. As the element of risk tends to decrease in the daily lives of people, it appears that the pursuit of risk increases in leisure activities (Cater, 2006:318). Cater (2006:318) states that there has been a clear increase in the amount of adventure tourism personality types while a definite decrease is apparent amongst low-risk leisure activities. People are becoming more accepting towards riskier activities as can be seen in the amount of increased adventure participants (Cater, 2006:318).

Aside from the element of risk which is sought by adventure participants, the idea of fear is also a motivating factor, such as the case with shark cage diving. Whale watching, on the other hand, can be classified as more of a leisure activity because the element of risk and fear is less. While the trend amongst operators is to minimise the risk about the specific activity and thereby the external aspects of fear, a co-modified fear is created (Van der Merwe, 2009:229). This co-modified fear allows the participant to experience an internalised thrill where the thrill experienced by the participant is merely perceived as such (Van der Merwe, 2009:229). The element of danger which the tourist fears is removed or minimised but the idea of something going wrong while taking part in the activity remains true to the participant. The operator ensures that safety measures and procedures have been put in place to remove the risk of injury or death as much as possible and the fear experienced by the tourist is his personal and internal perceptions of the activity (Van der Merwe, 2009:229). For example, when scuba diving all safety measures have been put in place to ensure that diver does not drown, such as skills taught to breathe underwater, dive masters, the buddy system and multiple equipment checks. The risk of drowning is minimum as long as the diver is qualified, the thrill experienced by the diver is real and the fear is internal.

Shark cage diving and whale watching can be classified as marine wildlife tourism, as discussed in Chapter two of this thesis. Therefore, marine wildlife tourists' travel motives for participating in marine animal viewing activities are also of consequence in understanding this sector. Reynolds and Braithwaite (2001:34) have identified nine different groups of wildlife tourists according to their exhibition of certain motivational factors. These groups apply to both marine wildlife and land-based wildlife tourists (Reynolds & Braithwaite, 2001:34):

- Naturalists: the primary interest for these tourists are their interest in nature and the outdoors
- Ecologists: these tourists are concerned with the natural environment as a habitat system
- Humanistic: these tourists have a strong affection for animals, their pets in particular
- Moralistic: the primary concern for these tourists are the correct treatment of animals
- Scientists: the main interest for these tourists are the physical attributes and biological functioning of animals
- Aesthetic: an interest in the artistic and symbolic attributes of the animal is the main concern here
- Utilitarian: the practical and material value of animals is the main concern for these tourists
- Dominionism: the primary concern here is in the mastery and control of animals such as sporting situations
- Negativistic: persons who actively avoid animals due to a general dislike, indifference or fear.

The reasoning behind the variety of motivational groups are that one person might express his or her characteristics of different categories at a different time and under different circumstances as the next person (Reynolds & Braithwaite, 2001:35). At the same time, though, an individual may encompass characteristics from more than one category (Reynolds & Braithwaite, 2001:34). Reynolds and Braithwaite (2001:34) propose that individuals who go on a wildlife tour will exhibit different values based on their motivations and interests, resulting in the fact that a variety of motivational factors can drive a range of different interest groups to embark on the same trip. Interesting to note is the fact that members of the general tendency to fall under the categories of humanistic and moralistic, while members are filling positions such as wildlife managers, tend to be ecologists, scientists and utilitarians (Reynolds & Braithwaite, 2001:35).

Jeong (2014:304) identified various motivational factors for marine tourists in general. Amongst these motives, the following were identified; to escape everyday life, to take a break from a routine life, to rest and recharge, to find introspection, to experience nature, for scenic beauty, to enjoy clear water and fresh air, to walk along the beach, adventurous activities, marine sports, a cruise and swimming in the ocean. Jeong (2014) goes further and classifies these motives as either push motives or pull motives. Jeong (2014:304) divides the pull and push motives of marine tourists as indicated in Table 3.2.

Table 3.2: Push and pull motives of marine tourists

PUSH MOTIVES	PULL MOTIVES
To escape everyday life	Adventurous activities
To take a break from a routine life	Marine sports
To rest and recharge	Going on a cruise

To find introspection	Swimming in the ocean
To experience nature	
For scenic beauty	
To enjoy clear water and fresh air	
To walk along the beach	

(Source: Jeong, 2014:304)

According to Jeong (2014:304), the difference in the motivational factors for marine tourists indicates that marine destinations with a primary focus on static activities, such as sunbathing and recreation, will appeal more to tourists portraying push motives. Tourists portraying pull motives, on the other hand, are those who are more inclined to participate in adventure activities, such as whale watching and shark cage diving (Jeong, 2014:304). Mohd and Ramli (2014:111) further proves that escape and relaxation are amongst the primary motivating factors for tourists visiting a marine environment. In the study conducted on the motivations of tourists to marine destinations in Malaysia, the authors (Mohd & Ramli, 2014:111) states that push factors are the main driving force behind tourists' decision to visit a beach or other marine destinations.

Travel motives have been researched for many years and in multiple tourism industries. Even though literature about the travel motives of shark cage divers and whale watchers are limited (Higham & Lück, 2008; Meyer *et al.*, 2002; Dicken & Hosking, 2009), a summary can be created from the research conducted previously on travel motives of tourists in marine tourism and marine adventure tourism. Table 3.3 is a portrayal of this summary (Van der Merwe *et al.*, 2011:460; Geldenhuys, 2012:41).

Table 3.3: Summary of travel motives in various tourism industries

TRAVEL MOTIVES TO MARINE DESTINATIONS		
Researcher	Motives	Title of article
Kozak (2002)	Culture Pleasure seeking or fantasy Relaxation Physical attributes	Comparative analysis of tourist motivations by nationality and destinations
Yoon and Uysal (2005)	Excitement Knowledge and learning Education Relaxation Family togetherness Achievement	An examination of the effects of motivation and satisfaction on destination loyalty: a structural model

	<p>Escape</p> <p>Safety</p> <p>Fun</p> <p>Destination attributes</p>	
Molero and Albaladejo (2007)	<p>Nature and peacefulness</p> <p>Physical attributes</p> <p>Culture</p> <p>Family togetherness</p> <p>Trip features</p> <p>Rural life</p>	Profiling segments of tourists in rural areas of South-Eastern Spain
Saayman, Slabbert and Van der Merwe (2009)	<p>Relaxation</p> <p>Escape</p> <p>Destination attractiveness</p> <p>Socialisation</p> <p>Personal attachment</p> <p>Site attributes</p> <p>Trip features</p>	Travel motivations: a tale of two marine destinations in South Africa
Tiedt (2011)	<p>Family togetherness</p> <p>Park attributes</p>	Travel motivations of tourists to selected Marine National Parks
Scholtz, Kruger & Saayman (2015)	<p>Accommodation</p> <p>Education</p> <p>Socialisation</p> <p>Park attributes</p> <p>Escape</p> <p>Relaxation</p>	Determinants of visitor length of stay at three coastal national parks in South Africa
TRAVEL MOTIVES OF MARINE LEISURE ACTIVITIES		
Jeong (2014)	<p>Escape</p> <p>Taking a break</p> <p>Novelty</p> <p>Active marine activities</p> <p>Static marine activities</p>	Marine tourist motivations: comparing push and pull factors
Petrack and Durko (2015)	<p>Relaxation</p> <p>Socialisation</p> <p>Culture</p>	Segmenting luxury cruise tourists based on their motivations

Kizielewicz, Haahti, Luković and Gračan (2017)	Visiting relatives Business purposes Tourism and visiting relatives	The segmentation of the demand for ferry-travel – a case study of Stena Line
TRAVEL MOTIVES OF MARINE ADVENTURE TOURISTS		
Ditton, Osburn, Baker and Thaling (2002)	Excitement Relaxation Escape Risk Devotion Exploration Discovery Social interaction	Demographics, attitudes and reef management preferences of sport divers in offshore Texas waters
Meyer <i>et al.</i> (2002)	Risk Self-improvement Confidence Learning Personal challenge	An exploration of motivations among scuba divers in north central Florida
Todd <i>et al.</i> (2002)	To experience adventure Social interaction Stature Learn Escape Personal challenge	Differences in scuba diver motivations based on level of development
Geldenhuys <i>et al.</i> (2014)	Personal challenge Devotion Relaxation and escape Exploration and discovery	Who is the scuba diver visiting Sodwana Bay and why?

(Source: Van der Merwe *et al.*, 2011:460; Geldenhuys, 2012:41).

Many of the motives identified for the various industries overlap, such as escaping, relaxation, knowledge and learning, status, excitement, risk, discovery and exploration. For similar reasons, Crompton (1979) identified seven general factors which he describes as socio-psychological motives of tourists. These motives are (Crompton, 1979):

- Escaping an everyday environment
- Discovery and self-evaluation

- Relaxation and recreation
- Prestige
- Regression
- Strengthening of family ties, or family togetherness
- Social interaction.

Crompton (1979) states that these motives can be regarded as the primary reasons why people travel or will participate in a specific activity. As evident from Table 3.4, these travel motives can be identified in all industries. Travel motives and experiences go hand in hand, therefore the following section discusses the adventure tourism experience by referring to relevant theories, concepts of interest and benefits gained.

3.4 ADVENTURE TOURISM EXPERIENCE

Adventure tourism is experienced differently by each participant, even though the activity remains the same. Adventure experience theories have been developed which aims to divide the behaviour of adventure tourists into certain categories, based on how the adventure is experienced. The literature states that adventure experiences are based on determinants of participation, namely challenge, competence and risk (Morgan, 2001:108). This ensures a different experience each time. Factors which influence the experience of an adventure tourist include the following (Buckley, 2007:1429):

- Emotions of tourists
- Previous experiences
- Demographic details, such as age and gender
- Expectations of the tourist
- Personal opinions and those of peers
- The level of skill of the tourist.

These factors can all differ from participant to participant during a single presentation of activity, the experience for each person will differ, but the fact remains that all the participants have done the same activity (Buckley, 2007:1429). The following activities can be typically categorised as adventure tourism activities; whale watching, shark cage diving, snorkelling, scuba diving, sea kayaking, mountain climbing, caving, abseiling, white water rafting, skiing, snowboarding, surfing, sailing, sail boarding, ballooning, skydiving, horse riding, mountain biking and off-road driving (Buckley, 2007:1429). For each of these activities, tourists will have a unique motivation which has either pushed them or pulled them towards the activity. The motivations of an adventure tourist will differ from that of a leisure tourist seeing as their needs will differ (Askama & Kieti, 2003:75).

The following adventure experience theories are discussed:

- Stages of adventure;

- The adventure experience paradigm; and
- Adventure activity scale.

3.4.1 Stages of adventure

According to Mortlock (1984:22), adventure can be divided into four different stages, or components, which takes into account the differing characteristics of adventure activities. These stages are identified regarding a descriptive model of adventure experiences which defines and analyses the different stages which participants move through (Mortlock, 1984:22). Figure 3.5 portrays the four stages of adventure according to Mortlock (1984).

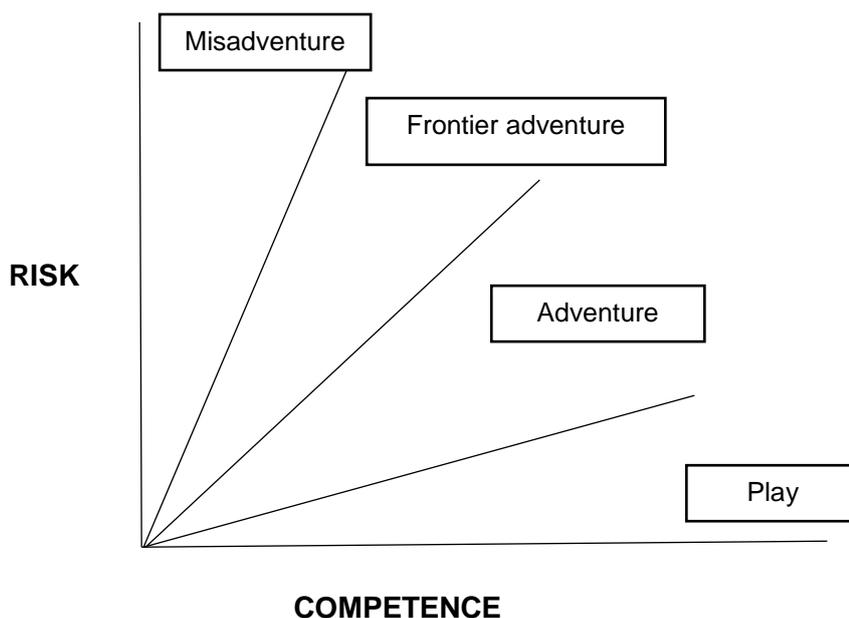


Figure 3.5: Stages of adventure

(Source: Mortlock, 1984)

The first stage, 'play' sees the participant operating below his or her capabilities. Minimum involvement regarding skills, emotions, concentration and mental control is required. This stage also does not involve high levels of fear or injury to the participant and the experience can be described as 'pleasant' or 'boring' (Mason, 2010:31). During the second stage, adventure, the participant will start to feel in control of the situation and will rely greatly on past experiences and skills gained to overcome challenges or obstacles (Swarbrooke *et al.*, 2003:11). This is also when the participant will start experiencing fear or unease, which is brought about by the remoteness of the setting in which the activity takes place. Thirdly, the participant will move on towards the stage of the frontier adventure. This stage involves little to moderate control over the situation at hand and can cause feelings of uncertainty and fear to be enhanced (Swarbrooke *et al.*, 2003:11). To overcome the challenges faced during this stage, concentration and non-passive actions will be required from the participant. According to Csikszentmihalyi and Csikszentmihalyi (1999:157), the level of satisfaction which is experienced during this stage is dependent on the level of intensity required. In other words,

the more intense the situation is, the higher the level of satisfaction will be. The last stage, 'misadventure', involves some of the challenges faced by the participant to be out of his or her control. This occurs where the skills, or competence, of the participant, is not efficiently matched with the level of risk faced. This can result in failure and can, therefore, lead to a variety of damage, such as mental, physical, emotional and social damage (Priest & Gass, 2005:50). According to Van der Merwe (2009:228) failure can be seen as an opportunity to learn and gain additional skills.

3.4.2 The adventure experience paradigm

The adventure experience paradigm (AEP) can be defined as the interaction between risk and competence (Morgan, 2001:109). The paradigm is based on the concept of uncertainty and can thus be applied to any leisure activity which possesses this characteristic (Carpenter & Priest, 1989). The AEP envelopes characteristics of several theories, namely Theories of Arousal (Ellis, 1973), the Concept of Flow (Csikszentmihalyi, 1975) and Mortlock's (1984) Spectrum of Adventure.

Firstly, it is important to note that individuals engage in activities which arouses their interest and offers an escape from daily routines (Morgan, 2001:110). Individuals, aside from the fact that they seek arousal, rely greatly on their level of experience to shape the outcomes of their participation in relevant activities (Morgan, 2001:110). From this, the AEP identifies five stages of challenge on which the experience of an adventure tourist is based, namely exploration and experimentation, adventure, peak adventure, misadventure and devastation and disaster (Morgan, 2001:110). Figure 3.6 visually portrays the five stages of the AEP, as developed by Martin and Priest (1986).

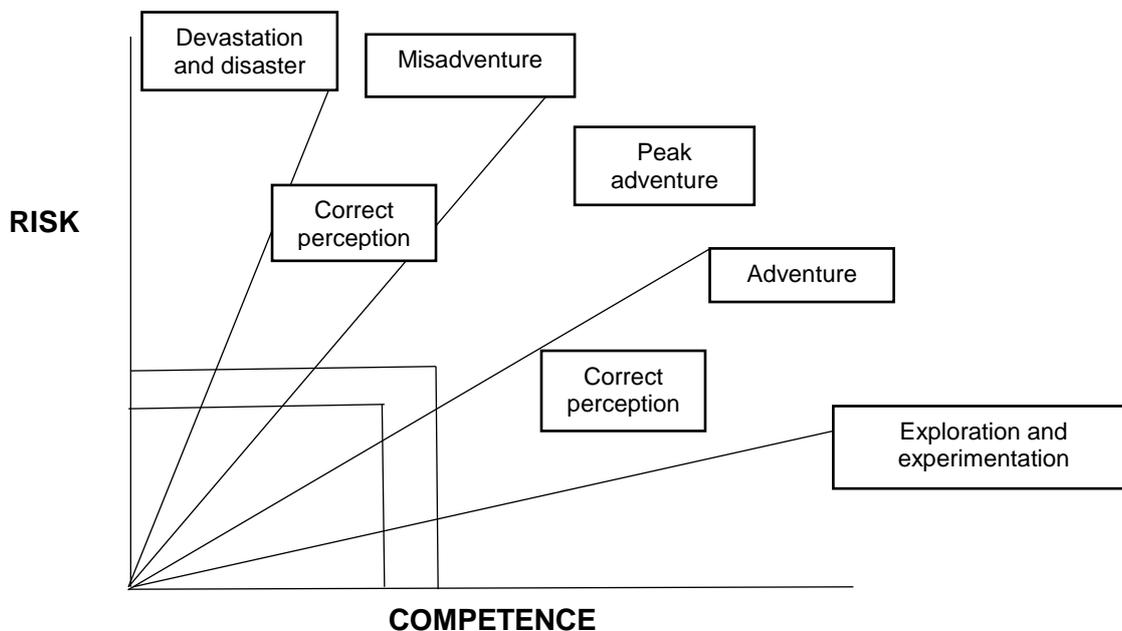


Figure 3.6: The adventure experience paradigm

(Source: Morgan, 2001:110).

As indicated by Figure 3.6 the results of the experience are dependent on the balance between risk and competence (Van der Merwe, 2009:227). With the first stage, exploration and experimentation are established when risks are low and competence is high. An example of such activity is a hike through the countryside. As the level of risk increases, the participant moves into the situation which is emphasised by adventure (Priest & Gass, 2005:49). Once the levels of risk and competence are balanced, a stage of peak adventure is reached, whereby the participant is experiencing high levels of risk but is competent to handle these risks (Priest & Gass, 2005:49). Once the level of risk exceeds the person's level of competence, in other words, not enough experience or skills are gained to handle the high levels of risk, the stage of misadventure is reached, which is similar to that of Mortlock's stages of adventure (Priest & Gass, 2005:50). Once this stage is reached the potential of minor mishaps becomes a reality. The last stage, devastation and disaster, appears where risks are very high and competence very low (Priest & Gass, 2005:50). The potential for permanent and fatal damage reaches a peak. The devastation and disaster stage should not play a role in educational experiences, but the stage of misadventure can be used as a basis for learning from mistakes made and improving skills and competence (Van der Merwe, 2009:228).

These stages represent all possible stages of the adventure experience, but ultimately the goal for any adventure participant lies with reaching peak adventure (Priest & Gass, 2005:50). According to Martin and Priest (1986:19) though, the term 'peak adventure' is relative. Each person's stage of peak adventure will differ and the experience will vary from person to person.

3.4.3 Adventure activity scale

The adventure activity scale, developed by Buckley (2007:1432), takes into account the level of difficulty of an adventure activity versus the volume of participants. The difficulty, regarding the adventure activity scale, is measured by the level of technicality of the activity, inherent risks, the remoteness of the setting, monetary costs of the activity, duration and prior experience of the individual (Buckley, 2007:1432). On the other hand, volume refers to a number of participants per year and the average size of a group (Buckley, 2007:1432).

The adventure activity scale is illustrated below, where difficulty is measured against volume. Figure 3.9 indicates that the volume of participants will increase as the difficulty of the activity decreases and vice versa (Buckley, 2007:1432). According to Figure 3.7, *icon adventurers* are those participants taking part in adventure activities with a high level of difficulty and a low volume of participants, such as mountain climbing and skydiving. On the other hand of the scale though, *thrill rides at fairs and theme parks* encompass adventure activities with high volumes of participants but very low levels of difficulty such as a theme park. Based on this, activities with high levels of difficulty can be described as those activities involving high levels of risk and danger, requires the participant to use specialised equipment and a qualified guide should accompany the expedition (Buckley, 2010:11). For these activities, training is usually required and the participant should possess a certain set of skills (Buckley, 2010:11). Activities with high levels of difficulty can also be associated

with high levels of financial cost, because specialised training is needed and the cost of acquiring and maintaining equipment can be high (Buckley, 2010:12). This can, therefore, be posed as a reason, aside for the fact that special equipment and competency is needed, for the low volume of a participant in adventure activities categorised as *icon adventurers* and *first, one-offs and adventures at extreme sites* (Priest & Gass, 2005:49).

Destinations which host activities on both sides of the scale, namely activities with high levels of difficulty and activities with a high volume of participants, have the benefit of involving a wider market. On the other hand, hosting activities categorised under high levels of difficulty will benefit conservation and preservation of the environment as well as positively impact environmental health. The reason being, lower volumes of participants, mean lower impacts on the environment. Additionally, seeing as these activities are usually priced higher than other activities, these will also have a positive economic impact on the destination.

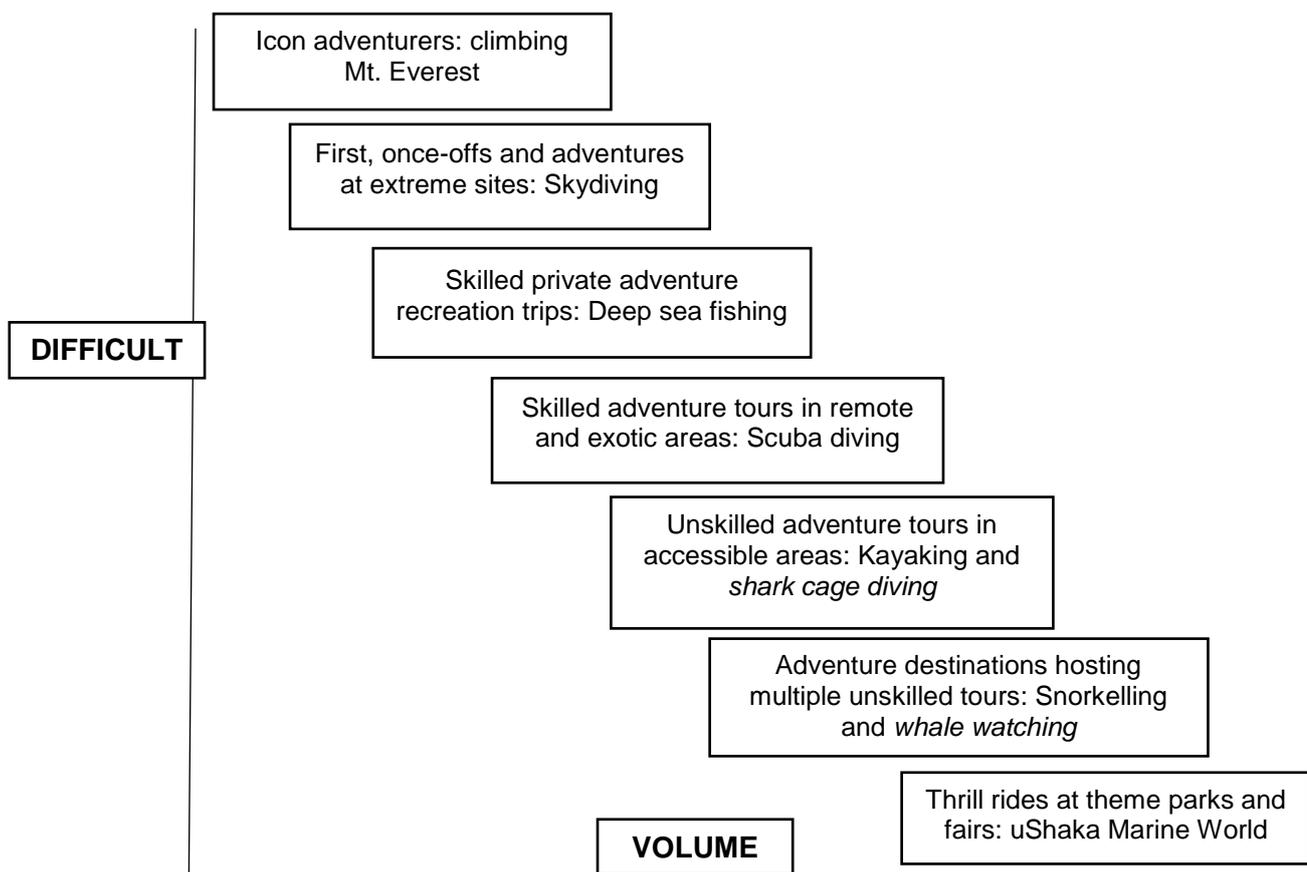


Figure 3.7: The adventure activity scale

(Source: Buckley, 2007:1432)

3.4.1 Marine adventure tourists' benefits and experiences

While motives are important and give insight into the driving force behind tourism, tourists experience a wide range of social and physiological, psychological, educational and conservation benefits which are derived from a marine wildlife encounter (Orams, 2000:561). Social and physiological aspects

influence the type of benefits sought from such an interaction, such as non-consumptive wildlife viewing rather than killing and escaping the daily routines of a normal lifestyle. Zeppel and Muloin (2008:21) discuss these experiences in terms of benefits derived by the participant from the experience and can be summarised as follows:

- Psychological aspects include the excitement of the encounter, novelty, intensity and the element of uniqueness, enhancing personal well-being and an improved quality of life.
- Educational benefits include learning about wildlife and personal growth.
- Conservation benefits include, amongst others, greater environmental awareness, supporting nature conservation work and aiding the protection of endangered species.

As far as benefits are concerned, Orams (2000:565) determined that benefits drawn from the encounter greatly influence the overall experience of the marine wildlife tourist. The study conducted by Orams (2000) highlights the experiences which whale watchers drew from a whale watching expedition. Various factors have been identified which either enhanced the experience or caused a decrease in tourist satisfaction levels. The following factors have been identified to either enhance or decline the experience for tourists regarding whale watching (Orams, 2000:565):

- Good quality whale watches, referring to the fact that whales were encountered on the trip and tourists could see the whales clearly
- The crew adds great value to the experience as tourists can still be satisfied with the experience due to the crew making the trip fun and enjoyable, even without spotting whales
- The proximity of the whales is not a crucial influence on the experience, while a larger number of whales and more spectacular whale behaviour does impact the experience
- The number of passengers on board the vessel impacts on experiences. The more crowded the boat is, the less satisfied tourists are with the experience
- Tourists feel the duration of the cruise should not be too long, but it should not be too short either
- The construction of the boat for viewing greatly impacts on experiences
- The position of the boat should allow for optimal viewing of the whales for all passengers
- Issues of sea-sickness can greatly influence a decline in tourist satisfaction (this concept is tested in the questionnaire for marine adventure participants).

There are factors which cannot be controlled by the operator which have been identified in the same study (Orams, 2000) to either enhance or decrease the whale watching experience. These factors include calmer water breaching of whales while the proximity of the whales was not an important issue for tourists (Orams, 2000:567). In contradiction to this statement, however, Duffus (1988) found that orca whale watchers ranked the proximity of orca whales of great importance to their overall experience, while encountering the whales were ranked as most important.

Tourists participating in marine wildlife tours can gain a variety of benefits. These benefits can be divided into five categories, namely psychological, economic, environmental, social and

physiological benefits (Higham & Lück, 2008:49; Bentz, 2015:42). According to Higham and Lück (2008:50) psychological benefits include participants being able to relax in a marine environment and undergoing personal growth (shark cage diving offers participants the opportunity to take their mind of daily work and life while experiencing personal growth).

Conservation or environmental outcomes involve participants being exposed to the concept of conservation and they are educated in how to go about protecting and conserving the marine environment and marine wildlife (Higham & Lück, 2008:50). Operators of shark cage diving and whale watching will emphasise the need for conservation of white sharks and the protection of whales while participants are enjoying the activity. Educational benefits can also be drawn from the environmental or conservational benefits and involve the participant learning more about marine wildlife, such as the behaviour of white sharks while hunting, or specific species of marine wildlife, such as various whales found along the South African coast (Higham & Lück, 2008:50)

Accordingly, physiological benefits encompass feelings of excitement, novelty, intensity and uniqueness, promotion of personal well-being and an enhanced quality of life for the participant (Higham & Lück, 2008:49). For example, tourists participating in whale watching will benefit from the environment by being close to the whales as well as exposed to the elements, while feelings of excitement, novelty and uniqueness will be felt during the trip.

While the above-mentioned benefits all refer to the tourist personally, the social benefits refer to the fact that whale watching and shark cage diving are group activities. Tourists are therefore exposed to other participants, cultures and personalities, which can enhance cross-cultural harmony and break down such barriers (Saayman, 2009:69). Economic benefits, on the other hand, refer to the concept of making money, boosting the local economy by means of selling more products and services to tourists, generating foreign income and creating more job opportunities for local residents, which will in turn aid the economic situation of the host community (Higham & Lück, 2008:49).

Research conducted by Dobson (2008:55) on the key features of shark-based tourism in general determined that the following benefits can have an impact on tourists taking part in shark-based tourism activities, such as shark cage diving:

- Education and attitude change: by exposing the public to sharks is one of the most effective and efficient ways to contribute towards the conservation of marine wildlife tourism. From a psychological perspective, it enhances individuals' attitudes towards conservation by exposing them to relevant stimuli, such as viewing a shark in the natural habitat would.
- Economic benefits: not only does shark-based tourism hold great economic benefits for local communities, but it also emphasises conservation ethic in the light of highlighting the value of live sharks.

- Research and lobbying: shark-based tourism can contribute to research on certain shark species, such as the Great White Shark. In South Africa, many shark cage dive operators conduct research on the Great White shark in terms of migration patterns and the behaviour of the shark (Marine Dynamics, 2015).

In addition to the factors mentioned above, Lück (2008b:340) proposes that marine wildlife tourists desire interpretation where a learning experience is incorporated. Furthermore, well-planned and structured interpretive programmes can alter tourists' attitudes towards conservation and their intentions to being more environmentally friendly as a result of improved knowledge regarding a species (Lück, 2008b:340).

Furthermore, key features of marine wildlife tourism are the perceived naturalness or authenticity of the encounter and the elements of animal attributes, surprise encounters, natural environments and new animals (Higham & Lück, 2008:51). A study conducted on marine wildlife viewing in New Zealand identified that close viewing of unique animals (such as whales and sharks) behaving naturally in a natural environment to be the biggest influencing factor for an excellent marine wildlife experience (Moscardo, 2001). On the other hand, aspects such as a knowledgeable guide, information on wildlife and touching or handling wildlife was found to be least important for a valuable experience for marine wildlife tourists (Moscardo, 2001).

Zeppel and Muloin (2008:24) suggest that key factors for satisfaction a wildlife tourism experiences in general include the following (Reynolds & Braithwaite, 2001; Moscardo & Saltzer, 2004):

- The intensity of excitement of the experience should be high
- The variety or large numbers of animals are important
- The experience should be authentic, or natural
- The experience should be unique
- Interpretation of the trip should be of a good quality
- Staff should be knowledgeable about the environment and the animals
- The more popular an animal that is encountered, the more exciting the experience
- The status of the species (rare or endangered) contributes to the experience
- A clear orientation or structure of the experience should be identifiable
- The facilities offered to visitors should be of appropriate quality.

These authors (Reynolds & Braithwaite, 2001; Moscardo & Saltzer, 2004) agree that the type of animal encountered, the authenticity of the experience and the authenticity of the marine environment is important for a quality marine wildlife experience. When considering the experience derived from shark cage diving and whale watching, two very different experiences can be addressed. Firstly, shark cage diving involves high levels of adrenaline and active participation from the participant is necessary for the participant to receive the full experience. The participant is

required to enter the water in order to see the shark's natural behaviour in its habitat. Therefore, the shark cage diving experience will rely greatly on aspects such as safety of participants, no presence of crowds and an educational experience is needed (Techera & Klein, 2013:23).

In 2004, Moscardo and Saltzer conducted research with the focus on tourists participating in marine wildlife tourism in Australia and New Zealand. The authors (Moscardo & Saltzer, 2004) have identified three aspects which are of importance to tourists viewing wildlife, these aspects are the setting conditions, visitor characteristics and wildlife characteristics. Firstly, setting conditions to refer to the variety of animals, large numbers of animals available, the natural setting in which animals are viewed, the quality of the interpretation, knowledge of the staff, clear orientations, the physical setting and absence of crowded places. These aspects have been identified by various researchers of wildlife tourism (Duffus, 1988; Orams, 2000; Lück, 2008; Dicken & Hosking, 2009). Secondly, visitor characteristics refer to elements such as the culture of tourists, previous experiences and the social element present in the group (Moscardo & Saltzer, 2004). Thirdly, the aspect entitles *wildlife characteristics* to refer to the size of the animal being viewed, the colour, rareness of the animal, the level of danger associated with the animal, whether small or baby animals are present, as well as endangered species (Moscardo & Saltzer, 2004).

Curtin (2010) on the other hand, identified the following aspects as contributing to a memorable wildlife experience; being able to make memories, charisma and appeal, large numbers of wildlife, first-time sightings, spontaneity, being mesmerised by nature, being in close proximity to the animal and embodiment. Curtin (2010) identified these elements by conducting qualitative research on the experiences of wildlife tourists. The following Table 3.4 provides a description of the aspects included in each of the factors influencing wildlife tourists' experiences (Curtin, 2010).

Table 3.4: Description of aspects influencing marine wildlife tourists' experiences

FACTOR	ASPECTS INCLUDED
Making memories	While viewing animals, tourists tend to get excited and might miss something taking places, such as the whale breaching or the shark grabbing the bait. Curtin (2010) describes the memories as the ability of the tourist to recall or trace parts of the experience and having access to these experiences after the activity is concluded.
Charisma and appeal	Some animals have a specific and strong attractions for human interest, such as sharks and whales. The attraction is based on the charisma of the animal, or in other words the connection which people have with the animal's approachability.

Large numbers of animals	The higher the number of varying animals tourists have seen, the more memorable the experience will be for them. For example, seeing more than one species of whales on a trip or seeing more than one species of sharks on a dive.
First-time sightings	Tourists usually experience a sense of thrill when seeing a specific animal, such as whales or sharks, for the first time. Curtin (2010) suggests that spotting some animals for the first time is more special than others, such as a southern right whale compared to a penguin.
Spontaneity	Experiencing the 'unknown' is one element which is very important for tourists. For example, a whale approaching the boat to scratch itself or hide from other a pursuing male is a spontaneous happening which will offer much surprise and joy for tourists.
Mesmerised by nature	The anticipation and excitement of witnessing a dramatic scene in nature, such as a shark grabbing the bait line aggressively, is an element which relates to a memorable experience for tourists.
Close proximity of animals	Being close to a wild and dangerous animal, such as whales or sharks, translates to a rare and exciting experience and one which tourists will remember.
Embodiment	The term 'embodiment' refers to an intense awareness of the connection between a body and its environment (Van der Merwe & Saayman, 2014:6). Tourists become very aware of their bodies in relation to that of wildlife when in close proximity to wildlife.

(Source: Curtin, 2010)

According to Van der Merwe and Saayman (2014:11) factors which have an influence on experiences of wildlife tourists include, special conditions (such as being able to spot whales and sharks easily), interpretation (the way in which guides communicate important aspects of the trip), meeting the expectations of the tourists, diversity and quantity of the animals seen, authenticity of the experience, wildlife ambience, proximity to the animals and attributes of the operator. The findings have been substantiated by that of Reynolds and Braithwaite (2001) and Moscardo and Saltzer, who specified similar findings for factors which contribute to a memorable wildlife experience.

Triantafyllidou and Petala (2016:80) investigated sea-based recreation activities to define the impact of different experiences on tourists' satisfaction, word-of-mouth and re-experience intentions. The authors (Triantafyllidou & Petala, 2016:80) identified the most important aspects of a memorable experience to be feelings associated with intense pleasure and immersion and activities which offer a personal challenge. Furthermore, aspects such as learning, challenge, socialisation, escaping a routine, being immersed in the activity and feelings of fun and joy played a big impact on sea-based adventure tourists' experiences (Triantafyllidou & Petala, 2016:80).

The whale watching experience differs from the shark cage diving experience in the sense that participants are not required to enter the water to experience the whale in its natural habitat. The most important influencing aspect identified from the literature is the closeness of the whale in proximity to the participant (Higham & Hendry, 2008: 356). The closer the whales are to the vessel, the more satisfied the participants are with the overall experience. In agreement, Catlin and Jones (2010:390) identified aspects such as being close to whale sharks and swimming with whale sharks to be the most important factors contributing to a valuable experience for participants in whale shark tourism in Western Australia. Furthermore, Catlin and Jones (2010:390) further suggest that the staff, food served and the operational elements of the experience was important to participants.

Dicken and Hosking (2009) suggest that one of the most important factors contributing to the experience of diving with sharks in the Aliwal Shoal Marine Protected Area, South Africa, is the fact that participants can observe sharks that are large in size and be close to nature, while fear was not ranked as an important influencer on the experience (Dicken & Hosking, 2009:229). Furthermore, Dicken and Hosking (2009:229) state that the proximity of these sharks also contributes toward a positive and good shark dive experience. In contrast to this seasickness, the smell of the bait (chum) and the long duration of the boat trip were causes of a bad experience (Dicken & Hosking, 2009:229).

If taking into account the experiences of both the whale watching and shark diving industry, it is interesting that the factors contributing to a good experience, or the benefits of tourists, is similar in both instances. Both the whale watching market and shark cage diving market feel that seasickness and long boat trips are causes for a bad experience (Orams, 2000; Dicken & Hosking, 2009) while positive influencers include the large number of the species that can be seen and being close to nature (Orams, 2000; Dicken & Hosking, 2009).

Regarding experiences, Pratt and Suntikul (2016:867) state that marine tourism experiences can be both educational and entertaining in nature. Education can be offered by providing an engaging learning experience that might induce tourists to undertake environmental-friendly actions in their daily and professional lives (Pratt & Suntikul, 2016:867). Furthermore, tourists can be left with lifelong memories or life changing experiences, such as a whale breaching next to the boat or a shark breaking the surface. These experiences can enhance the overall satisfaction of the tourists and might induce a change of mind-set towards conservation or protection of marine animals.

The market for marine tourism is increasingly emphasising the fact that visitor experiences should incorporate a learning experience has raised awareness of the market's needs to learn about the marine environment. Marine tourists are increasingly moving towards a state of protection and conservation of marine resources, especially whales and sharks (Ballantyne *et al.*, 2011b:770). According to Ballantyne *et al.* (2011b:770), tourism experiences are placed effectively to enhance a positive educational message. These experiences contribute towards the satisfaction of the market's needs to be close to nature and to feel connected to nature once again (Ballantyne *et al.*, 2011b:770). Kals, Schumacher and Montada (1999) further argue this point by stating that direct experiences in nature, such as viewing whales and sharks in their natural habitats, can promote a state of emotional affinity with towards nature.

3.5 MANAGEMENT OF ADVENTURE TOURISM

According to Bentley, Page and Laird (2001:44) management of adventure tourism requires management of three factors, namely individual factors, equipment factors and environmental factors. The factors were identified by means of primary research conducted amongst operators of adventure tourism products and a generic model was established (Van der Merwe, 2009:245). This conceptual model is generic in nature and therefore not directly applicable to a specific type of adventure tourism product. Figure 3.10 below is a portrayal of the model, as established by Bentley *et al.* (2001:44).

According to the model, management of adventure tourism operations are structured into the above-mentioned three categories. Firstly, operators should pay attention to individual or client factors, such as ensuring clear briefing and instructions are given, personal characteristics of participants, physical fitness levels and safety measures should all be taken into account (Bentley *et al.*, 2001:44). Secondly, equipment used for the activity should be of a high quality and not low-budget or cost-saving equipment, it should be maintained and equipment should be fitted to the participant (Page *et al.*, 2005:314). Thirdly, environmental factors should be monitored, such as the weather conditions and ocean conditions (Page *et al.*, 2005:314).

Operators of shark cage diving and whale watching should pay attention to the same factors to ensure a satisfactory and safe activity. For example, shark cage diving operators should fit participants with the correct size wetsuit, booties and masks to ensure comfort as far as possible. They should also ensure that the weather and ocean conditions are appropriate for the activity to reduce discomfort and sea sickness as far as possible. Lastly, operators should ensure that the equipment used for diving, such as wetsuits and the cage, is in proper working condition and will not pose any risks to the participants. In terms of whale watching, operators should once again pay attention to weather and ocean conditions to ensure that a comfortable trip can take place. Little equipment is used for whale watching, but the boat should be comfortable and in good working condition, as well as the lifejackets. Marine adventure operators should ensure that a clear briefing is conducted before and after the trip to inform participants of the procedure to be followed, what to

expect and how to behave while on the trip (Van der Merwe, 2009:246). By managing the aspects as indicated in Figure 3.8 operators will not only ensure satisfaction, but a safe environment as well.

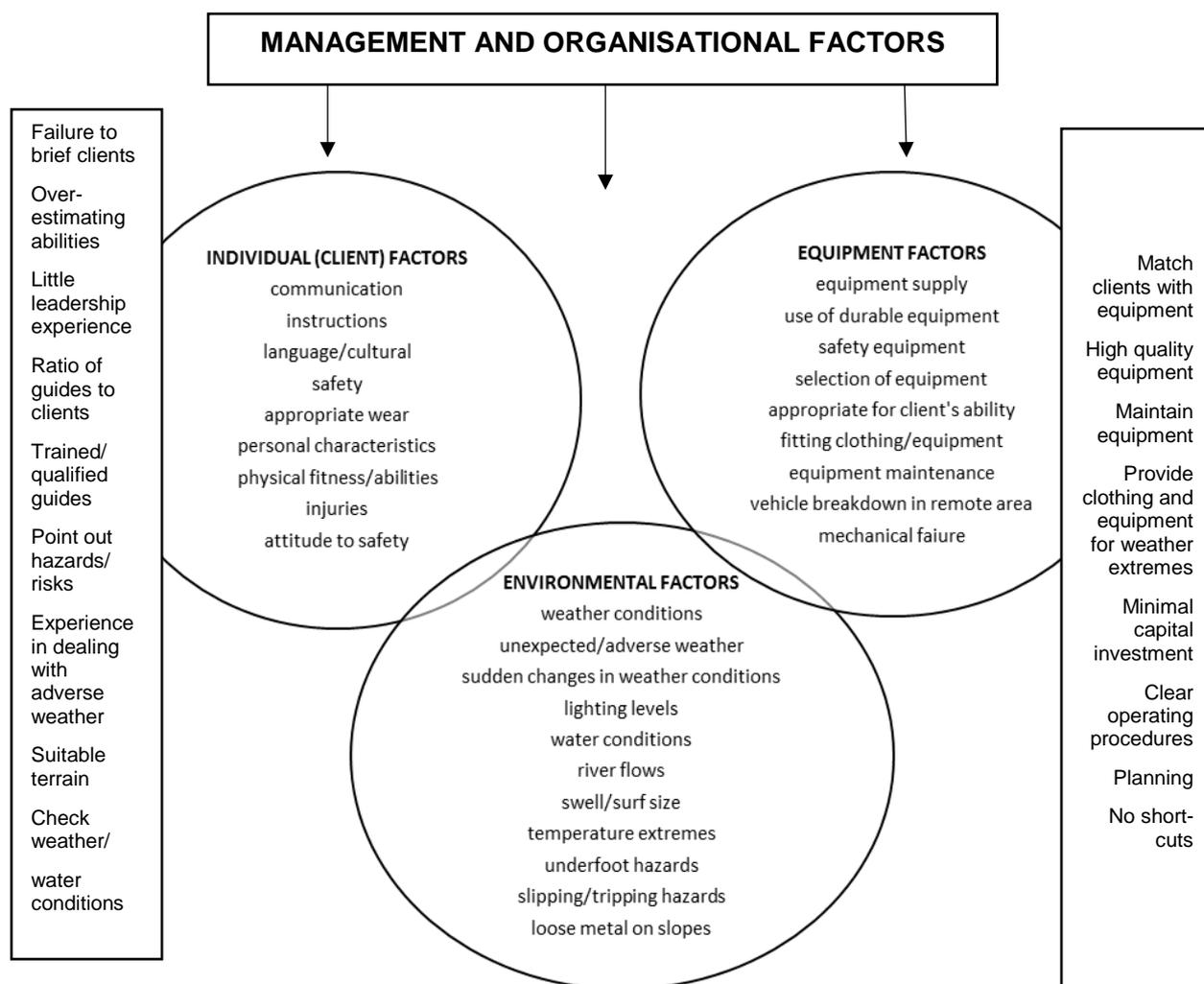


Figure 3.8: Conceptual model for adventure tourism management

(Source: Page *et al.*, 2005:384)

3.6 CONCLUSION

The aim of this chapter was to analyse literature pertaining adventure tourism through discussing important definitions and concepts. Firstly, the concept of adventure tourism was defined as an activity involving elements of excitement for the participant and a rush of adrenaline. In order to analyse the concept of adventure tourism properly, the characteristics of adventure tourists have been identified as people between the ages of 25 and 55, who enjoy spending significant amounts of money on adventure activities, who are highly educated and have experience as travellers. Adventure tourism forms part of the lifestyle of tourists taking part in such activities. Furthermore, the categories of adventure tourism were discussed, which includes soft adventure, hard adventure and the adventure tourism quadrants. This contributes to formulating a decent idea of what adventure tourism entails.

Furthermore, aspects which influence the level of experience of adventure tourists have been discussed by referring to relevant literature. Aspects identified include emotions, previous experiences, demographic details (such as gender, age and home language), expectations, personal opinions and level of skills. Lastly, the chapter was concluded by discussing the specific factors of experience for marine adventure tourists. These factors were similar to those of alternative adventure tourists, with differences identified as excitement, novelty, intensity, proximity of the animals and learning about the animals. The knowledge and friendliness of the staff and crew, quality of the trip, duration of the trip, number of passengers, sea-sickness and the boat can contribute greatly towards the experience of marine adventure tourists.

After analysing the concept of adventure tourism, it can be concluded that shark cage diving and whale watching activities are categorised as soft adventure tourism taking place in a marine environment. These activities involve a unique element, participants are close to nature, a level of fear and risk is involved and multiple benefits are derived from participation in these activities, such as social, psychological, physiological, educational and conservational benefits. Discussing adventure tourism is therefore important for this study as it contributes to the knowledge necessary for establishing a sustainable management framework for marine adventure tourism products.

Chapter 4

Sustainable Tourism Management

Individuals of all ages can make an important difference in the overall health of our ocean by the actions they take every day. Simple things like picking up trash on the beach, recycling and conserving water can have a big impact on the health of our ocean

~Ted Danson

4.1 INTRODUCTION

Humans have an interest in the marine environment, but aside from mere interest in relaxing, the marine environment also provides livelihood (Bentz *et al.*, 2013:874). Local communities can make a living from either tourism to the area or from using the ocean as a resource for exportation (Bentz *et al.*, 2013:874). The benefits derived for the local community include, amongst others, a source of food, a source of tourism spending as well as a source of recreation (Deltori & Giudici, 2015:1). Although the community can benefit greatly from the marine environment, there is also a negative side to this. Negative impacts which can derive from an increase in tourism to an area include social impacts such as reduction in tourist and community satisfaction (due to crowding and overpopulation) as well as biological impacts such as a change in the behaviour of marine wildlife and reduced quality of the habitat (Seminiuk, Haider, Beardmore & Rothly, 2009:195). Therefore, it is important to ensure the sustainability of marine tourism activities, such as adventure tourism products (whale watching, surfing, shark cage diving and scuba diving) and recreational activities (sun bathing and swimming), both socially, biologically and economically (Bentz *et al.*, 2013:875; Pratt & Sontikul, 2016:897).

Sustainability can be defined as the survival of a product within a destination in the long term (Ioannides, 2001:59). The World Commission on the Environment and Development (here after referred to as WCED (WCED, 1987:7), on the other hand, defines sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their needs.” Although the definition as stated by WCED (1987:7) is the most widely accepted definition for sustainability, other definitions have been formulated which are more specific in nature. According to Hamid and Isa (2015:85), another appropriate definition is that “sustainable global development requires that those who are more affluent adopt lifestyles within the planet’s ecological means” as well as “sustainable development can only be pursued if population size and growth are in harmony with the changing productive potential of the ecosystem”.

According to Kokkis and Tsartas (2001:35) these definitions can be extended in terms of sustainable tourism development. Sustainable tourism development refers to a form of tourism development which has the potential to establish a suitable balance between the ecological environment,

economic environment and the social environment, where conditions are created involving services, structures and knowledge bases for the uninterrupted use of tourism products (Kokkis & Tsartas, 2001:35).

The need for the implementation for sustainable tourism development practices within a globalised society has been proposed as the answer to sociocultural and environmental problems (Polyxeni & Ourania, 2008:2). As sustainability can be directly linked with social responsibility (the participation of the local community in tourism development) it has been proposed as the solution to negative impacts created by the tourism industry (Polyxeni & Ourania, 2008:2).

Therefore, the aim of this chapter is to discuss existing literature regarding the sustainable development of tourism products. Concepts regarding sustainability of tourism products which will be discussed include the concept of sustainability, elements of sustainability and various models, theories and frameworks on sustainability. Figure 4.1 is a summary of the discussions to be followed for this chapter.

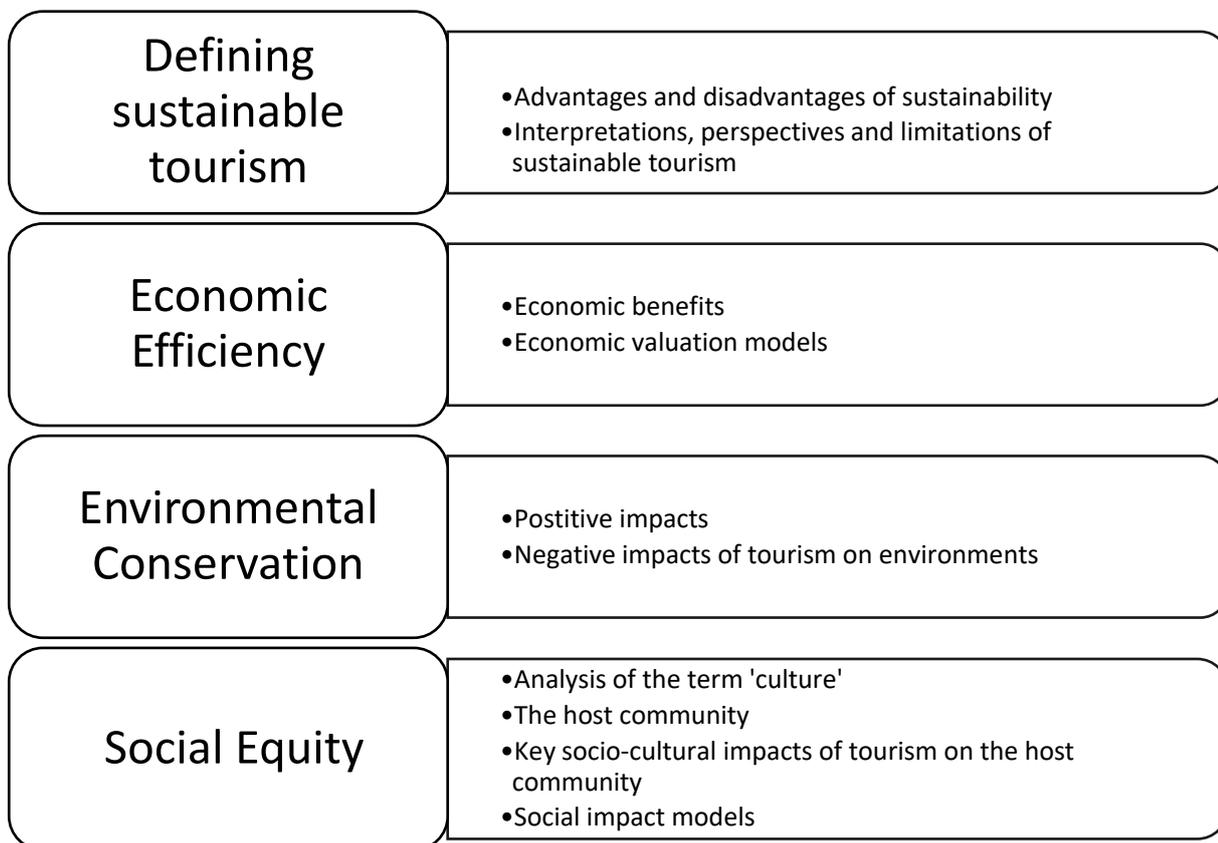


Figure 4.1: Outline of chapter

4.2 DEFINING SUSTAINABLE TOURISM

Sustainability and sustainable practices have been a catchword amongst academics for a long time, even though no agreement on the definition of sustainable tourism has been reached (Manwa, 2013:31). According to the World Tourism Organisation (2001) the working definition of sustainable tourism is as follows: “sustainable tourism is envisaged as leading to management of all resources

in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems.”

According to Liam and Cooper (2009:90) the concept of sustainability has been the topic of many discussions. These discussions often criticise the definitions as being vague, ambiguous, secretarial and can create confusion through its linkage to environmental issues (Liam & Cooper, 2009:90). In recent times, though, literature on sustainability suggest that a paradigm shift in terms of tourism requiring a holistic and systematic approach is needed in order to ensure an integration of interventions (Pulido-Fernandez, Andrades-Calidito & Sanches-Rivero, 2015:48). According to Pulido-Fernandez *et al.* (2015:48) these interventions should take into account the complex and dynamic interactions between economic, environmental, social and cultural challenges which the tourism industry faces in terms of sustainable development.

The paradigm shift can be seen as a multidimensional concept, incorporating three elements; social, environmental and economic (Pulido-Fernandez *et al.*, 2015:48). Figure 4.2 illustrates the relationship between the three concepts (economic, environmental and socio-cultural) of sustainability.

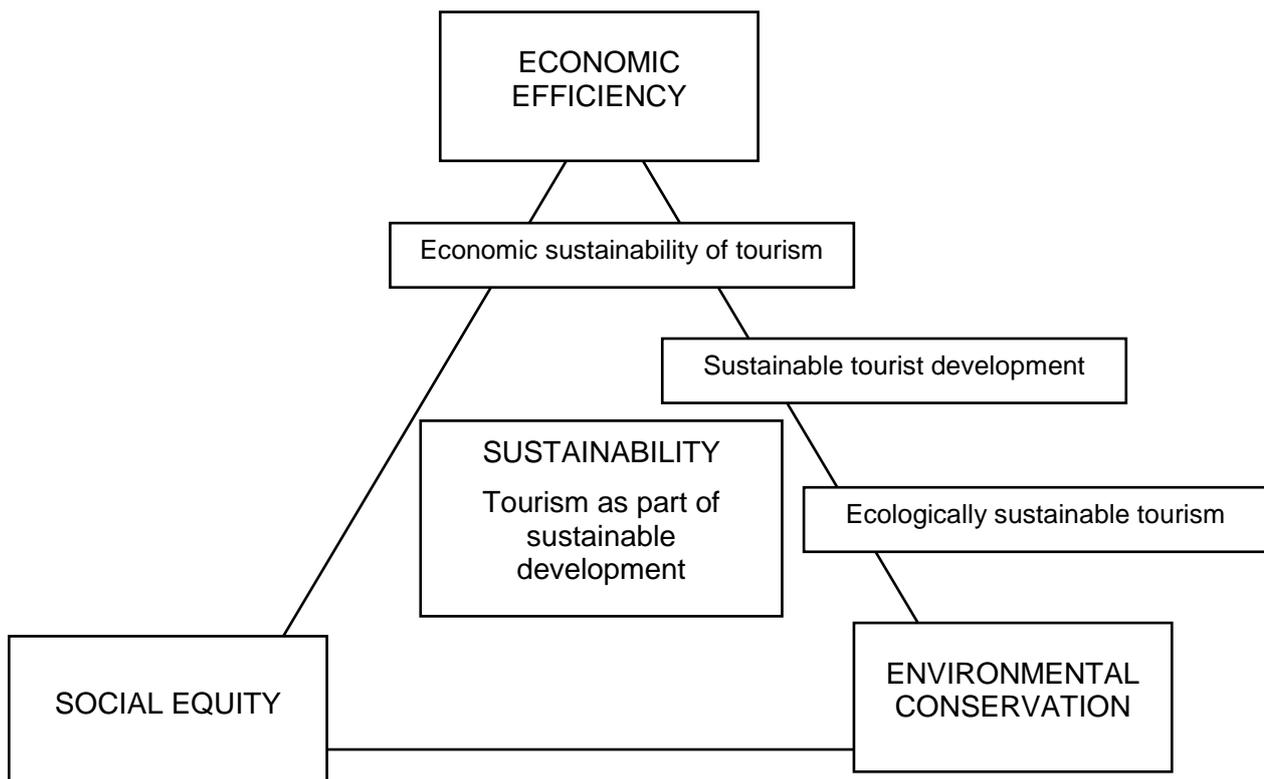


Figure 4.2: Sustainable tourism

(Source: Coccossis *et al.*, 1996)

Figure 4.2, illustrates sustainable tourism as based on ecologically sustainable economic development, where sustainability is dependent on the entire environment system, including humanity (Coetzee & Saayman, 2009b:131). Therefore, sustainable tourism can be analysed in terms of three legs of a triangle (Figure 4.2 consisting of economic efficiency, social equity and

environmental conservation (Coetzee & Saayman, 2009b:131). Hereby tourism policies are integrated with social, economic and environmental policies, without tourism policies taking priority over the latter (Coetzee & Saayman, 2009b:131). In other words, tourism policies incorporate economic efficiency, social equity as well as environmental conservation without tourism in the area being more important than the other three aspects and vice versa.

The three legs of the triangle form the three pillars of sustainability, namely economic sustainability of tourism, sustainable tourist development and ecologically sustainable tourism. Firstly, tourism should encompass the aspect of economic efficiency whereby the economic growth and health of a destination is contributed towards (Coetzee & Saayman, 2009b:131). Secondly, tourism is a catalyst for social equity at a destination. Tourism has the ability to contribute towards the social wellbeing and growth of a community at the destination where tourism is practiced (Coetzee & Saayman, 2009b:131). Tourism also has the ability to create many job opportunities for low-skilled workers, providing many local inhabitants with a source of income (Polyxeni & Ourania, 2008:4). Furthermore, tourism can contribute towards the improvement of infrastructure (such as roads and maintenance of buildings), provide foreign currency (such as tourists spending money at a destination that has not previously been in the economic cycle of that destination) as well as offer growth opportunities for the destination in the form of expansion (Polyxeni & Ourania, 2008:4). Thirdly, environmental conservation is a goal that should take equal importance to economic and social sustainability (Buckley, 2012b:531). The ecological environment should be conserved and protected and resources should not be exploited. With climate change and the increased in carbon emissions produced, tourism's contribution to pollution is extensive (Buckley, 2012b:531). Recently however, there is an increase in self-regulating companies within the private sector which aids the sustainability of the ecological environment and improves the relationship between the economy and the environment (Buckely, 2012b:532).

Furthermore, the three elements of sustainability; economic efficiency, environmental conservation and social equity is once again portrayed by the three corners of the pyramid in Figure 4.3. Each leg serves as a connection between the three corners (elements) ultimately connecting all three elements. The three connecting elements include tourist satisfaction and participation by the local community and conservation and promotion of the economic as well as ecological environments. This model is aligned with other models of sustainable tourism development which aims to indicate the linkages between the economic, environmental and socio-cultural dimensions (Baumgartner, 2013:46). The general aim of this model is to identify solutions for the challenges faced when developing tourism in a sustainable manner by indicating the relationship between the three elements of sustainability along with the needs to balance these elements (Baumgartner, 2013:46).

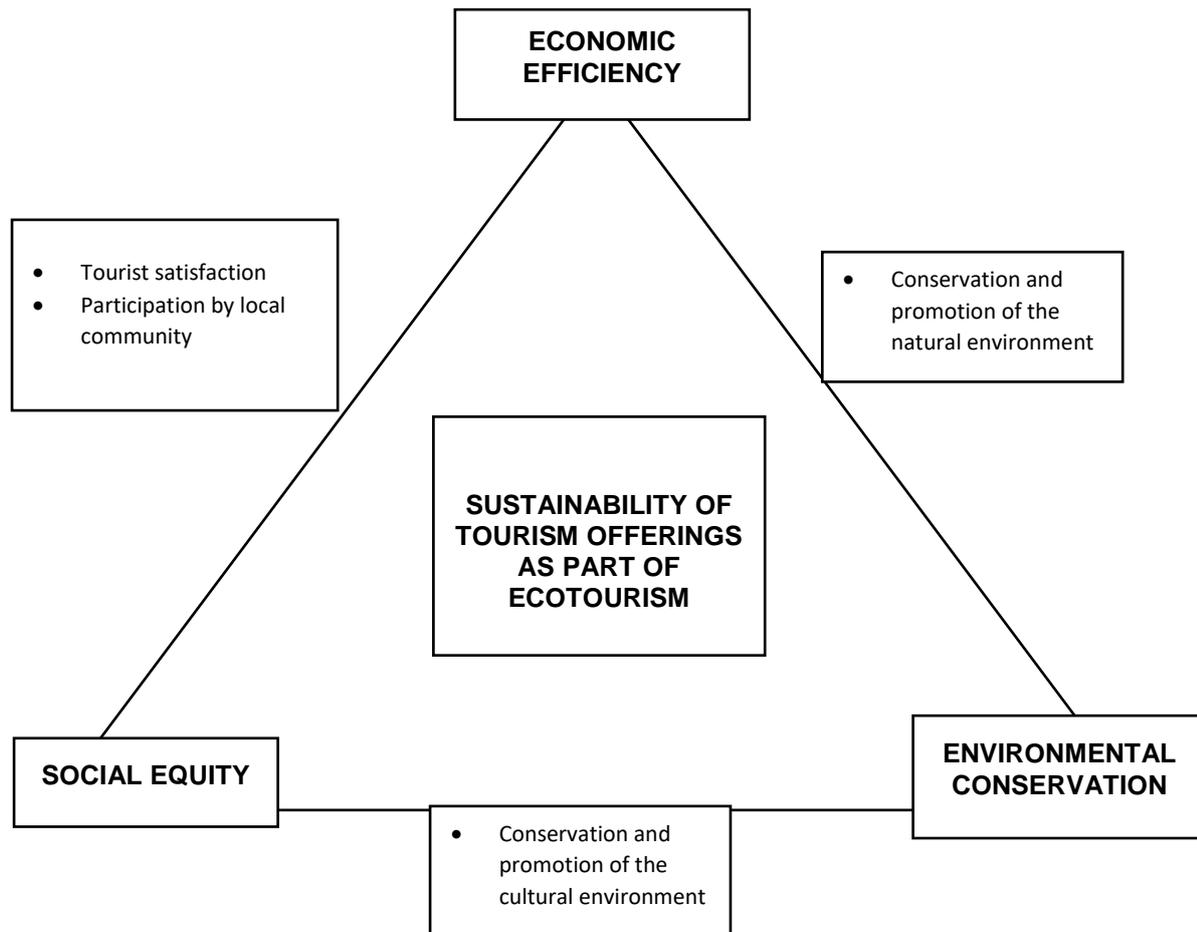


Figure 4.3: Sustainability of tourism offerings as part of ecotourism

(Source: author's own creation).

According to Baumgartner (2009), as seen in Figure 4.3, key aspects to sustainable tourism development can be identified which has an impact on the outcome of such developmental schemes. These aspects include (Inskip, 1991:461; Baumgartner, 2009; Deale, 2013:105; Senge, 2014):

- Respect for the natural environment stems from public policies or private sector self-regulation. Therefore, maintenance of the quality of the environment on which sustainability is dependent should be maintained, as well as reducing environmental impacts through, for example, the reduction of the carbon footprint
- Tourism should be embedded in a sustainable, regional-specific and networked manner
- Respect for the social well-being of the local community, the culture as well as employees in the tourism sector is important through promotion of equity in development, along with the improvement of the quality of life for the local community

- There should be a focus on employees and the community as important components for fostering and supporting the process of sustainability, indicating the importance of participation of the host community in decision-making and planning processes
- Intensely visited destinations should see the implementation of environmental management systems
- Making use of triple bottom line sustainability reporting systems, such as those developed by the Global Reporting Initiatives (2013), should be implemented. Such systems include integrated reporting that combines the analysis of non-financial performance (involving corporate social responsibility efforts as well as environmental efforts) with financial performance
- Implementing the sustainable development process as “a way of travelling” rather than a destination can contribute to sustainable practices in the long term
- Companies should keep in mind the significance of corporate social responsibility for the well-being of a company and all its stakeholders
- Companies can work towards the development of greater awareness and understanding of significant contributions which tourism can make towards the environment, community and the economy
- Provision of high quality experiences for tourists can ensure tourist satisfaction.

When implementing sustainability as a way of travelling rather than a destination, it means that the organisation does not reach a state of sustainability after development (Deale, 2013:106). Rather sustainability is dynamic to the nature of the organisation (Deale, 2013:106). Organisations should thus adapt their portfolio and brand to the various stakeholders and their needs, including socio-cultural, environmental and economic issues (Deale, 2013:106).

Sustainability is a long-term goal, instead of fast economic growth (Lee & Brahmasrene, 2013:70). Therefore, short-term goals are found which tend to give preference to less tangible social justice and environmental protection goals (Kent *et al.*, 2012:90). In other words, tourism operators who are more concerned with fast economic rewards are not concerned about the environment and social affects (Padin, 2016:511). It is therefore difficult to convince a community to adopt a long-term sustainable development process if economic growth is pursued (Padin, 2016:512). This view of tourism can be distinguished as non-sustainable tourism development. The main difference between sustainable and non-sustainable practices lie within the management structure followed by the operator. Saayman (2009a:134) indicates that this difference can be seen across three separate fields, namely general concepts (such as timeliness of development, control and scaling), development strategies (such as planning, concerns and pressuring) as well as the behaviour of tourists (such as mentality, educational element and respect). Table 4.1 clearly indicates the differences between sustainable and non-sustainable tourism (Saayman, 2009:134).

Table 4.1 Sustainable versus non-sustainable tourism development

SUSTAINABLE	NON-SUSTAINABLE
General Concepts	
<ul style="list-style-type: none"> • Slow development • Controlled development • Appropriate scale • Long term • Qualitative • Local Control 	<ul style="list-style-type: none"> • Rapid development • Uncontrolled development • Inappropriate scale • Short term • Quantitative • Remote control
Development Strategies	
<ul style="list-style-type: none"> • Plan, then develop • Concept-led schemes • Landscapes concerned • Pressure and benefits diffused • Local developers • Local employment • Vernacular architecture 	<ul style="list-style-type: none"> • Develop without planning • Project-led schemes • Concentrating on honey-pots • Increase capacity • Outside developers • Importing labour • Non-vernacular architecture
Tourist Behaviour	
<ul style="list-style-type: none"> • Some mental preparation • Learning the local language • Tactful and sensitive • Quiet • Repeat visits 	<ul style="list-style-type: none"> • Little or no mental preparation • No learning of local language • Intensive and insensitive • Loud and rowdy behaviour • Unlikely to return

(Source: Saayman, 2009:134)

4.2.1 Advantages and disadvantages of sustainability

As with all tourism products and services, there are both advantages and disadvantages that need to be considered. The following advantages can be identified for sustainability (Saayman, 2009:134; Kent *et al.*, 2012:90; Waligo, Clarke & Hawkins, 2013:343):

- Brings satisfaction and enrichment to visitors: visitors escape the daily routines and busy lifestyles to reconnect with nature
- Strengthens the respect for natural and built heritage: tourists tend to respect attractions, cultures and natural environments more if they understand or learn about the attraction.
- Promotes an understanding of and appreciation for other communities and cultures: mutual respect and understanding can be achieved

- Supports the maintenance and improvement of heritage: heritage is kept alive for the sake of tourism
- Acts as a catalyst for clearance of eyesores and dereliction: sustainability ensures that the environment is kept as close to the natural element as possible, that involves maintenance of the sight
- Creates jobs and wealth: the community has a great impact on tourism and sustainability ensures that local community members are offered jobs and an income before labour is outsourced
- Diversifies narrowly-based rural economies: sustainable tourism development generates other revenue-generating tourism opportunities
- Improves the quality of community life: with the increased household income offered by tourism development in the area, community members' standard of living is increased
- Supports businesses and services that might close down, had it not been for ecotourism: sustainable tourism development involves local service or product providers instead of outsourcing these services or products.

The advantages offered by sustainable tourism is vast and the positive impacts surely outweigh the negative impacts. On the flipside of the coin, though, some disadvantages can be identified, these disadvantages come with the development of sustainable tourism. Development often equals expansion and an increase in interest in the destination can lead to disadvantages, if not managed and maintained appropriately (Saayman, 2009:135). The following disadvantages are listed in the literature (Saayman, 2009:135):

- **Overcrowding of visitors:** at destination with high interest or biodiversity value
- **Traffic congestion:** an increase in visitors means an increase in traffic as well, which leads to an increase in congestion
- **Wear and tear:** more visitors mean higher wear and tear to infrastructure, such as gravel roads and buildings, which in turn, means higher maintenance costs
- **Inappropriate development:** such as overexploitation of local cultures and breaching the carrying capacity threshold
- **Conflicts with the local community:** where the local community is against tourism development in an area, disaffected community members can sabotage or cause destruction to tourism infrastructure and tourism activities.

In order to overcome the negative impacts (or disadvantages) of sustainable tourism development, Barkin (2000) suggests that a model should be developed and implemented in order to break the cycle of impoverishment and environmental degradation. Barkin (2000) states that sustainable tourism can be used to provide employment and other opportunities for local communities, but merely as a complementary activity to other land use. Barkin (2000) further proposes the following:

- The government should recognise the community's right to be in control and benefit from the tourism activity, through training, assistance and resources
- Mechanisms should be in place to ensure the system of food provision is maintained
- The relevance of sustainable tourism practices should be considered in terms of the environment and the community
- In order to overcome the problem of seasonality the promotion of cultural tourism and other aspects of the indigenous biodiversity should be researched
- The benefits of sustainable tourism development should be spread to all and not be kept to a select few
- A movement should be made away from policies which are destructive to the environment, contributes to social polarisation and which offers economic leakages
- An attempt should be made to integrate tourism into regional development in order to achieve a more balanced economy.

4.2.2 Interpretations, perspectives and limitations of sustainable tourism

Deming (1996:3) suggests that humanity has an insatiable need to see and discover more and to get closer to the natural attractions. As a result of this need, the tourism industry continually pushes the limits in terms of acceptable versus unacceptable human-wildlife interactions (Fennel, 2015:63). According to Fennell (2015:64) humans have evolved through stages of having an urgent need to preserve their own lives to having a concern for and valuing other people's lives; a social value. This social value is reflected in economic development priorities which holds serious implications for the long-term sustainability of communities and resources on which they rely (Fennell, 2015:64).

Interpretations and perspectives of sustainability

To ensure that sustainable tourism is implemented across all sectors of the tourism industry, strategies must be found which will aid this implementation (Coetzee & Saayman, 2009b:130). The problem arising with the identification of applicable strategies is the fact that there are various interpretations and perspectives amongst academics and the industry of sustainable tourism, such as the following (Coetzee & Saayman, 2009b:130):

- The first perspective is that sustainable tourism can be interpreted, where the primary objective is the viability of the tourist activity, from a sectoral point of view
- Political and socio-cultural areas strongly emphasise the fact that there is a need for ecologically sustainable tourism practices. Included in this view is a conservationist approach that puts the protection of the environment first, including ecosystems and natural resources
- The third viewpoint identifies the fact that environmental quality is important for competitiveness. Environmental quality involves aspects such as aesthetics, cleanliness, monuments, regulation of traffic as well as laying out recreational areas

- The fourth viewpoint takes into account ecologically sustainable economic development, according to which sustainability is based on the human-environment system. This suggests that environmental conservation is equal to economic efficiency and social equity.

Limitations of sustainability

The above-mentioned viewpoints suggest that the three elements (economic efficiency, environmental conservation and social equity) of sustainability is interrelated. If one element is removed, sustainable development will be compromised. According to Sierra (2002:16) sustainability cannot be identified as the ideal goal which suggests a “fixed state of harmony”. Rather as a process of adaptation and reorientation of the tourism industry and development thereof to achieve the desired balance between the three elements of sustainability (Sierra, 2002:16). According to Aronsson (2000:23), the best which could be hoped for is the constant development and improvement of the tourism industry through implementation of sustainability. The limitations on the concept of sustainability mentioned in this section is both practical and ethical in nature (Pulido-Fernandez *et al.*, 2015:48).

The following section of this chapter discusses the three elements of sustainability namely, economic efficiency, environmental conservation and social equity, in detail.

4.3 ECONOMIC EFFICIENCY

The economic dimension of sustainable tourism seeks to enforce the fact that long term planning should take all stakeholders’ opinions and needs into account (Padin, 2016:512). All socio-economic benefits should be evenly distributed amongst those whom have stable employment opportunities based on competitive businesses (Padin, 2016:512). For example, the small town of Hermanus draws economic benefits from the annual Whale Festival held in the town in honour of the whales’ return to the South African coast. Community residents whom have businesses in the town benefit from the influx in visitors and the increased economic contribution which is made by the festival.

Economic benefits can be extended to national and local economies as well (Eagles, 2014:532). The concept of total economic value is therefore identified as an attempt to describe the widespread beneficial impacts which can stem from tourism activities and is one way in which this dynamic and complex industry’s impacts can be measured (Eagles, 2014:532). Seeing as the tourism industry impacts on more industries than one, for example transportation, manufacturing, services and retail, measuring the true economic impact is difficult (Saayman, 2013:110). Economic impact valuation is a method developed which can determine the value which tourism adds to the local economy (Eagles 2014:532). This concept identifies the societal values that can be captured from tourism activities, enhancing the capture of revenues by the tourism industry, tourism activities and local communities (Eagles, 2014:532). With proper management these activities can be managed in a sustainable fashion (Eagles, 2014:532).

4.3.1 Economic Benefits

In order to gain economic benefits, some academics believe sustainability of the destination must be sacrificed (Pulido-Fernandez *et al.*, 2015:48). This is especially true in the case of coastal tourism development where the natural environment and resources are downgraded and overexploited in the quest for profit maximisation (Pulido-Fernandez *et al.*, 2015:48). For example, shark cage diving in Gansbaai, Western Cape, is dependent on the sharks in the environment, meaning that all operators in the town will compete for the sharks' attention by making use of chumming and baiting methods. This can have certain detrimental impacts on the sharks in the environment, such as sharks being conditioned to view the shark cage diving boats as suppliers of food (Johnson & Kock, 2006:45).

Arguments for the suggestion that tourism negatively impacts on the natural environment and resources is that the main goal of tourism development is to maximise the economic benefits drawn from the industry (Choi & Sirikaya, 2005). Those advocating for sustainability is of the opinion, on the other hand, that sustainable tourism development should remain within the destination's capacity to accommodate the growth of the industry along with the restoration of downgraded and overexploited environments and resources (Pulido-Fernandez *et al.*, 2015:48).

In addition to the above mentioned, Lundie, Dwyer and Forsyth (2007:15) and Buckley (2012b:531) emphasise the fact that destinations which yield high economic benefits can be associated with adverse environmental effects, such as ecological footprints, water and energy usage. This results in the fact that destinations should make trade-offs between the economic benefits and environmental benefits that could be gained (Lundie *et al.*, 2007). As an example, Dwyer and Forsyth (2007) as well as Dwyer and Thomas (2012) suggest that it is of utmost importance to identify new product opportunities and new market segments which could ensure greater economic benefits. According to Pulido-Fernandez *et al.* (2015:48) the following aspects is recognised as economic benefits of tourism:

- Contributes to foreign exchange earnings
- Contributes to government revenue
- Generates employment
- Creates business opportunities
- Tourism can be regarded as one of the main sources of economic impact.

Furthermore, Oberholzer *et al.*, (2010:3) suggest that the greatest economic benefit of tourism is the fact that it contributes to the improved livelihoods of communities. Additionally, tourism is also important for the maximisation of long term stable income through small-scale, high-value tourism opportunities (Oberholzer *et al.*, 2010:3).

Without a comprehensive understanding of the economic benefits of tourism activities, such as whale watching or shark cage diving, along with sufficient information which allows the undertaking of

benefit-cost assessments it is difficult for managers and operators of tourism activities to make an efficient and informed investment decision (Windle & Rolfe, 2014:2).

4.3.2 Economic impact studies on marine tourism

Many researchers have attempted to determine the economic impacts of tourism, specifically marine tourism (Turpie *et al.*, 2005; Dicken & Hosking, 2009; Vianna, Meekan, Pannell, Marsh & Meeuwig, 2012; Cisneros-Montemayor, Barnes-Mauthe, Al-Abdulrazzak, Navarro-Holm & Sumaila, 2013; Orams, 2013).

Turpie *et al.* (2005) conducted research on the economic impact of the whale watching industry of South Africa to determine the profitability and reasons for success or failure of the industry, as well as to estimate the value of the industry. In order to reach these goals, the authors (Turpie *et al.*, 2005) conducted interviews with the operators of boat-based whale watching operations and a survey of participants. During the time of this study, 25 areas were allocated for boat-based whale watching and 18 permits were allocated across South Africa, with the Western Cape possessing 14 in total (Turpie *et al.*, 2005:25). The results indicate that 79% of income is generated by whale watching, while 21% are generated by other activities undertaken by the operator, such as marine eco-tours, accommodation establishments or restaurants. During the time of this study, prices for whale watching trips varied from R150 to R650, which resulted in a turnover of R12.8 million (Turpie *et al.*, 2005:26). According to Turpie *et al.* (2005:27) individual permit holders generated over R200 000 from whale watching trips only. Based on these findings the authors (Turpie *et al.*, 2005:31) estimated that the industry for boat-based whale watching generates up to R45 million in tourism expenditure throughout South Africa, contributing up to R37 million to the Gross Domestic Product (GDP).

Secondly, in 2009 Dicken and Hosking (2009) identified the socio-economic aspects of the tiger shark diving industry within the Aliwal Shoal Marine Protected area of South Africa. The authors (Dicken & Hosking, 2009:227) found that a total of R12 405 274 was contributed to the local economy by the tiger shark diving industry. According to Dicken and Hosking (2009:230) this amount is not derived from purely tiger shark diving activities, but tourists participating in this activity also spent money on other aspects, such as going on package holidays or eating out.

In international cases, however, Vianna *et al.* (2012) determined the socio-economic value and community benefits from shark-diving tourism in Palau. According to the authors shark-diving tourism generates up to 39% of the GDP of Palau, which can be translated to US\$85 million (R1.15 million at the time this research was conducted). The authors (Vianna *et al.*, 2012:273) indicate that shark-diving tourism is of immense importance for the GDP of Palau, as it represents the highest contributing industry. Furthermore, the authors (Vianna *et al.*, 2012:274) state that several economic benefits are also derived from shark-diving tourism, such as higher employment rates, dispersion of

revenues, generates taxes to the government and a multiplier effect is identified which results in further dispersion of revenues and job creation.

According to Cisneros-Montemayor *et al.* (2013:384) a total sum of US\$215 million (R2.9 million at the time this research was conducted) per year is generated by shark watching tourism in 260 sites around the world which have been studied, including China, America and Japan. Globally, however, the authors (Cisneros-Montemayor *et al.*, 2013:385) have estimated that shark watching tourism generates a total of US\$314 million (R4.2 million at the time this research was conducted), which supports over 10 000 jobs annually. In terms of the global whale watching industry, the authors (Cisneros-Montemayor *et al.*, 2013:386) state that more than UD\$2 billion (R40.5 billion at the time this research was conducted) is generated annually with the potential for further growth. According to the numbers, it is clear that whale watching tourism generates a higher income than shark tourism, although both these industries are highly profitable and shows potential for further growth.

Orams (2013) identified the economic activity derived from whale-based tourism in Vava'u Tonga. Important economic benefits have been identified by Orams (2013) include the fact the whale-based tourism in Vava'u, Tonga, is the highest contributing economic factor, with a total direct expenditure of US\$ 4.6 million (R62 million at the time this research was conducted). The total whale-based tourism business expenditure in the community was calculated at US\$300 000 (R4 million at the time this research was conducted) per season and whale-based tourism therefore generated a total of US\$5.2 million (R70 million at the time this research was conducted) per season. Orams (2013:489) state that the results of the calculations estimate a total of US\$600 000 (R8.1 million at the time this research was conducted) direct expenditure on whale-based tourism in 2009, of which 54% was spent on trip fares.

From these studies it is clear that shark- and whale-based tourism are big economic contributing factors to the global economy. As stated by Orams (2013:490) a clear growth can be seen in the industries (shark- and whale-based tourism) in general, therefore resulting in further potential for growth.

4.4 ENVIRONMENTAL CONSERVATION

Conservation is seen as the sustainable use of natural resources, such as water, plants, animals, soil and minerals (Saayman, 2014:59). The loss of conservation leads to two viewpoints, namely an economic loss and an aesthetic loss. Conservation includes maintenance of parks, wilderness areas, historic sites and wildlife (Saayman, 2014:59). Natural resources can be divided in renewable or non-renewable resources, from where it is further subdivided, as shown in Figure 4.4 (Saayman, 2014:59).

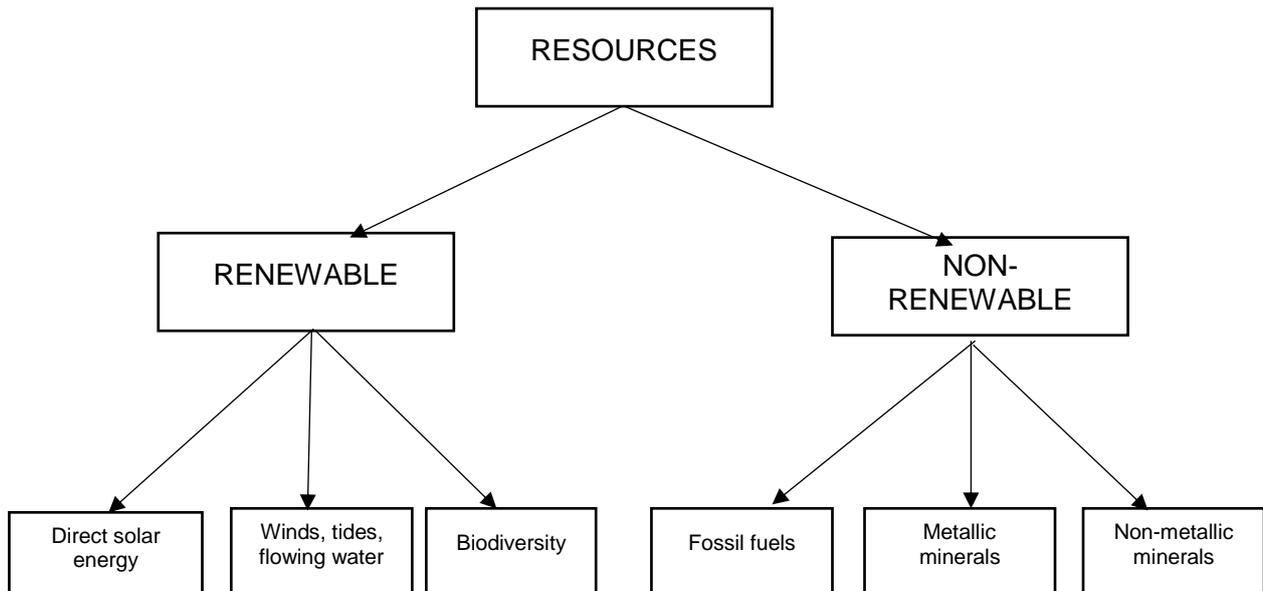


Figure 4.4: Renewable and non-renewable resources

(Source: Saayman, 2014:59)

Renewable resources are resources which can be maintained indefinitely by careful management and pollution control (Saayman, 2014:59). Renewable resources include wildlife and natural vegetation of all kinds, including soil and water (Saayman, 2014:59). Shark cage diving and whale watching is dependent on renewable resources, which include whales and sharks, for the survival of the sectors. On the other hand, non-renewable resources are resources which cannot be replaced, or can only be replaced over extremely long periods of time (Saayman, 2014:59). These resources include fossil fuels (coal and natural gas) and metallic and non-metallic ores.

The term 'environment' can be defined as the external surroundings in which an organism lives (Stout & Green, 1986:212). In contrast, Fuggle and Rabie (1996:84) see the environment as a concept involving a multitude of elements, namely:

- Natural environment (biodiversity): involves renewable and non-renewable natural resources, such as water, air, soil, plants and animals. In a stricter sense, though, it is the natural world in its pure state. The ocean in which shark cage diving and whale watching activities take place is the natural environment.
- Spatial environment: this concept involves both man-made, landscapes and natural areas, for example suburbia, towns, mountains and provinces. The towns of Gansbaai and Hermanus, with the harbour, ocean and surrounding landscapes forms the spatial environment for shark cage diving and whale watching activities.
- Sociological or social environment: the people living in the area, such as families, groups and societies. The community of Hermanus and Gansbaai provides the sociological environment.

Biodiversity can be best explained as the sum of all the different species of plants, animals, fungi and microbial organisms which live in a variety of habitats on earth (Guitierrez *et al.*, 2005:13). Each of the species found in a particular environment is uniquely adapted to its surroundings (Guitierrez *et al.*, 2005:13). All living organisms within that particular area, along with their interaction with the physical and environmental factors, make up the ecosystem (Guitierrez *et al.*, 2005:13). According to the United Nations Environment Programme (UNEP) merely 1.7 million species are known to man world wide while an estimation of 10-100 million species exist which is not yet identified (Ryan, 2012:10). Therefore, it is clear that the number of identified species are well under the actual number in existence (Ryan, 2012:10). A reason for this is the fact that methodologies vary as well as the inconsistency of data collection (Ryan, 2012:10). A healthy ecosystem is of utmost importance to life on earth seeing as it enables species to respond to environmental change as well as fulfilment of important functions, such as birds pollinating plants (Guitierrez *et al.*, 2005:13).

Communities are dependent on biodiversity for the provision of food, shelter and medicine. Therefore, with the majority of species identified to humans it is essential that one help maintain biodiversity across the world (Ryan, 2012:10). To ensure that conservation of the environment takes place in sustainably, the following principles are discussed: marine conservation, forest conservation, conservation of grazing lands, wildlife conservation, soil conservation and carrying capacity.

Marine conservation

One very successful method in which conservation of the marine environment can take place is the establishment of marine parks, or marine protected areas (Orams, 1999:80). Marine protected areas (MPA's) have been defined by various researchers (Dixon & Sherman, 1990:8; Fabinyi, 2008:898; Baker & Roberts, 2008:180; Page & Connell, 2009:645). According to Dixon and Sherman (1990:8) a MPA is any area of the marine environment which has been given special status to aid long-term protection on part, or all, of the natural and cultural resources found in the specified area. In 2008 Fabinyi (2008:898) proposed that MPA's are established by multiple organisations over the course of several years with a system of user fees, such as Shark Alley and Dyer Island in Gansbaai. Furthermore, Barker and Roberts (2008:180) suggest that MAP's provide a focus for conservation management and regulatory oversight of visitor activities which is welcome from the perspective of environmental management. Lastly, Page and Connell (2009:645) added that a MPA is a water-based reserve with protective policies in place for the protection of marine life.

From these definitions it is clear that the goal of MPAs is to protect and conserve marine resources in all forms for the long term. The following characteristics can therefore be identified from the above-mentioned definitions:

- MPAs should provide opportunities for long-lasting protection of marine resources, including natural and cultural resources (Dixon & Sherman, 1990:8).

- MPAs are established to protect and maintain biotical values, to ensure ecological sustainability, while maintaining options for human utilisation (Harriot, Davies & Banks, 1997:173).
- MPAs should provide opportunities for conservation of the marine environment while allowing recreational activities to be conducted to the extent that it is compatible with conservation of the natural environment (Davis, Banks, Birtles, Valentine & Cuthill, 1997:260).
- Supervised marine activities should be welcomed, but the focus should remain conservation of marine resources and sustainable environmental management (Barker & Roberts, 2008:180).

Industries such as shark cage diving and whale watching are heavily dependent on areas such as MPAs because that is usually where whales and sharks are found in abundance (Davis *et al.*, 1997:260). Within South African waters three MPAs have been declared, namely Tsitsikamma Nature Reserve along the Garden Route, Western Cape, De Hoop Nature Reserve near Cape Agulhas, Western Cape and Dwesa Nature Reserve in the Eastern Cape. Although the shark cage diving and whale watching sites in Gansbaai have not been proclaimed a MPA, it has been proclaimed protected sanctuaries for seabirds (such as the African Penguin and other rare and endangered species), great white sharks, whales and the Cape Fur Seal colony on Dyer Island (Marine Dynamics, 2017).

The establishment of marine parks can facilitate both protection of marine resources as well as provision of recreational opportunities (Orams, 1999:80). The designation of a no-take marine protected area is seen as an extreme method, but allows for undisturbed areas where the removal of marine life is not permitted, such as that of Cape Rodney to Okakari Marine Reserve at Leigh, New Zealand (Orams, 1999:80). On the other hand, a marine park can also be managed with the focus on management of the publicly owned area instead of the management of marine resources specifically, for example Hauraki Gulf Maritime Park (Orams, 1999:81).

Forest conservation

Three fundamental principles can be identified in terms of forest conservation, namely protection of growing tree crops from fire, insects and diseases, proper harvesting methods and the complete use of all trees harvested. Firstly, the protection of trees from fire, once seen as a destructive, are now implemented as a measure of control. Some tree species, such as timber trees, require the implementation of fire control methods in order to successfully regenerate. To implement this effectively, though, it is necessary to look at aerial spraying, proper cutting cycle and slash disposal (Saayman, 2009:60).

Secondly, proper harvesting methods should be implemented, which ranges from the removal of trees to the removal of selected mature trees as well as the provision for reproduction. The rate and frequency of cutting trees should be implemented sustainably to ensure production over an undefined period of time (Saayman, 2009:60).

Thirdly, technological advances, such as wood pressing and gluing, have ensure that all parts of a trees can be used, including branches, defective logs, small trees and inferior trees. Management practices and policies for the use of wilderness areas and commercial forests will become more intense as the demand for recreational use of forests increase (Saayman, 2009:60).

Conservation of grazing lands

In order to maintain the healthy growth and reproduction of plants in an area, principles of range conservation can be implemented. This can be done in the form of utilising only a portion of the annual forage plant production of a particular zone. In addition to dividing the area up into certain zones, each zone is stocked with an appropriate number of animals, which can be nourished properly on the forage usable. The number of animals permitted to graze in each zone must only be permitted to do so during the appropriate season and only animals appropriate for the type of zone should be permitted. The reasoning behind the implementation of conservation ranges is based on a programme which is designed to improve depleted areas in the form of natural reproduction or artificial seeding (Saayman, 2009:60).

Wildlife conservation

Through careful management, wildlife can be maintained as an important biological, economic and recreational resource. The basic principle pertaining wildlife conservation is the ability to provide adequate natural food and shelter for maintenance of the populations of species within a specified habitat. Aspects which pose a threat to wildlife conservation initiatives involve the following: drainage, agricultural activities and urban expansions can destroy habitats, fragmentation of habitat, illegal trade in animal by-products, such as feathers, ivory and rhino horn and exploitation of the hunting industry (Saayman, 2009:60).

Soil conservation

Soil conservation is implemented for various reasons, amongst which is the fact that soil is used for agricultural purposes, cultivation and production and reproduction of plant species. Several methods have been identified which contributes to the conservation of soil. The first of which involves the zoning of land according to capability classes. Secondly, soil conservation can take place in the form of soil building plants in crop rotations. Thirdly, cultivation methods that leave a litter or trash cover on the surface is used for land development (Saayman, 2009:61).

Carrying capacity

Carrying capacity refers to the maximum use of a site without causing damage to the environment, resource, reducing visitor satisfaction or impacting negatively on society, the economy or culture. Being essential to the environment, it is difficult to determine the carrying capacity of an area, but it is essential for the development and planning of recreational activities in an area (Saayman, 2009:61).

4.4.1 Positive impacts of tourism on environments

According to Archer, Cooper and Ruhanen (2005:79) tourism can have a positive impact on the environment. As much as negative impacts arise from tourism, positive impacts can be maximised in order to ensure sustainability and improvement of the natural environment. Archer *et al.* (2005:79) and Guitierrez *et al.* (2005:88) and George (2015:367) state that the following positive impacts can arise from tourism:

- **Voluntourism:** this new concept stems from the words *volunteer* and *tourism*. Many tourists make use of opportunities in countries such as South Africa, to volunteer their time for the benefit of the environment. Voluntourism opportunities exist in the form of rehabilitation of animals and the environment and marine volunteers.
- **Clean up tourism:** clean-up projects are being organised, such as beach clean ups and coral reef clean ups, which benefits the environment because litter and pollution is removed from the environment.
- **Income generated for conservation:** tourists can contribute to conservation by paying entrance fees to marine national parks, concessions, taxation, grants, traveller donations and participation fees.
- **Economic alternatives:** by providing alternative means of making a living for local residents, over-fishing, over-harvesting, poaching and hunting can be eliminated. This can be done by offering local residents job opportunities in the tourism environment, such as tour guides, boat crew and managers in the operation. Negative impacts on the environment will then be eliminated.
- **Environmental conservation:** tourists expect scenic, pristine and natural surroundings while at a destination. This leads to the host community taking care of the natural environment to ensure that these expectations are met, therefore conservation is practiced.
- **Conservation of historical buildings and derelict land:** tourism can generate income for the restoration and maintenance of historical buildings. These buildings could otherwise have fallen to ruin, but due to the tourism activities at a destination, buildings can be restored and maintained to serve as visitor attractions. Similarly, urban landscapes can be developed into tourism attractions, such as Green Point Park in Cape Town, which was developed into an urban park for the 2010 Fifa World Cup Soccer.
- **Wildlife protection:** parks and game reserves are established as a means of protecting wildlife, while at the same time providing attractions for visitors.

These impacts can be seen in light of the marine environment as well. For example, tourism taking place in marine environments, such as the case of shark cage diving and whale watching, can generate enough income to aid conservation of sharks, whales and the environment. This can take place through raising awareness of the animals and the environment amongst participants and by increasing sales of items such as locally made jewellery, souvenirs and coffee shops or restaurants.

Gansbaai (a partial location for this research) is a good example of where tourism contributes to protection and conservation of the marine environment. Due to the cape fur seals living on Dyer Island, the area has been proclaimed a marine protected site (Marine Dynamics, 2017b). This means that tourism activities, such as marine ecotours, can take place in the area, but regulations have been implemented to help protect the seals. These regulations include no swimming, fishing, diving, or docking at the island (Marine Dynamics, 2017b).

Furthermore, coral reef clean-up missions have increased over the past few years due to the increased awareness amongst divers, especially, of litter that is thrown into the ocean. Litter, such as plastic bags, bottles, packets and paper, are thrown into the ocean and have detrimental impacts on the coral reefs and the animals. Coral reef clean-up missions therefore help to remove the litter, while raising awareness for environmental friendly practices.

4.4.2 Negative impacts of tourism on environments

Humans as well as natural processes have an influence on the environment (Guitierrez *et al.*, 2005:13). Where humans alter ecosystems, such as through creation of agricultural lands, natural events have caused extinction of species (Guitierrez *et al.*, 2005:13). Over the past 50 years, though, the rate of extinction of species have increased dramatically where the main causes include the following human activities (Guitierrez *et al.*,2005:13):

- Exploitation of natural resources: such as fish stocks in the ocean and trees in forests
- Draining of wetlands and clearing of forests and grasslands for agricultural use
- Introduction of harmful, invasive plant and animal species into ecosystems
- Releasing of pollutants
- Poaching of animals, unsustainable hunting or illegal trade in wildlife.

Davenport and Davenport (2006:280) identified negative impacts on marine environments and divided these impacts into two categories. Firstly, negative marine environmental impacts can arise due to the number of tourists in an area and their demands, while secondly, negative impacts can also arise from individual, often novel, forms of transportation (Davenport & Davenport, 2006:280). According to Davenport and Davenport (2006:281) the following negative impacts on marine environments, specifically, can be identified:

- Coastal transport infrastructure: the rise in demand for transportation has led to an increase in coastal infrastructure development, which increases habitat loss and fragmentation.
- Cruise ships and ferries: illegal discharge of substances, anchoring in tropical waters and dredging channels for larger vessels has led to damage to coral reefs.
- Intertidal trampling or collection disturbance: by walking in the intertidal zone, turning rocks over or searching the rock pools for food can cause declines in algae and barnacles and loss of mussel beds. This causes the community structure of the rock pools to change as mussel cover is replaced with algal turf.

- Beach cleaning: by removing naturally deposited debris, such as coral and kelp washing up on shore, decreases sandy shore biodiversity immensely. Living inside the debris that washes up is a variety of marine and terrestrial vegetation, such as isopods and larvae. Which attracts predators, gulls and scavenging terrestrial animals to the beach.
- Marine ecotourism: activities such as whale watching and shark cage diving, if too heavily demanded by tourists, can cause negative impacts such as disturbing wildlife patterns and breeding habits and disturbance in marine mammal behaviour and acoustic activity.

According to Davenport and Davenport (2006:285) marine ecotourism often follows the 'self-destruct theory of tourism'. This theory implies that an attractive natural environment will be developed for an upscale exclusive market who have minimum requirements but are willing to pay top prices (Holder, 1988). Thereafter, competition will increase as other developers become aware of the area, causing mass tourism at the destination. The result is that the original market moves on to unspoilt areas, while the quality of the environment decreases with the increase in tourism to the area (Holder, 1988; Davenport & Davenport, 2006:281).

Aside from the above-mentioned causes, Tovar and Lockwood (2008) state that tourism in general has significantly contributed to the degradation of the environment. Poor preparation to receive and manage tourists has caused damage to the natural and socio-cultural environments (Lee & Brhamasrene, 2013:71). These negative impacts have led to the growing concern for conservation and preservation of natural resources (Lee & Brahmasrene, 2013:71).

Causes of biodiversity loss

According to Fennell (2015:98), biodiversity is valued on a number of levels, which can either be directly or indirectly. Directly, humanity impacts on biodiversity through food production, medicine and other industrial products (Fennell, 2015:98). Indirectly, though, humanity impacts through ecosystem services such as water purification, climate regulation, aesthetically (which concerns the loss of species and landscapes) and ethically (humanity has the responsibility of protecting species and individuals from destructive actions) (Fennell, 2015:98).

One of the biggest causes of biodiversity loss is climate change (Saayman, 2014:62). Climate change leads to instability and vulnerability of ecosystems, especially where other causes of biodiversity loss add or remove stress (Saayman, 2014:62). According to O'Riordan and Stoll-Kleemann (2002) the following forecasts are made in terms of the impacts of climate change:

- Migration of plants and animals will increase at a rate faster than humans are possible to adapt
- Species will become stressed and more threatened as a result of being sensitive to temperature and precipitation patterns
- Extinctions will increase dramatically
- Adaptions through gene banks, special reserves, transference corridors and zoos will contribute to extinctions. Although this might prove costly and ecologically ephemeral

- Polar ice caps melt as a result of temperature increases, causing sea levels to rise and endangering marine animals such as Emperor Penguins, Polar Bears and Seals
- Coastal environments could be critically endangered due to increased salt incursions as the sea level rise
- Behavioural changes are identified amongst marine life due to temperature increases and melting of the polar ice caps
- Insect pathogens and migration will adversely affect human health in ways which are bound to impact more on those whom are vulnerable, suffer from diseases, suffer from immuno-deficiency and those with least access to healthcare
- Natural mechanisms of response, adaptation, migration and opportunism may be impaired.

Overharvesting is a function of inappropriate property rights, false price signals, rigged markets, unequal power relations, criminality and lack of knowledge regarding the future tragedy of losses (Saayman, 2014:63). Overharvesting is a result of inequality and poverty which drives people to overexploit lands (Saayman, 2014:63). This leads to the break-down of traditional mechanisms for recreating, sharing and protecting resources (Saayman, 2014:63). Furthermore, overharvesting is also a function of wealth accumulation driving the poor to more desperate measures and onto ecological marginality (Saayman, 2014:63). Overharvesting takes place in marine environments in the form of fishing. In a country such as South Africa where fishing plays an economic role within a community, overharvesting leads to the depletion of fish stocks (Venter & Mann, 2012:1). According to Venter and Mann (2012:1) the Dwesa-Cwebe Marine Protected Area, Eastern Cape, has been established in 1991 as a no-take park. As a result of illegal fishing within the park, it has been suggested that park management authorities should rezone the park in order to allow for subsistence and recreational fishing (Venter & Mann, 2012:2). Due to the depletion in fish stocks, it has, however, been strongly advised against as a measure to preserve marine life (Venter & Mann, 2012:2).

Another reason for biodiversity loss is habitat loss and alteration (Saayman, 2014:63). Due to urbanisation and a greater need for more products and services, the resilience and survival capabilities of species are impaired (Saayman, 2014:63). Lastly, pollution of water, ground and air contributes to biodiversity loss (Saayman, 2014:63). The pollution stems from travelling methods of tourists (Cruise ships), use of energy, carbon offsets and carbon neutrality (Buckley, 2012b:531).

Seeing as a large portion of negative impacts stem from the fact that tourist activities are directly dependent on natural resources and the natural environment, tourism development is not likely to contribute to conservation of the environment (Lee & Brahmastre, 2013:71). That is, unless sustainable environmental conservation practices are implemented (Lee & Brahmastre, 2013:71). If such practices are implemented, tourism can contribute to conservation by raising awareness for the importance of the environment and educate the public on environmental-friendly practices. According to Gossling and Hall (2006) the effects of negative global environmental changes have been visible since 2006, while more dramatic changes are anticipated. Such negative changes

include, amongst others, climate change and extinction of species such as the black rhinoceros (Lee & Brahmašrene, 2013:71). Environmental changes have, in turn, an impact on a whole range of tourism destinations, such as mountain regions and coastal areas (Schott, 2007:258).

4.5 SOCIAL EQUITY

Today, more than ever, travelling for the sake of travel is easier than ever before due to a rise in the standards of living, changes in the age population composition, the increased levels of educational attainment, improved communication, increased social consciousness of the welfare and activities of people across the world and globalisation (Saayman, 2012:78). Therefore, an increase in tourist numbers are visible to multiple destinations across the world due to the need of people to experience environments unfamiliar to them in terms of geographical, personal, social and cultural differences (Saayman, 2012:78).

Fennell (2007:47) states that social impacts are amongst the most prominent topics in tourism research, along with the ecological and economic impacts of this diverse industry. A vital aspect of successful and sustainable tourism development at any destination is the support and positive attitudes of the local residents. Tourism plays a significant role in the lives of community members due to the provision of income generation for locals and visitors, thereby enhancing the image of the community (Saayman, 2012:78). In essence, tourism can be seen as a vehicle for improving social relationships in surroundings, for attaining relationships with one another, for strengthening abilities to comprehend one another and also for the well-being of community members (Kurtzman, Zauhar, Ahn & Choi, 1998:2). According to Doiron and Weissenberger (2014:22) dive tourism acted as a vehicle for improvement of the social situation of the island community of Honsuras. The community of this island has been enjoying improved social circumstances since the 1980's when dive tourism was introduced (Doiron & Weissenberger, 2014:22). The negative side of this development on the island is the fact that immigration became a problem. Many foreigners immigrated to the island and took employment opportunities from the community due to the increased awareness of Honduras as a destination (Doiron & Weissenberger, 2014:22).

The unique interaction taking place between tourists and the host community leads to certain social impacts relating to the change in value systems, individual behaviour, social relationships, lifestyles and modes of expression and community structures (Page & Connell, 2009). These changes can result in either short-term or long-term changes and can either be positive or negative for the community (Saayman, 2013:148).

The following section presents a literature review of issues and theories relating to the social impact of tourism on the host community. The aim is to analyse the term culture and the social impacts of tourism and to discuss the theories and models identified by various researchers concerning tourism's social impacts.

4.5.1 Analysis of the concept “culture”

Culture refers to a way of life of a particular group of people and their behaviour patterns, values and perceptions of themselves as well as the world (Saayman, 2012:79). According to Reisinger and Turner (1998:534) certain differences are visible between different cultures. These cultural differences are differences between groups of people who do things differently and hold different perceptions of the world (Reisinger & Turner, 1998:534). These differences can be the main cause of differences in behaviour and the interpretation of behaviour which in turn, ends in miscomprehension of other cultures (Reisinger & Turner, 1998:534). Furthermore, Saayman (1999) suggests that culture entails the knowledge, experience, meanings, values, attitudes, religion, concept of the self, concept of a relationship, hierarchy of status, role expectations, spatial relationships and time concepts commanded by a group of people transferred from generation to generation, through individual and group aspirations.

The question therefore remains: where does culture fit in with the society and what does culture do for the society. Culture can be seen as the “glue” keeping people together and the following factors have been identified in answer to the question raised above (Saayman, 2012:79):

- It enables communication between groups of people or individuals through a learned and commonly shared language
- Culture makes it possible to anticipate how others in a society are likely to respond to one’s actions
- Culture provides standards for distinguishing between what is considered right and wrong, ugly or beautiful, reasonable or unreasonable, tragic and humorous, safe and dangerous
- Culture provides methods for training children to behave in certain ways generally considered appropriate according to the society
- Culture provides the knowledge and skill necessary for meeting sustenance needs
- Culture enables one to identify with other people of similar background and to think in terms of social “we” in addition to the personal “I”.

In order to understand the socio-cultural impacts of tourism, it is necessary to further analyse the concept by discussing the host community, the role of the community in the tourism industry as well the positive and negative impacts tourism have on the host community.

4.5.2 The host community

The local community of a destination can be regarded as the centre of the tourism product (Saayman, 2013:151). The term ‘host community’ refers to residents, or people, staying at or near the tourism location or in close proximity to the location. They are the people most likely to understand the tourism product and the impacts due to the fact that they live in the tourism area (Orams, 1999:65). The term is derived from the word *communions*, which means ‘to share a common task together’ and it is in this sharing of tasks that people are capable of reaching greater heights than they thought

possible. The host community includes residents, traders and lobby groups along with public authorities such as councils, transport services, police services, fire brigades and ambulance services (Stamboulis & Skayannis, 2003:36).

Three elements are identified of which the community consists (Saayman, 2013:149):

- **The local economic system:** this is the system providing the livelihood for residents of the tourism destination. Included in this system are all economic activities along with the tourism industry, such as the local supermarket in Hermanus.
- **The local residents:** these are the people giving the community its human content. They are the operators of the services and facilities needed for tourism to be successful in the community. For example, permanent residents of Hermanus.
- **Community infrastructure and services:** these are the facilities enabling the community to live and operate in the area. Included are roads, power utilities, telephone services, water and waste disposal services as well as police and fire services.

The success of a tourism destination is to a great extent reliant on the support of the community, particularly where financial assistance is required (Jago, Chalip, Brown, Mules & Shameem, 2003:32). The role of the community within the tourism industry is one of importance but lacks recognition (Saayman, 2013:149). It is important for the residents of a host community to recognise and take ownership of the impacts of tourism. Residents of the host community have experience with the impact of tourism on their lives which results in valuable knowledge for future tourism development in the area (Reisinger & Turner, 1998:534). According to Saayman (2013:149) the role of the host community in tourism can be summarised as follows:

- Tourism provides current and future opportunities for community cultural development and direction for communities
- The value systems of individuals united by shared customs, images, collective memories, habits and experiences are reflected through tourism
- The host community can contribute to a successful sustainable tourism industry, but the community can only be involved if they have the desire to be
- Residents should be employed as guides or guest speakers due to the fact that they often are very knowledgeable about local attractions
- Local resources are to be explored which previously might have remained unnoticed or protected by independent organisations or lost amongst the complex social workings of the community
- If local residents see themselves as an integral part of the tourism interest, their interest and support will have a positive impact on the visitors to the area
- Awareness regarding community resources and expertise and can be raised through the interaction between planners, local business and the general community. This interaction also facilitates social links between groups of people whom have been unrelated in the past

- The local residents' expertise on the available resources in the area also aids in the identification of possibilities for development and in general it serves as encouragement for a stronger interaction between existing community organisations.

Furthermore, it is important for the development of tourism at a destination, such as the case of Hermanus, to be compatible with the values and expectations of the host community in order to ensure that local residents do not view themselves and the community as being exploited (Williams, Hainsworth & Dossa, 1995:12). Through ensuring the well-being of the local residents it can be ensured that the satisfaction of tourist experiences will contribute to a positive image of the destination, which in turn influences the decision-making of tourists (Saayman, 2013:150). If for any reason the community comes to the belief that tourism is the cause of negative social and environmental impacts this can result in the interaction between tourists and the community to become damaged (Hall, 2000). In turn this will influence of the community to shift from being friendly and welcoming to a negative image (Hall, 2000).

Influencing the community to adopt a positive outlook on the tourism is easy in the case of once-off events, such as the Olympic Games or, in a South African setting, the FIFA Soccer World Cup (Saayman, 2013:151). It is not as easy though to encourage a positive attitude amongst the community towards annual events (such as a national arts festival) or seasonal destinations (such as coastal town experience an increase in tourists over holiday periods) (Saayman, 2013:151). Therefore, it is important to realise that tourism can have both positive and negative impacts on the host community (Saayman, 2013:151). The following section discusses the positive as well as the negative impacts of tourism on the host community.

4.5.3 Impacts of tourism on the host community

Even though the impact of tourism on the host community can be viewed as extensive in most cases, it is important to remember that tourism acts as a medium for social change rather than being the cause itself (Saayman, 2013:159). The changes or impacts on the community is brought on through the interaction between the members of the community and the visitors (Saayman, 2013:159). A host community can act as an attraction itself, in the sense that cultural art and craft works, music, dance and religion can attract a very specific type of tourist (George, 2012:302). The degree to which these impacts will influence the community is dependent upon several factors, namely (George, 2007:203):

- The degree of contrast between the tourist-generating country and the destination (or the receiving country) in terms of culture and economic development. The greater this contrast is, the more significant the impact will be on the host community
- The type of tourist which the destination attracts: for example, a tourist partaking in a packaged tour are more likely to busy himself with Western amenities, while an explorer-type tourist will want to experience the local culture and environment

- The demographic structure of the tourists (where they originate from)
- The scale of tourism involvement
- The visitor-resident ratio
- The level of development of the tourism industry at the destination
- Level of tourism infrastructure available
- Seasonality of tourism at the destination
- The extent of foreign ownership.

According to George (2007:301) the above-mentioned factors will have an influence on the scale of the impacts caused by tourism on the host community. These impacts can be both positive and negative. When evaluating the negative impacts which marine tourism can have on a community, the example of the islands of the Caribbean should be kept in mind (Orams, 1999:63). The community of the Caribbean has revolted against destination managers due to over forty beaches being allocated for the specific use of tourists (Orams, 1999:65). Aside from this problem, residents were further impacted in terms of loss of traditions and cultures (Orams, 1999:65). The following can be identified as negative impacts of tourism on the host community (Orams, 1999:65; George, 2007:301; George, 2012:304):

- **Crime:** Tourists are susceptible to crime for various reasons as they are considered to be 'easy targets'. It is assumed that all tourists carry with them various items of significant value, such as cameras, iPods and significant amounts of money. In 2014, in the Quarterly Newsletter of Hermanus, it is stated that crime in the town has increased, due to increased numbers of tourists (Ratepayers Association Hermanus, 2014:2).
- **Prostitution and sex tourism:** tourists leave behind their moral and social restrictions and thus will be willing to indulge in activities considered as immoral in their home environment. Many European destinations (Amsterdam, Hamburg and Soho) as well as various places in South Africa (Green Point and Durban) have become notorious sex destinations.
- **Gambling:** destinations offering gambling as an activity to visitors are often associated with criminal activities, such as begging and prostitution.
- **Rural-urban migration:** tourism's effect can lead to the younger generations leaving their traditional activities in order to seek employment in cities or urban areas.
- **Health issues:** tourists travelling from one destination to another may bring various kinds of diseases into the destination, affecting residents of the local community, such as HIV/AIDS, sexually transmitted diseases and the H1N1 flu virus.
- **The demonstration effect:** local residents will adapt and change their values, beliefs and behaviour to imitate those of tourists. This will occur where there is notable contact between tourists and residents on a superficial and short-lived basis. An example is that of Antigua, where local residents of the beach destination transitioned from traditional values to a 'western-style materialism', in other words the loss of a cultural identity.

- **Conflicts between tourists and residents:** as tourism to an area increase, so does the levels of pollution, noise, water consumption and litter, bringing with this rise in unwanted happenings (such as prostitution and drunkenness), conflict between tourists and residents as well as overcrowded beach areas and traffic problems. In a South African marine tourism context residents of small holiday towns such as Hermanus and Gansbaai experience traffic congestion and price increases during summer months when marine tourism is most popular, this leads to many residents making their way to other destinations, such as Cape Town, during peak season when the Whale Festival is hosted.
- **Language:** the use of the vernacular language will decrease as the level of tourism to an area increases due to the fact that tourists and residents communicate with each other using an international language, such as English, German or French. New words or phrases will also be introduced into local vernacular.
- **Commoditisation:** the culture of a destination is transformed into a commodity as the demand for cultural activities or goods by tourists increase. Commoditisation of crafts, art and cultural performances or dances may be experienced.
- **Staged authenticity:** residents of a community will stage performances for tourists of cultural dances or traditions, making the tourist feel as if he is viewing/partaking in an authentic cultural activity, such as Zulu tribal dances at shopping centres. Hermanus makes use of a whale caller during the Hermanus Whale Festival. The whale caller used to serve the purpose of calling whales closer to the shore by means of a horn. Today however, the whale caller serves more as a tourist attraction with whom tourists can take photos.
- **Facilities being closed down to local residents:** in areas where marine tourism is highly popular situation might arise where public facilities, such as beaches, are closed down to locals in the sense that an entrance fee is charged. This can result in the local residents feeling excluded from the tourism industry.

Aside from these negative impacts influenced by tourism, many positive impacts can also be identified, such as those stated below (George, 2007:303; George, 2012:305).

- **Preservation of culture and heritage:** experiencing a culture at a destination can often be a major attraction for tourists and one of the reasons why they visit the destination. Revenue accrued from tourism at the destination is often put towards preservation of heritage and cultural landmarks, such as Robben Island, South Africa. In a marine tourism context, this can refer to maritime museums (Diaz Museum, Mossel Bay) or naval bases (Simon's town, Cape Town). Within the community of Greater Hermanus the Old Harbour Museum serves to preserve the fishing culture of this town (Vogelgat Private Nature Reserve, 2017).
- **Renewal of cultural pride:** tourism can boost a community's pride when residents experience an interest amongst tourists in their rituals, ceremonies and beliefs. An example is that of Swodana Bay, KwaZulu-Natal, where local residents experience high volumes of tourists each

year. Aspects residents are proud of include the area enveloped by the St. Lucia Wetland Park, world class scuba diving sites and beaches.

- **Promotion of peace and cross-cultural understanding between tourists and locals:** due to direct contact between the different cultures meeting at a destination (tourists and residents) stereotyping can be dispelled, thereby promoting a culture of peace and understanding between different cultures.
- **Improved infrastructure for the community:** infrastructure such as roads and buildings are a necessary to meet the needs of tourists at a destination. Tourism often leads to improvements in roads, telecommunications and public transport which not only stimulates growth in tourist numbers but also benefits local residents. During the years 2015/2016 Hermanus experienced improved infrastructure in terms of roads, water and sanitation, solid waste assets, storm water assets, building assets and community facilities (Overstrand Municipality, 2015:39). This has led to improved conditions for the community of Hermanus.
- **Provision of community facilities and public services:** additional facilities, such stadia and tourist information centres, can often be the result of growth in tourism to an area. While these facilities and public services are established primarily for tourists, local residents also benefit from being able to use it. For example, Hermanus has implemented multiple programmes for the local community, such as the sport and recreation programme (Overstrand Municipality, 2015:42). This programme aims to offer residents of Hermanus a place to practice various sport genres, such as netball, soccer, cricket, tennis and golf. The local municipality has thus ensured to provide these facilities for the different sport genres to be practiced (Overstrand Municipality, 2015:42).

4.6 SOCIAL IMPACT MODELS

The following section is a discussion on the relevant models explaining the social impact of tourism. These models have been identified as important to the knowledge of what social impacts activities such as whale watching and shark cage diving can have. Models which are discussed include: Butler's Model of Intercultural Perception, Doxey's Irridex Model, the Lifecycle Model, the Social Exchange Theory, the Social Representation Theory and Smith's Model of Cross-cultural Contact. For the purpose of this study, social impacts can be described as changes brought about in a community regarding norms, values and structures due to an increased amount of other cultures passing through the community and coming into contact with the local community members, which can result in positive or negative alterations in the way of life of individuals or the community (Scholtz, 2014:36). The models discussed below all provide relevant information pertaining to how such changes are brought about, or which factors act as stimuli for certain changes.

4.6.1 Doxey's Irridex Model

Doxey (1975) developed a model in order to assess the interactions and relationships between the community of a tourism destination and tourists to the destination (Fennell, 1999:100; Kuvan & Akan, 2005:691; Hall & Page, 2006:161; Holden, 2006:153; Cooper, 2007:13; Saayman, 2013:153). The aim of the model is to describe the changes in behaviour and attitude of the members of the community as the destination moves through the tourism growth cycle (Saayman, 2013:153).

Doxey (1975) states that during the early stages of development the host community will welcome visitors warmly and with enthusiasm. The tourism industry is seen as a provider of employment opportunities, increased household income as well as an improved standard of living (Saayman, 2013:153). From the visitors' perspective, they are appreciative and respectful towards the traditions and lifestyles of the local community (Saayman, 2013:153).

As the tourism industry develops and visitor numbers increase, contact between the local community and visitors become more formal and commercialised (Saayman, 2013:153). The tourism industry, in this particular stage, is taken for granted and residents develop an apathetic attitude towards tourism (Saayman, 2013:153). With a further continuation of development, residents' tolerance thresholds are exceeded because of increased congestion, increase in prices and perceived threats to the culture (Murphy & Murphy, 2004). This marks the turning point of residents' apathy towards annoyance as residents feel the cost of accommodating tourism is exceeding the benefits drawn. After annoyance, residents become antagonistic towards visitors and open hostility to tourism facilities and visitors can occur (Jennings & Nickerson, 2005:128). The tourism industry is blamed for economic and social problems which the local community suffer during this stage (Saayman, 2013:154).

Doxey has realised, though, that not all residents would develop similar negative reactions and the attitudes of residents will vary according to certain factors (Murphy & Murphy, 2004). Table 4.2 is a summary of the four stages through which communities move (Kuvan & Akan, 2005:691; Saayman, 2013:154).

Table 4.2 Doxey's Irridex

STAGE	DESCRIPTION
Euphoria	This is the initial phase of development. Visitors and investors are welcomed by the community and little planning or control is practiced
Apathy	The local community take visitors for granted and contact between residents and visitors becomes more formal and commercialised. Planning is mostly concerned with marketing the destination

Annoyance	The destination's saturation point is reached and residents have misgivings about the industry. Policy makers attempt solutions by increasing infrastructure
Antagonism	Irritation with visitors are openly expressed by the community and visitors are being blamed as the cause of economic and social problems. Planning is now in the remedial phase, but promotion is increased to offset deterioration of the destination

(Source: Saayman, 2013:154).

4.6.2 Butler's Lifecycle Model

To understand the changes through which a destination progress from the moment of introduction, it is necessary to look at Butler's Lifecycle Model.

Butler (1980) adapted the original Lifecycle Model to one which is applicable for tourism destinations (Saayman, 2013:151). Butler states that all tourism destination will pass through seven different stages during its evolution as tourism destination. These stages include exploration, involvement, development, consolidation, stagnation, decline and rejuvenation (See Figure 4.5) (Saayman, 2013:152).

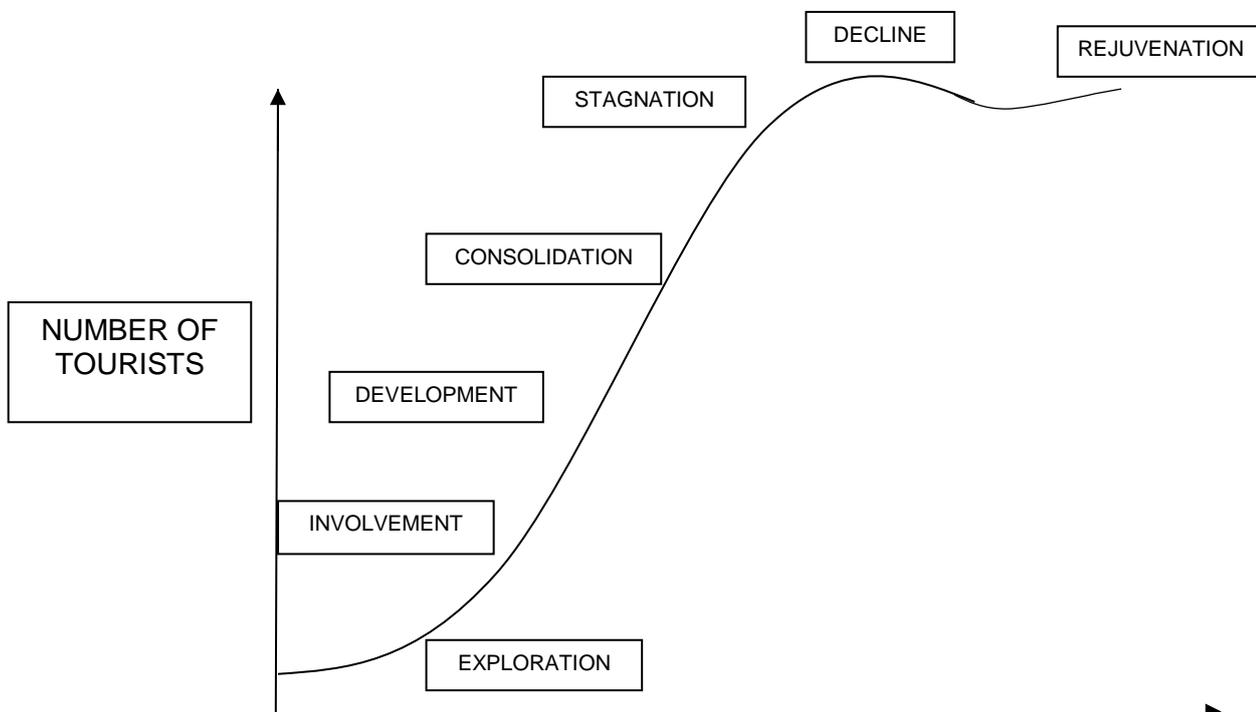


Figure 4.5 Butler's Lifecycle model

(Source: Butler, 1980)

Each of these seven stages has its own set of characteristics (George, 2014:517):

- **Exploration:** a small number of tourists visits the area because independent travellers just discovered the area as a tourism destination
- **Involvement:** a transition from exploration to involvement takes place due to the fact that entrepreneurial activities, word-of-mouth recommendations and reviews are in circulation about the destination
- **Development:** the destination is transformed from a relatively unknown destination to a fully developed destination or resort
- **Consolidation:** the rate at which tourist numbers to an area increases drop and the exclusivity and uniqueness of the destination is lost
- **Stagnation:** tourist arrivals to the destination has reached its capacity and the destination is no longer part of the trends in the market
- **Decline:** the destination starts to lose tourists to competing destinations and repeat visitors are no longer coming back to the destination
- **Rejuvenation:** once a destination has entered the stage of decline it is still possible to rejuvenate the destination through the development of new product offerings or identification of a new market to enter into.

Butler's model is based on eight elements which aims to explain the growth, change, limits and intervention of tourism in an area (Saayman, 2013:152). These elements include (Butler & Boyd, 2000):

- **Dynamism:** The tourism environment is very dynamic and constantly changes
- **Process:** Changes in a destination go through an extreme process of development where the community should be involved in
- **Capacity or limits to growth:** If visitor numbers exceed the capacity of the destination, satisfaction levels of visitors will decline
- **Triggers:** Triggers are factors which can initiate change in a destination, such as innovations
- **Management:** The destination should be managed holistically, aside from facilities and resources being managed individually
- **Long-term viewpoint:** Looking to the future from the beginning will ensure avoidance of declination
- **Spatial components:** A new destination would begin as a result of a spatial shift of development because development at a specific destination has stagnated
- **Universal applicability:** The model can be applied globally, to any destination.

According to Rodriguez, Para-Lopez and Yanes-Estevez (2007:60), this model highlights the importance of management and control in order to overcome potential difficulties and negativities. Aside from the benefits which the implementation of this model can hold for tourism destinations, George (2014:520) suggests that there are three limitations to this model. The first limitation is that

it is difficult to specify within which of the stages a destination is at (George, 2014:520). Secondly, it can be misleading to apply the model to a destination in its entirety seeing as one of the area can be declining whilst another area at that destination could be in the development phase (George, 2014:520). And lastly, the model is more useful as a diagnostic tool than a predictive tool (George, 2014:520). It is important to note that some destinations might reach a particular stage faster than other destinations, or the destination might stay in a particular stage for a longer period of time (George, 2014:520).

4.6.3 Dogan's Framework

In contrast to Butler's and Doxey's models, which focus on the attitudes of residents towards tourism in a community, Dogan's framework focuses on residents' reactions to tourism impacts (Cordero, 2008:38). According to Dogan (1989:220) residents will adjust themselves to particular conditions. The framework consists of four stages, namely adoption, boundary, maintenance and resistance (Zhou & Ap, 2009:79; Cordero, 2008:38; Dogan, 1989:220). Communities will move through these four stages in order to cope with the impacts generated by tourism. It is therefore stated that this framework implies that the extent to which tourism impacts are perceived as either positive or negative will influence residents' reactions to lean towards either acceptance or resistance (Cordero, 2008:38).

As with the social exchange theory (discussed below), this framework implies that the more positive residents' perceptions are towards the impacts of tourism, the more accepting their reactions will be of the tourism industry. On the other hand, the more negative residents' perceptions are, the more residents' reactions will be become resistant (Dogan, 1989:220). This framework further states that any of the four stages may occur in any phase of tourism development (Cordero, 2008:38).

4.6.4 The Social Exchange Theory

Ap (1990) developed this theory based on the identification of the community's perceptions of the impact of tourism as well as how these perceptions are measured. The theory is behavioural in nature which attempts to understand as well as predict the reactions of community members in an interactive situation (Ap, 1990). It is seen as an examination of large-scale issues and challenges through the investigation of smaller scale social situations (Stole, Fine, Cook, 2001:410).

The social exchange of resources is essentially an exchange of goods, which can involve material goods as well as non-material goods (such as prestige and status). Ap (1990) is of the opinion that people who give also try to receive and those who receive are under pressure to give in return. The theory states that what is given by one person is seen as a reward to the person receiving (Ap, 1990). The theory is further based on fact that when the difference between the cost and the reward reaches a maximum, the less a person's behaviour will change (Scholtz, 2014:38).

The possibility of this theory is based on the fact that humanity has developed intellectual and emotional motivations which directs their behaviour towards cooperation instead of towards any forms of unfair behaviour (Wischniewski, Windmann, Juckel & Brune, 2009:306; Ward & Berno, 2011:1558). Figure 2.6 is an illustration of the model for the social exchange theory (Scholtz, 2014:38).

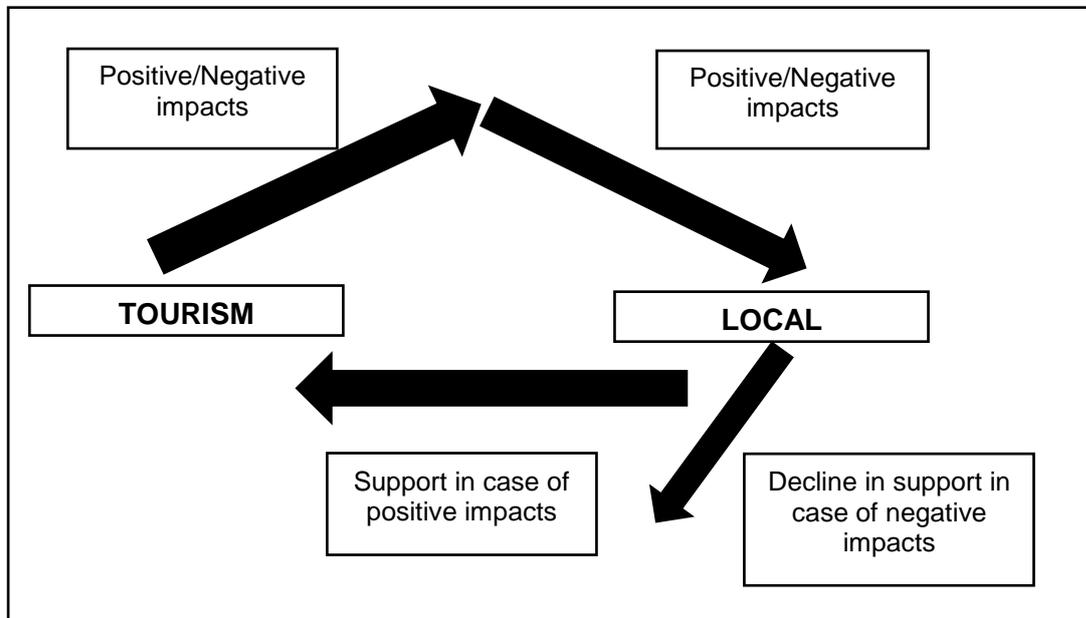


Figure 4.6: Social exchange theory

(Source: Scholtz, 2014:38).

The model illustrates the fact that tourism can have both a positive or negative impact on the local community. As shown, if the impacts generated are positive, residents will return the favour by supporting the tourism industry (Scholtz, 2014:38). If, on the other hand, the impacts are negative, residents' support towards the industry will decrease and the industry can result in failure (Jurowski & Gursoy, 2004:297).

According to Ward and Berno (2011:1556), this model lacks theoretical sophistication and should thus be used together with other social impact models. Although, Bignoux (2006:619) states that the social exchange theory is more complex and innovative, due to the following reasons:

- Both economic and non-economic exchanges are taken into account
- The theory states that exchange is voluntary
- Exchange is not guaranteed
- The process of exchange takes place in the social system
- The theory emphasises social relations and personal ties, shaping the exchange of tourism resources.

4.7 LITERATURE ON SUSTAINABLE MANAGEMENT FRAMEWORKS

Multiple authors have established sustainable management frameworks for tourism sectors, such as frameworks for management of tourist interactions with cetaceans (Higham, Bejder & Lusseau, 2009), for involvement of stakeholders in sustainable management (Waligo, Clarke & Hawkins, 2013) and for parks management (Hermann, 2015). Below follows a discussion on the sustainable management frameworks as identified above.

Higham's Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals

Higham *et al.* (2009) established an integrated and adaptive management framework to address the long-term sustainability of tourist interactions with cetaceans, such as whales and sharks. This framework highlights the need for a multi-stakeholder involvement for management purposes in such a way that it contributes positively to the sector. The framework is based on four research platforms, namely social sciences research, tour operators, planning and management agencies and natural science research. The authors (Higham *et al.*, 2009) divided the management of tourist interactions into two phases. The first phase is known as the pre-tourism phase and highlights the importance of aspects such as development of legislation, community support, licensing systems, the target market, permits issued, operator guidelines, monitoring criteria and control sites. During this phase emphasis is placed on policy, planning and management agencies to establish legislation and regulation for managing the interaction between tourists and marine animals. The second phase, named the tourism phase, places emphasis on visitor satisfaction, visitor perceptions, effectiveness of environmental education, organisation, modification of commercial operators, active management decisions and data collection (Higham *et al.*, 2009). The authors (Higham *et al.*, 2009) state that ongoing research is important for the effective management of animal-tourist interactions. This framework further indicates the integrated relationship between the four research platforms and how each platform can contribute to the management of tourist-animal interactions. Figure 4.7 is a visual diagram of the framework established by Higham *et al.* (2009).

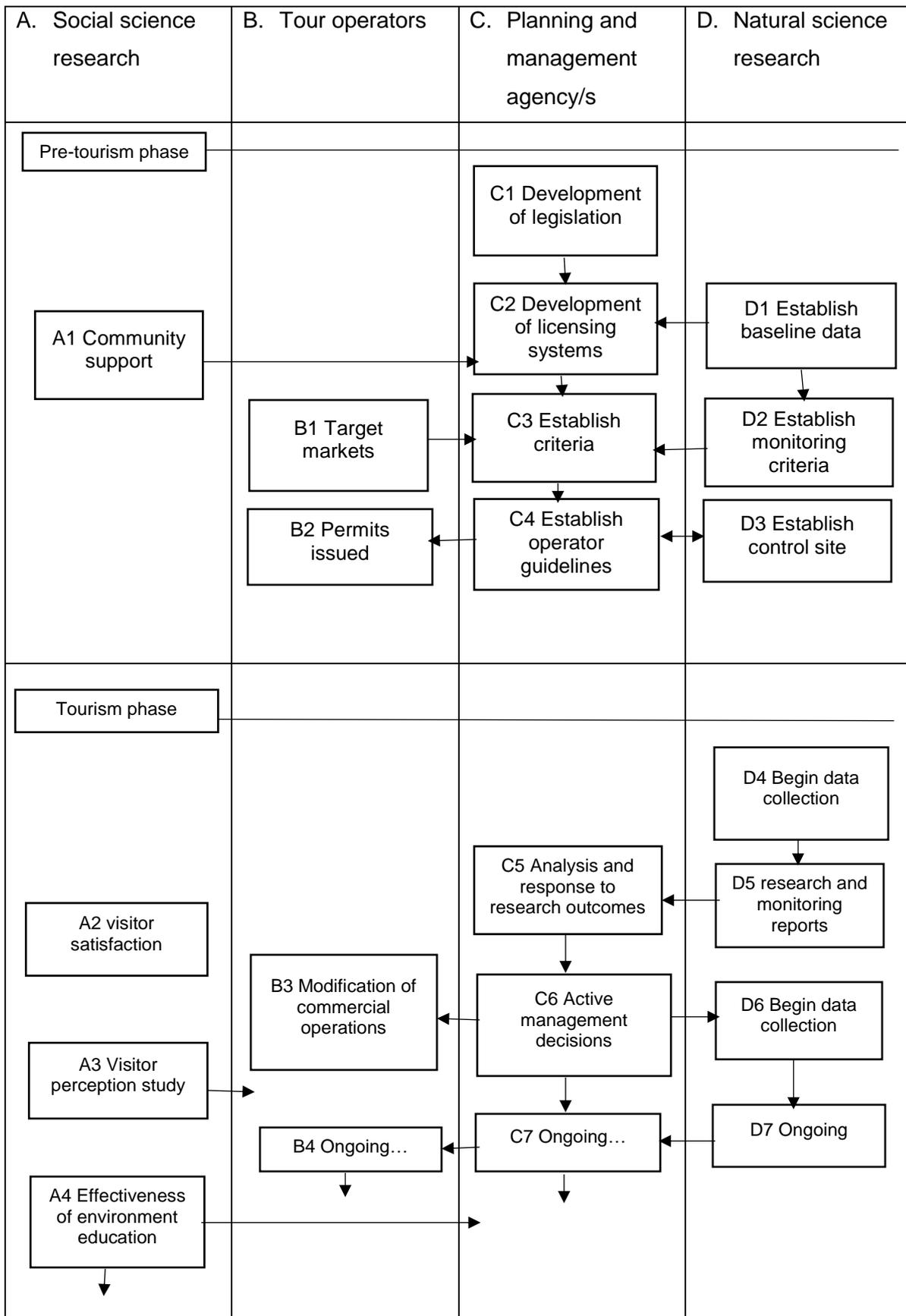


Figure 4.7: Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals

(Source: Higham *et al.*, 2009).

Waligo's multi-stakeholder involvement management framework for sustainable tourism

Waligo *et al.* (2013) developed a multi-stakeholder involvement management framework for sustainable tourism. The aim of the framework is to address key stakeholder-related issues while involving stakeholders in sustainable tourism management practices. The framework is divided into two parts. Firstly, it suggests three strategic levels for stakeholder involvement in sustainable tourism management, namely attraction, integration and management. This part of the framework identifies the strategic decisions that should be considered by sustainable tourism stakeholders and operators to adopt a stakeholder approach to implementing sustainable tourism (Waligo *et al.*, 2013). The second part of the framework consists of six stages that are embedded in the three main decisions highlighted in the first part. The six stages consist of scene-setting, recognition of stakeholder involvement capacity, stakeholder relationship management, establishing objectives, influencing implementation capacity and monitoring stakeholder involvement. Figure 4.8 represents the framework established by Waligo *et al.* (2013).

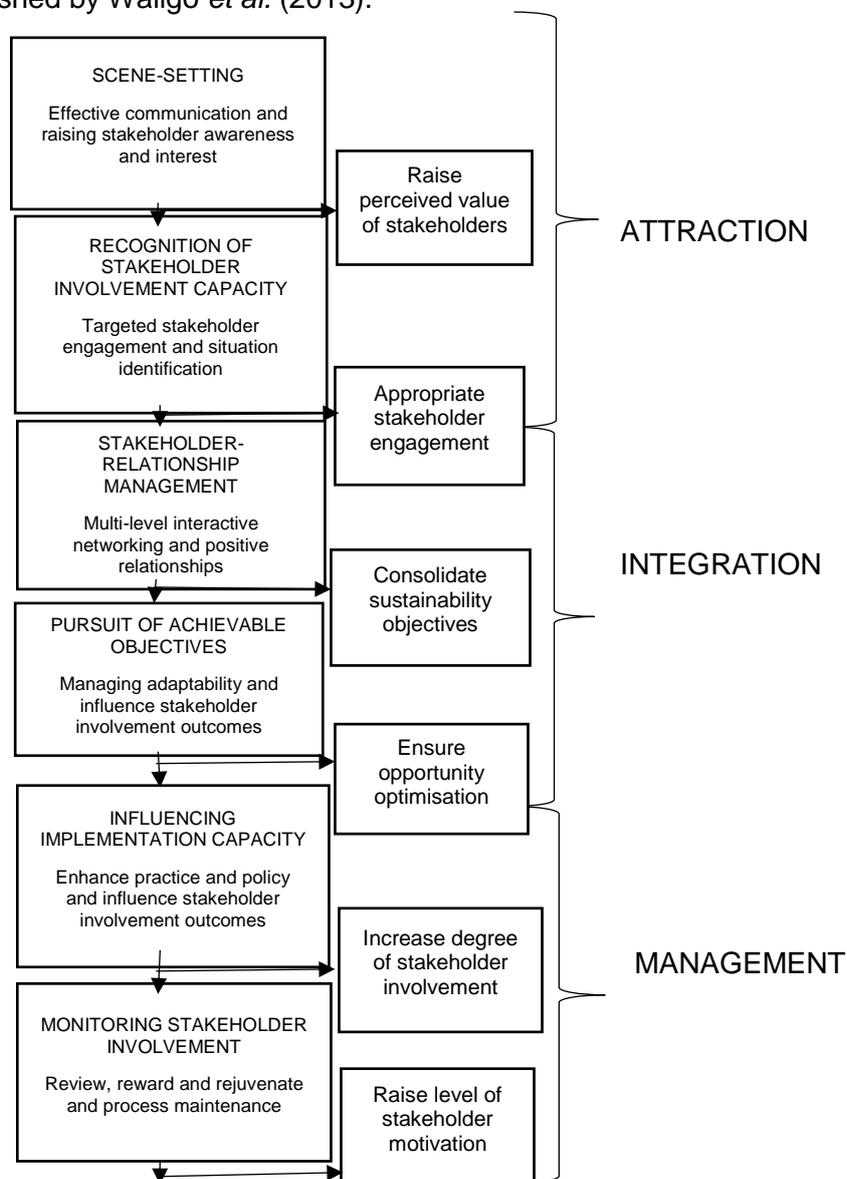


Figure 4.8: The multi-stakeholder involvement management framework (Source: Waligo *et al.*, 2013)

Hermann's sustainable management framework for Mapungubwe National Park

Thirdly, Hermann (2015:213) established a sustainable management framework for Mapungubwe National Park (MNP). The framework includes elements of the external environment (uniqueness of the park's forces and management forces), the internal environment (adaptive planning, adaptive implementation and adaptive valuation) and sustainability forces (local community engagement, sustainable ecotourism management and sustainable environmental management). According to the author (Hermann, 2015:214) the framework for sustainable management of MNP should start with an adaptive planning process which aids establishing the vision and objectives for the park. Next, the plans should be implemented and adaptive evaluation should be conducted. The evaluation process stems from implementation of the objective set during the planning phase. Hermann (2015:214) further identified gaps in the management of MNP, which includes information and accessibility, leisure facilities, human resources, accommodation and ablutions, professional operations, regulations and marketing, environmental impacts, food and beverage management and conservation and socio-economic impacts. The framework is applicable to the study because various elements of management and sustainability are included and should be adapted for use in marine adventure tourism. The concept of adaptive management is the result of continuous feedback to management regarding improvements, which will ensure the successful management of MNP (Hermann, 2015:214). Figure 4.9 is a visual representation of the sustainable management framework developed by Hermann (2015).

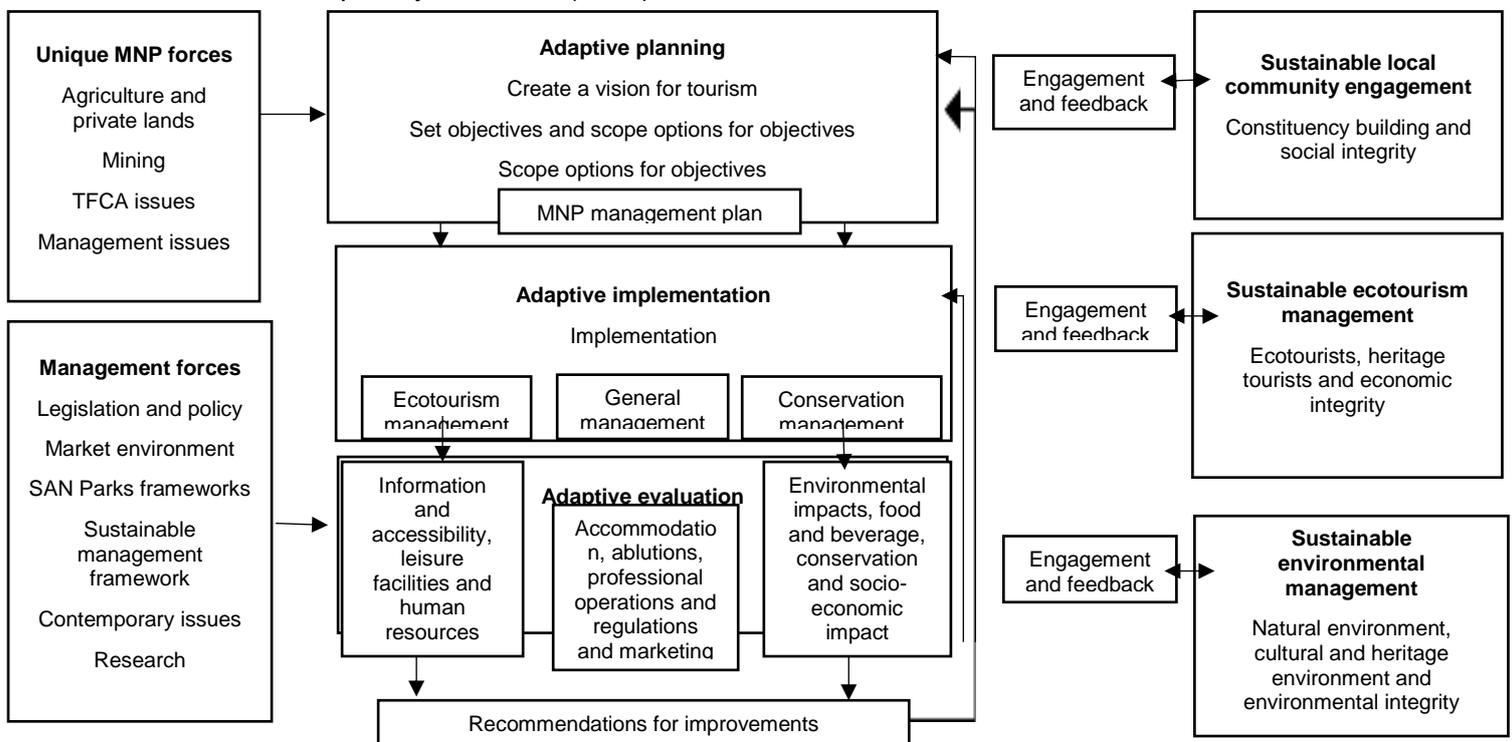


Figure 4.9: A sustainable management framework for Mapungubwe National Park

(Source: Hermann, 2015:213)

¹ TFCA is an acronym for Transfrontier Conservation Areas.

From the frameworks discussed above, several key factors for sustainable management can be highlighted. These factors include the inclusion of the local community in tourism activities and operations is important, education and awareness, marketing, management decision-making, visitor satisfaction and regulation in terms of legislation, licensing and permits.

4.8 CONCLUSION

The purpose of this chapter was to analyse the aspect of sustainability in the tourism industry. In order to achieve this goal, the researcher analysed all aspects regarding sustainability, including the economic, environmental and social equity elements along with all underlying aspects.

The first phase of this literature review was to analyse the concept of sustainability. Through assessment and analyses of this concept, full comprehension of sustainability, what it entails and how it contributes to the tourism industry was ensured. Amongst others, the definitions and concept of the term 'sustainability', the positive and negative impacts of sustainability, the difference between sustainable and non-sustainable tourism and interpretations, perspectives and limitations of sustainability were discussed.

The next phase of this review was to analyse each of the elements which make up sustainability, namely economic efficiency, environmental conservation and social equity. In terms of economic efficiency, the economic benefits of tourism and various economic valuation methods were discussed. The knowledge gained through the review of literature regarding the economic efficiency of tourism is valuable because it offers insight into what a tourism activity can offer and monetary benefits which can and should be, derived from tourism.

The discussion on environmental conservation included aspects such as what the terms 'conservation' and 'biodiversity' refer to, along with the differences between renewable and non-renewable resources, the types of conservation found as well as the negative impacts of tourism on the environment. As a result of the concepts analysed for this section of the chapter, valuable knowledge was gained by the researcher in terms of how tourism contributes to the conservation of the environment and the various ways in which conservation can take place.

The last part of this chapter focussed on the discussion on the social equity of tourism. Amongst this discussion, the following concepts were included: an analysis of the term 'culture', an analysis of the host community and the elements of which it comprises, key social-cultural impacts of tourism on the community as well as social impact models and frameworks identified in the literature. The discussion on the various models which describe the complex and variability of a community and social systems, has provided the researcher with a comprehensive understanding of tourism-related elements and factors which may impact the social community where tourism activities are offered.

This chapter focuses on the concept of sustainability, what the literature describes the concept to entail and all underlying factors associated with this concept. This chapter does not, however, discuss the context in which sustainability is to be implemented. For the purpose of this study that

context is marine adventure products. Therefore, the previous chapter focussed on discussing relevant literature pertaining to adventure tourism, while chapter two discussed the concept of marine tourism and management in detail. The next chapter of this study provides a discussion on the empirical results obtained from the qualitative and quantitative surveys.

Chapter 5

Empirical Results

Far and away, the greatest threat to the ocean, and thus to ourselves, is ignorance. But we can do something about that

~Sylvia Earle

5.1 INTRODUCTION

The aim of this thesis was to develop a sustainable management framework for marine adventure tourism products. In order to do so, four objectives were set. The first objective is to analyse existing literature on marine tourism. Through conducting this analysis an understanding of the marine tourism sector can be reached, which can contribute to the establishment of the sustainable management framework for marine adventure tourism products. The results of this analysis were reported on in chapter two. Chapter three ensured that the second objective, which included a literature analysis on adventure tourism, is met, while the third objective, relating to an analysis on sustainable tourism management with the focus on economic efficiency, environmental conservation and social equity, was met in chapter four.

The fourth objective, the empirical results of this research, is met in this chapter. The data is discussed in two sections. Firstly, the qualitative results, which include the data collected from the interviews held with the operators of shark cage diving- and whale watching establishments (Section A). Secondly, the quantitative results are discussed and include the profile of respondents, namely marine adventure participants (shark cage and whale watching) and residents of Hermanus (Section B). Section C discusses the results obtained from the exploratory factor analyses, while section D discusses the results obtained from the cluster analysis and the cross-tabulations. Figure 5.1 below summarises the stages in which the results are discussed.

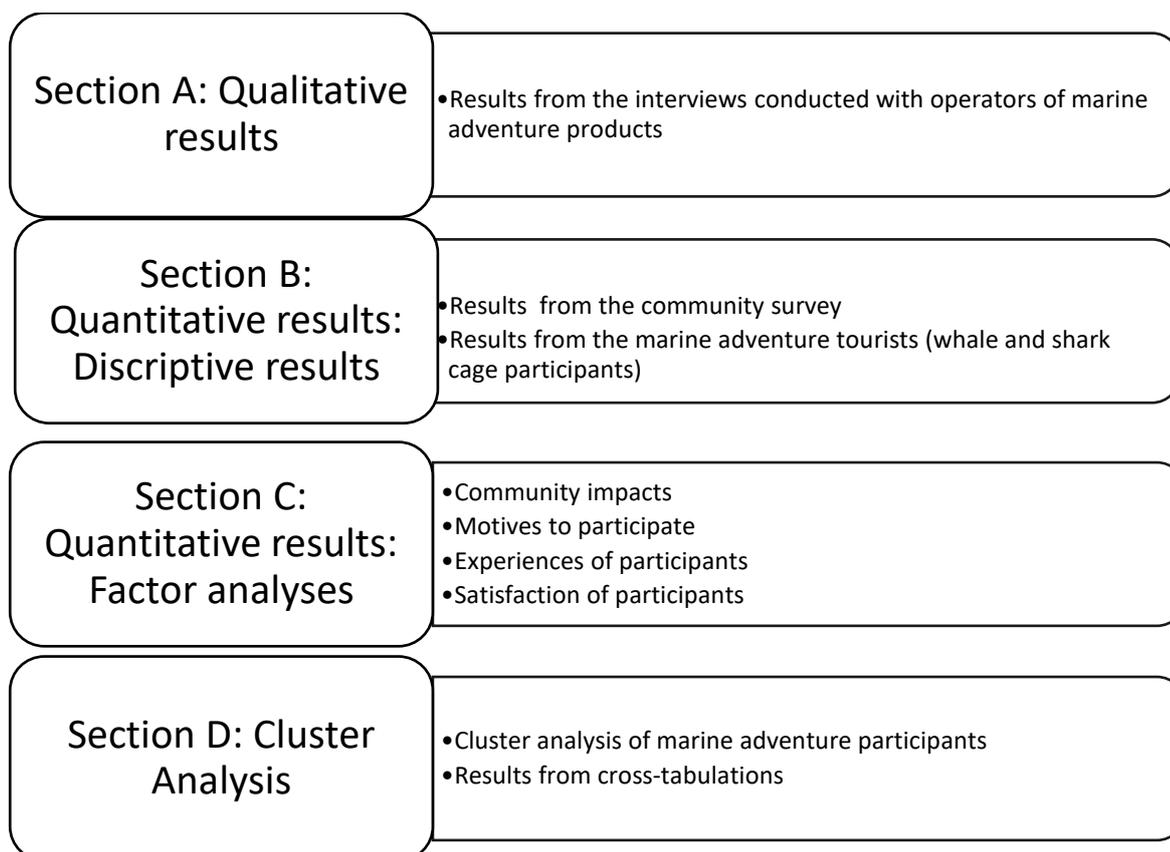


Figure 5.1: Outline of chapter

5.2 SECTION A: QUALITATIVE RESULTS

As discussed in chapter one, the qualitative data was captured by means of personal interviews. These interviews were conducted with four different whale watching- and shark cage diving operators in the Hermanus and Gansbaai area, Western Cape. Eighteen questions were asked during the interview, including the number of years they have been in operation, the target market, marketing tools used and questions pertaining to the sustainability of the industry. The four interviews were recorded by means of a Dictaphone and transcribed by the researcher. The following section discusses the results obtained from the personal interviews.

5.2.1 Number of years in operation

The average number of years which operators have been in operation in this sector is 18 years.

[Operator 1] *We have been in operation for 20 years.*

[Operator 2] *We are in operation from about 1989, so that is 18 years in practice now?*

[Operator 3] *Whale watching since 2000 and shark cage diving since 2005.*

[Operator 4] *1999, so where does that put us? So we are now 17 or 18 years in operation.*

5.2.2 Number of boats owned and in operation

The average number of boats owned by operators is one. According to regulation operators are only allowed to own and operate one boat per operation. One interviewee is the owner and operator of

both a shark cage diving and whale watching operation, but merely one boat is allocated to each activity, according to the Marine Living Resources Act 18 of 1998 (see South Africa, 1998). This Act has been enforced to allocate an optimal number of permits safely and efficiently, as well as to improve the regulation and compliance of operators in the industry (Marine Living Resources Act 18 of 1998). Turpie *et al.* (2005) stated that operators in South Africa make use of one boat and one support vehicle for their operation, which is in accordance with this study.

[Operator 1] *Only one boat per operator. There are 8 boats in Gansbaai, Kleinbaai area and most of us have been in operation between 15 and 20 years.*

[Operator 2] *We are only allowed one boat. We started with small boats, no spares. We bought another boat, it's still laying down there and now we have the cruiser. We extend it as time goes by.*

[Operator 3] *There is one whale watching boat, capacity 50, one shark boat, capacity 40 and one bird watching boat, capacity 12. And there is a dedicated research vessel.*

[Operator 4] *One boat. You are legally only allowed one boat.*

5.2.3 Number of permanent staff and temporary workers

The number of permanent staff members per operation ranges between 18 and 40 staff members, depending on the size of the company. The average number of permanent staff members is calculated at 25.5 members. The number of temporary workers are much lower, due to the seasonal nature of the sectors. This number ranges from 0 to 50, with an average number of 13.5 temporary staff members. The reasons for the difference in numbers of staff members is due to the fact that the one operator owns both a shark cage diving and whale watching operation and a seabird and penguin rehabilitation centre, all of whom are employed under the same umbrella. According to Turpie *et al.* (2005) many operators in South Africa operate with a select number of permanent staff and employ a limited number of temporary workers, such as one or two, during high season.

[Operator 1] *I've got 23 permanent staff, no part-time workers.*

[Operator 2] *We're not all permanent because it's only seasonal. We are all together 16 now.*

[Operator 3] *That is difficult because we combine the restaurant with all the businesses, even though they are all separate entities. We are about 90. This includes the international marine volunteers. Maybe you should say the total amount of people with the two companies [whale watching and shark cage diving] is maybe 40. And this permanent. The other 50 will be the Great White House, the International Marine Volunteers and the African Penguin and Seabird Sanctuary.*

[Operator 4] *I'd have to double check, but I think we have about 21. Temporary workers in South Africa works for less than 24 hours a week and so, we've got seasonal. So that would be, I think we've got about 2 seasonal workers.*

5.2.4 Role in the operation

Operators who formed part of the survey were either owners or managers of the company. Therefore, 50% were owners while 50% were managers.

[Operator 1] *...because I've had my business for 20 years, I've had people that has been with my business for 20 years. A lot of the other operators will have people that come and go, but my people seem to stay. Because I, number one, look after them. When they are happy, I am happy. And they make my people happy at the same time.*

[Operator 2] *I am the manager.*

[Operator 3] *Owner.*

[Operator 4] *We don't give out titles here, but I would probably be general manager.*

5.2.5 Average price per person for a trip

The average amount per tourist per trip for whale watching equals R850, while the average price per tourist per trip for shark cage diving equals R1700. Prices for whale watching trips have been identified from the literature as R650 per person, on average (Turpie *et al.*, 2005:26). This was identified 12 years ago. Thus, new insights are needed in terms of the average price per person per trip. According to the literature shark cage diving operations, on the other hand, are more expensive due to the nature of the product and is measured at R1650 per person per trip (Marine Dynamics, 2017a). According to Orams (2013:439) a slight increase (more or less R250) in the average price per person per trip for marine adventure activities, such as whale watching and shark cage diving, have been identified over the past ten years. This is indicative of a slight growth in the sector for marine adventure tourism.

[Operator 1] *R1650 per person per trip.*

[Operator 2] *R700 per person is the walk-in price. Kids are half-price.*

[Operator 3] *R1750 for the sharks and R1000 for the whales.*

[Operator 4] *Average price per tourist? R700.*

5.2.6 Number of months per year in operation

Shark cage dive operators are in operation for the full 12 months of the year, while whale watching operators operate for more or less 6 months of the year. The reason for whale watching operators only conducting tours for six months is the fact that the whales are only on the coastline of South Africa between June and November of each year. They come to the coastline to mate and calf. Turpie *et al.* (2005) identified that whale watching operators in South Africa are in operation from July to December, during the time when the Southern Right Whales are along the coastline. Furthermore, the authors have identified the average number of days when whale watchers operate are 126.3 days a year. Dicken and Hosking (2009:227) state that shark diving operations in South

Africa operate from January to December each year. From the results obtained it is safe to assume that whale watching is a seasonal activity, while shark cage diving enjoys year-round operations.

[Operator 1] *Full year around. We are obviously much busier in the European winter, our summer here, much more busy. Although winter time here for use us much more sharks, much clearer water because of the winds and surf and direction.*

[Operator 2] *It is actually from mid-June to mid-December. More or less six months.*

[Operator 3] *Twelve months for the sharks. Six months for the whales. For the rest of the year, January until end of May, mainly end of June, we do eco-trips with the whale boat.*

[Operator 4] *We are nine months of the year in operation.*

5.2.7 Training provided for staff members

According to regulation in South Africa, operators should provide training for staff members in multiple areas of the business, which includes the boat crew and office staff. Operators in the Hermanus and Gansbaai areas adhere to these regulations and staff members' training are kept up to date. According to the Marine Living Resources Act (18 of 1998) training should be provided to all staff members in the areas of health and safety, safety out at sea, first aid and skipper training. All respondents have indicated that their staff members have received the appropriate training.

[Operator 1] *Obviously, the office staff do office training. They do all types of computer training. And then I've got two people that I've just employed full time [to] look after my web page... I've got a marketing girl that runs around. As far as the guys on the boat, obviously you can't just take a boat out. You must go through the courses and be a qualified skipper or a dive master. And then with the skipper and dive master comes the safety and the firefighting, life raft drill, all different drills. And you've got to keep up to date with the. I don't give the course, we go to course and radio operators' course. And my boat staff, which is seven of them, are up to date with them.*

[Operator 2] *The type of training you must have is, first of all, you must be a trained tour guide through a certified facility, so we all are trained. We have six trained guides who work here. You must do some modules, because that is the law. You can't do tours if you don't have the certificate. The guides are all adequately trained. And then the people on the boat also need training. So they are all trained to do health and safety and skipper training.*

[Operator 3] *Aside from what they do, the crew receives special training. The captain, or the skipper, is a well-trained person. You have a dive instructor, I also fight against this because we don't really dive, but you have a diving supervisor on the boat and the crew are all trained in three-day fire-fighting, a pre-sea, a three-day medical aid course and a tourism guide course.*

[Operator 4] *Special training, yes. The boat crew, they all have the required training that they all have to undergo. So we provide all of their sea training that is required. And then, for the office, there's not too much training, it's more in-house, but if there is a course that comes up and then we will provide that. For the boat it is your proficiency in life raft, your pre-sea, your medical, your first-aid at sea and then there is another two or three... But we definitely keep up to date with all our training. We have to, it's required.*

5.2.8 Does the company have a website and is it in operation

All the operators who have been interviewed have operational websites. Participants are able to book a trip, whether whale watching or shark cage diving, on the website. Although none of the operators prefer payment over the website visitors can pay in advance. The reasons for not preferring payment beforehand is due to the changeability of weather and the migratory patterns of the whales. If the weather is not suitable for a trip out to sea, the trips arranged should be cancelled or postponed, which can cause logistical issues for the company in terms of paying customers back. According to Pike (2008:271) a total amount of 64 million users research, plan and book trips and activities online in the USA alone. The management impact of this is the fact that operators should ensure that their websites are kept up to date to ensure the market receives sufficient information about the service and to offer additional information on the marine environment and environmental-friendly practices.

[Operator 1] *We've got a website and they book online, they can actually book a place online, morning or afternoon and pay online. People can also pay on arrival and they can pay cash or credit card, they can pay in advance. We don't like to get money in advance. Reason being, because the weather could change and then they go away and you've got to pay them back or you've got to cancel.*

[Operator 2] *We have a website yes and it is in operation. We can make bookings. You see, because we don't take online bookings because of weather permitting. They can make a booking via email, we send a confirmation, weather permitting. They can pay when they arrive. Otherwise you're going to have a lot of problems with a few days you couldn't go out and you must refund people and it can be difficult to refund people.*

[Operator 3] *Yes. I pay on average, along with the Google Ads between R60 000 and R70 000 a month for the website. It is a very good source for us.*

[Operator 4] *It is in operation. We do take bookings through the website. We take details to secure the booking but payment is done on arrival. It helps with the trips being weather permitted.*

5.2.9 Attendance to marketing shows

The majority of operators do attend marketing shows, such as the Tourism Indaba and the World Travel Market exposition in Cape Town (WTM Africa). These shows are used as a marketing tool to increase awareness of the company, educate people on the topic of conservation of marine animals and to attract tourists to participate in the offering. One operator found the shows do not benefit acquisition of participants to his offering though, but has placed emphasis on the fact he did attend such shows in the past. Marketing shows, such as the Tourism Indaba and Getaway, offer operators the chance to meet consumers and reach new target markets. According to Kapoor, Powell and Abbott (2006:45) an average of 36% of tourism is generated through attendance to marketing shows. As indicated by respondents, attendance to marketing shows form a big part of the marketing strategies of whale watching and shark cage diving operations. Through this attendance, operators have an opportunity to reach out to new and different markets regarding the service offered as well as sustainable business practices. Not only is a competitive advantage gained, but operators can identify which actions are taken by competitors in the industry to improve sustainability.

[Operator 1] *I'm not so good at that. I have been to Indaba. I've been to one or two of them. It costs us nothing but I didn't enjoy it and I don't go to them. I didn't find it very beneficial for the business.*

[Operator 2] *We go to Indaba. When you go to Indaba, more or less, you know, your marketing is wide enough because you are fully booked.*

[Operator 3] *We do WTM Africa, WTM London and Indaba is a given. I have been to Indaba for the past 20 years. And then we have a girl, she just came from Cape Town and she will be staying with us for three weeks. She worked for Fairtrade. She does marketing for us in Europe. So she has already done England this year and she attended ITB². And each year we do a roadshow in England, each year. I was in Holland two or three times already. I just came from England where I attended a roadshow and I go to America every second year.*

[Operator 4] *We do more of the tourism trade shows. So we go to WTM Africa that's held in Cape Town. And then Indaba in Durban. Then there are small international shows we go to as and when they come about.*

5.2.10 Marketing tools, such as direct marketing, that are used

According to respondents traditional marketing tools, such as printed material and brochures, are not utilised as much anymore. Social media, such as Facebook, Instagram and blogs and online marketing is a stronger marketing tool and allows a wider reach of potential customers. Operators

² ITB is an acronym for International Travel Trade show Berlin

will make use of printed advertisements, but preference in general lies with social media marketing, as evident from the responses received through the personal interviews.

[Operator 1] *We do advertise every now and again in booklets and books and things like that. You've got brochures printed, 1000's of brochures distributed. And you've got a place called brochure management. And brochure management take your brochure and they tell you if they put it in this hotel, it's going to cost you R300 a month. They put it here at this hotspot, it'll cost you R300, there it's going to cost you R500 and there it's going to cost you R200. And you can spend thirty or forty thousand rand a month on your brochures being distributed in brochure management kiosks all over South Africa. And you know what we did? We put numbers on these brochures and we said if you return this brochure to us you get a 20% discount. You know how much return business we got? Nil. So that twenty and thirty thousand rand I spend was absolutely useless. So we have through trial and error over the 20 years found that brochures distributed all over the place don't help us either. Giving good service and those two girls [social media marketers], whatever they are doing, it's the best way.*

[Operator 2] *We market ourselves in all of this (shows brochures) and the Overberg. We are in some of the Timing of the Overberg. We are here, we are in Table Mountain and Lion's Head, the botanical gardens. And we have nice information about the Overberg, not just that you go to Table Mountain and see nice information about Table Mountain, but you can also get information about the Overberg. Word of mouth is also good. Some experiences are much better, then you can market something very nice and then you come there, it's a shocker. But yes, word of mouth where people go for experience then they go back and take their phones and say "wow!"*

[Operator 3] *We do direct marketing as well. We go and see the people. I drive to Cape Town every Tuesday and [my marketing manager] chooses the most important people I need to see and I go and see them. And they also go and see important people every day. So it's direct marketing, shows and the web, especially and social media.*

[Operator 4] *Brochures, print magazines, print in flyers, also maps, you know, tourism maps. And we do website, banners, through blogging, with bloggers and yes, that's probably about it.*

5.2.11 Target market

The target markets for the various companies stretched across a wide continuum of markets. Depending on the image which the company is trying to sell to the market, target groups will vary as well. In general, target markets included people from all age groups, occupation, nationalities and backgrounds. The majority of the target markets do originate from international countries, such as Germany, Egypt and Japan. The target markets identified by all four respondents are in accordance

with the profile identified by Dicken and Hosking (2009) regarding the industry for tiger shark diving in the Aliwal Shoal marine protected area, South Africa. According to the authors, the majority of respondents originate from Britain and Germany, they were mostly male with an average age of 67 years.

[Operator 1] *I can mention you names, I mean film stars, the King of Jordan, Saudi Arabian Princes, a list of film stars, rock bands, rock stars, you name them. They all come from all over the world to Cape Town, Hermanus, Gansbaai, to look at the sharks. We've had people that come back for 12 consecutive years. I would think up to, most of them, only come once. Because they come to South Africa, they do the Cape Town thing and next year they come and do Kruger Park. But not many people come for a second time.*

[Operator 2] *We have the Japanese, they are lining up and phoning all the time. So this month, the first of October, is the time they break loose and they come here with buses all the time. So we have the Japanese market and then Germany and we have the Dutch market. The Africans, you know, it is 0.1%, is South Africans. Those who travel is the people who are mostly on pension, 50 years of age or older.*

[Operator 3] *We have done a lot to change the profile of shark divers. We absolutely go for the five-star market. Because we have a bigger boat and because we have a lot of crew members we sell shark cage diving. You can bring your baby along if you are happy. You can be 80 or 90 years old. So a big part of the market is over 50 years of age. The shark dive market is a mix of old, very old and very young. They have a spunk in them to get out of their comfort zones. The whale watchers, on the other hand, like seeing sharks, but they would not go and sit on the shark boat for a day. They are different. They are in general a bit older, more your middle-aged group of participants and well-travelled. They will much rather want to see birds, dolphins and they will see the shark, but they are a softer tourist.*

[Operator 4] *Anybody. It's not a defined target market. It is generally more international, however, we have seen an increase in local tourism over the last three to four years. A lot more people are travelling locally, or doing this, should I say, from the South African market. And the target market, we would have a backpacker to old, old people travelling, like their bucket list trip at 75. So there's no real specific target market.*

5.2.12 Relationship to the Hermanus Whale Festival

The operators, in general, have no relationship with the Hermanus Whale Festival. The general feeling is that the festival does not contribute to an increased number of participants, but the festival does not have a negative impact on operations either. It can therefore be assumed that the Hermanus Whale Festival does not contribute to the livelihood of whale watching and shark cage diving operations in Gansbaai and Hermanus.

[Operator 1] *Because, as I said, 98% of my people [participants] are from overseas. They don't know about the Whale Festival. Hermanus people don't benefit at all. Whale watching and shark watching don't benefit at all. I can do without it completely.*

[Operator 2] *In the past we were part of it and it's mostly a local market. We're struggling to get people here to come onto it and we don't really need local people. It's a festival for locals who come down and eat and drink and enjoy themselves and have a good time.*

[Operator 3] *We have a good relationship, we know the people. But do we get business through it? No. It is of value to me to have people see that there are things going on at Gansbaai, that we are different and that we pay attention to the animals? And we worry about our penguins and we put our money where our mouths are. So that is why we are there.*

[Operator 4] *Do we have any relationship to the [Hermanus] Whale Festival? No.*

5.2.13 Attitude towards conservation fees

The overall attitudes of operators towards conservation fees are positive, but the preference amongst respondents were to inform participants about conservation projects to which they can contribute and thus let participants choose whether or not they would like to contribute towards conservation. All respondents are, however, already contributing towards conservation in some form or another. This includes donating money to a certain cause, conducting their own research or empowering the community to help conserve and protect marine animals. According to Cisneros-Montemayor *et al.*, (2013:381) operators of shark cage diving and whale watching activities have contributed extensively towards the protection and conservation of sharks and whales because operators are contributing to research, conservation and protection of these species across the globe. The results obtained from these interviews are therefore in accordance with literature pertaining to these sectors.

[Operator 1] *We contribute to different shark organisations for the conservation of sharks. I give on a monthly basis and I contribute all over the world to shark conservation projects all over the world. Right here, in Hermanus, we have a shark conservancy. We help them, we work with them. We contribute on a monthly basis for the further education of sharks. So the answer is yes, we do and we will and we do all the time.*

[Operator 2] *It would be difficult to tell people to pay. Like, you go to a Kentucky Fried Chicken and add R2 for charity, okay go ahead. It's something you must tell people. You must first test it and say "well, what do you want?" and I would say "are you prepared to pay extra R2 or R10 for conservation?" then yes, it might go. You have to speak to people. It's all about conservation. And it's a privilege to go out and meet the big animals in the water, they come all the way from Antarctica to mate. I tell people it's a privilege, you know. And you must love nature to go on a boat, because nature can change any time.*

[Operator 3] *I give where it is necessary, as much as is necessary. If the penguins need food, then I buy food for them. If the veterinarian needs to be paid, then I pay it. That is how I contribute to conservation. We have a truck, so if we need to go pick up trash at the beach, we go. We try to get conscientious tourists, which is very easy because the tour agents help out. So if people walk through these doors we know they care about nature, they care about people and they care about the planet. And they give quite easily. They will buy a nest for the penguins, or a block of ocean for R300 as a contribution to research.*

[Operator 4] *We don't have any fees in place that we pay for conservation, so then attitude towards paying towards conservation? Positive. We do support a lot of different conservation entities. We've got a partnership with the local company here in Hermanus, the shark conservancy. They've got interns that come on our boat to do additional research to what we are already doing, just so it's an outside entity as well, so yes, we try and do what we can in a short season towards conservation.*

5.2.14 Management advantage of the company

The general feeling towards a management advantage was centred on a unique element offered by each company. Service stood out as an important aspect, as well as attention to detail and experience. By paying attention to details, such as providing water while out at sea or providing warm jackets while on the boat, delivery of a good service and offering a once-in-a-lifetime experience to participants will result in positive word of mouth and the chances of educating participants on the importance of conserving the marine environment is much greater (Cisneros-Montemayor *et al.*, 2013:381).

[Operator 1] *I am not one to go and put posters and fancy things and all the things. Other people do that but they don't look after the people. If they go to sea they send staff. So you see I'm the other way around, I'm not very good at marketing, but I have a marketing manager. My people seem to stay because, number one, I look after them. When they are happy, I am happy.*

[Operator 2] *Our experience, you know. We've got experienced guys on the water and we're growing. People are reading all the time.*

[Operator 3] *I have wonderful people working for me. And attention to detail. It is the small things that make a difference.*

[Operator 4] *I think it's the service. And also, we started off extremely small. Our first boat was an eight-seater. It's actually our tender now, it's what we use to get to our boat if our boat is on the water. So that was our first whale watching boat. So to go from eight people with maybe one trip and the seasons then, due to an unawareness of Whale watching as an industry, were probably around September to November. So you only did it for two months, probably one or two trips a day. And now we are licensed to take up to 70 000 and to do*

multiple trips a day. The beginning philosophy of the company was to get to know the people by name. We don't work on booking ID's. Yes, we might have given a booking ID, or we might give you a booking ID on our website, but you are a person so your name is Anne or Margaret. And I think that does give us an edge that, somebody will come into the office and we'll remember what they did yesterday and we'll chat about that.

5.2.15 What do you think is sustainability?

Respondents understand the concept of sustainability and each offered an opinion which is related to the three pillars of sustainability, namely economic viability, social equity and environmental conservation. Aspects which were highlighted include educating participants and the community on the marine environment, ensuring harm does not come to the animals and ensuring the sectors are operated in such a manner as to ensure that whales and sharks remain active within the area. According to Chen (2011:10) sectors of whale watching and shark cage diving has contributed greatly in areas such as Taiwan to the conservation and protection of sharks and whales, proving that operators do have sufficient knowledge of sustainable practices and therefore substantiating the results obtained from this research.

[Operator 1] We are not hurting the sharks and we are not harming them. We are educating people and we are also watching our waters to see that no one is hurting or harming the sharks in any way. And if we see hurt or harmed sharks or sharks with big hooks in them, then we are aware and we talk to each other. So we are actually our own policemen of our own industry. And we are doing much more good than any harm. If you had to look at the twenty years of data, we are not finding a decline in the number of sharks. I am not seeing a decline. I am not seeing as many big sharks as I saw ten and fifteen years ago. But the general shark population, or from what I am seeing, is that they remain constant, if not slightly up than twenty years ago.

[Operator 2] Sustainability is the fact that we must have enough passion and like we can sustain ourselves now, we only have a boat now that can take 80. And that is impossible to do that. When there is a lot of boat activity taking place, like the one area where the whales mostly used to be there, they're not there anymore. Give the whales enough rest because you can stay for twenty minutes with a group of whales and then you must move away. We tell the people that the whales' tolerance is only twenty minutes, so we move to another group of whales. And then leave them, let them be. Because they are very curious they will come to you, look at you and stuff, but they also need to come and do their thing.

[Operator 3] My sustainability starts with what I can do in my life. And that is the animals in the ocean. And the entire system with it. Because you cannot look at the animals right in front of you and you don't see what the seagulls are doing, or we are not seeing this bird anymore, or those birds are arriving earlier every year. At the restaurant we have our own

garden which make up 80% of our celery and herbs used for the food. I would prefer our curio shop to be made up of beaded jewellery made by the local community. I want the poorest of the poor to benefit from what we are doing. That is really empowerment. And it becomes a way of life. For your people as well, because you cannot pick up a piece of paper here but throw it back onto the street again.

[Operator 4] *With regards to the whales, unfortunately I don't think we know enough long term to see and whaling happened not so long ago and there was hardly nothing. So yes, there is a growth and the growth is healthy. The Southern Right Whale is actually a victory story of conservation. It's actually an animal that was nearly made extinct through human intervention. And now has grown from strength on strength. Where, you know, there is lots of conservation like the rhino or the cats and then there is problems there. And those problems haven't sort of turned around. Where with the Southern Rights, they have turned around and it's actually great. But, with that said, we don't know enough about their movements. Will there be no whales in Hermanus? No, I don't think so. Will there be maybe less? Possibly. But yes, so then it's the unknown that's a bit worrying there, but as far as sustainability, I think whale watching is also highly regulated in the country. You know you've Australia and America with massive boats and in America you've got cocktail bars, you've got a lunch buffet on the boat. But you're there to do whale watching, not sit and eat a buffet. So the big ferries, you are looking at 100 to 200 plus people going out to go and see whales. And you are also looking at a lot of boats. Some areas you find 8 boats in one area. So with South Africa, we are essentially in most harbours, or in most areas where they launch, there is a maximum of two boats. Sometimes one, Kleinbaai's got one. Where, Hermanus, we've got the maximum amount. We've got three boats, but still there's no other traffic. If you look at Cape Town harbour, loads of boats. They've got boats, ferries, ships, tugs, working vessels, fishing vessels, there's a lot of traffic. Hermanus, that's what you see. Yes there's a couple of fishing boats now and again, then there's the three whale boats. I don't think Hermanus, through vessels, will have an issue. I mean it is pretty sustainable.*

5.2.16 What should be done to keep the industry sustainable?

The general feeling amongst respondents were that regulations and permits should be enforced stronger by the government. Poaching and illegal whale watching have been mentioned as a concern and operators feel strongly toward the fact that the government should enforce the regulation surrounding the sectors more. Furthermore, operators also feel that educating people about the animals will contribute towards the sustainability of the industry. According to Johnson and Kock (2006:52) operator compliance to not feed sharks should be enforced more extensively, compliance information sheets should be displayed by operators and priority should be given to issuing operational permits to the sectors (Richards, O'Leary, Roberts, Ormons, Gore & Hawkins,

2015:208). These findings are in accordance with the results obtained by this research and therefore proves the importance of identifying a sustainable management framework for this sector.

[Operator 1] *Fortunately the government has got certain rules and regulations. But all the money has been used on the wrong places. Even when it comes down to patrolling, patrol boats, officials with Land Rovers and rubber ducks, people knock off at four o'clock because there is no over time. So the poachers go wild and do their thing. Now what happens, because Great Whites are protected, there is a demand for them like there is a demand for rhino horns. There is a tremendous demand for Great White teeth and jaws. Because it is protected it can't be caught and it can't be captured. So there is poaching going on. And nothing is being done because there is no money for the patrol boats to come out and patrol.*

[Operator 2] *Scientists have prescribed how you must approach the whale. You approach them to the eye and lay 50 meters from them. Let them come to you and play for five, ten, or fifteen minutes. They will circle the boat, lift its head up and then you go away. Let them go and you also go away. Do the right thing. From there you must go with no great speed for 500 meters. But you can still take photos as you go because they will put their tails up and you know your time with them.*

[Operator 3] *We already do a lot. But we don't necessarily do enough. If you are a member with Fairtrade and you educate people and spend time on all these things, then the industry will be uplifted. If everybody starts doing little things to draw in a conscientious market the industry in the area will be uplifted.*

[Operator 4] *Well, definitely in this harbour, no additional operators. And then, compliance, you know. We've had encounters this season, the first season ever, of illegal whale watching boats. For the industry to be sustainable, why bother with going through the process and abiding with regulation when any Tom, Dick and Harry can go and do it. So I think that the permits should be enforced. You've got the regulations, so what happens if you don't comply? What happens if there is someone who is advertising whale watching who is not a whale watcher? There needs to be a bit more of a compliance sector.*

5.2.17 What is being done to educate people about the sharks and whales?

The general consensus amongst all operators is the fact a decent briefing is given before the trip starts and a de-briefing afterwards that includes a discussion on conservation of the sector. This informs participants about what they are allowed to do on the boat and what not, what they should expect and how to behave in an emergency. These briefings also educate participants about the animals in question and eco-friendly behaviour. Further actions taken to educate people include the use of marine biologists on board the boat whom will answer questions which participants might have, as well as tour guides who can provide further information for participants on the area. These

findings are in accordance with that of Richards *et al.* (2015:202) whom identified operators across the world to educate participants of shark cage diving on shark conservation.

[Operator 1] *All the way along the line, from the morning briefing, to the safety briefing, to the boat briefing and to the educational briefing, we tell people about the environment. We educate people about what is going on.*

[Operator 2] *It's a 15 minute talk before they go out. I explain to them about the whales that come to our area. I explain to them that the weight of the whales are eighty tons. I would also tell them the length is eighteen meters. I give them the explanation of the [clots] on their heads so that they can be aware of what's going on. I will speak in a way to make them aware, to give them a talk on the whales and in the end, they are more informed.*

[Operator 3] *We actually only have a very good, decent briefing. And we tell the people if they want to know anything they can go onto our website as well.*

[Operator 4] *We can start with before they even get here. Our website's got quite a bit of information, so even they are not joining us they can get some information off the website. So there's a bit of creating awareness for somebody who doesn't even come to the door. Then, once they get to the door, we've got these information boards on the way to the door. Plus we have a life-size whale. So then again, even if they are not going onto the boat, this is open to anyone. So everybody within the harbour can read up this information and then empower themselves. Then, what we do is we have a briefing. The briefing is about 15 minutes long and it covers facts on the Southern Right, what they should expect on the trip and the behaviour of the Southern Right. Then, once they are on the boat we have a tour guide with a microphone. He also walks around and mingle so you can ask one-on-one questions. But, as a whole, he gets a question, he will then say that over the PA system. So the trip itself becomes a bit educational. So it's not just watching what they are doing, it is also learning why they are doing what they are doing. And then we've also got, on any given trip, professional crew.*

5.2.18 Measures in place to look after the environment while on a trip

The operators share similar views, even though each operator highlighted different methods for looking after the environment while on a trip. In general, operators act in a conscientious way when approaching the animals and the way in which trips are conducted. By being an example of eco-friendly and sustainable behaviour, operators are contributing towards sustainability of the industry and increasing awareness of the benefits of the industry. Examples of conscientious acts include removing litter from the ocean when spotted, not approaching animals too closely, not feeding the animals and not staying longer in the vicinity than can be tolerated by the animals. It was identified from these interviews that operators in the Gansbaai and Hermanus areas feel that the sector can be managed in a more sustainable manner. This will involve extensive research on behaviour and

migration patterns, while improving compliance by operators to rules and regulations as well. A study conducted in Vava'u, Tonga, determined that operators of whale watching and shark cage diving establishments are concerned with the sustainability of the sector and have emphasised the need for the sector to be managed more carefully (Orams, 2013:497). A particular need for research on sharks and whales, behavioural elements and the sector over all have been emphasised as a way of improving management activities (Orams, 2013:497). It is therefore clear that the industry is in dire need of a clear management framework which will provide knowledge and understanding for the sectors to be managed in a sustainable manner, substantiating the results of these interviews.

[Operator 1] *A lot of people think we feed sharks or we reward them to perform. But we don't. We present and we pull away the bait. We don't feed them. We borrow them out the environment for a short while, show the people the beauty of the animal, not the monster. Everyone expects the shark to attack the boat or attack the cage. We change the mind-set of the person and so we educate people. If he goes to China, or wherever he's going to go and he sees shark fin soup, or a load of sharks being offloaded, he will know that it is not alright. The shark is not the monster and hopefully we are doing something in the world to educate people, to show people the beauty and the gracefulness and that sharks must be left in peace rather than be caught or killed in any way.*

[Operator 2] *Come together and work together, you see. Give the whales enough rest because you can stay for twenty minutes with a group of whales and then you must move away. Because some of them have a total amount of time with the whales for 2 hours.*

[Operator 3] *That is very good. Do not throw papers around. The way in which we chum as well. We do not use big chunks of chum. We spend a lot of time on the way in which we chum. There is a biologist on board who will tell people about our method of chumming. Our toilettes have special machines which will break whatever is flushed out of the toilette into a million tiny pieces. We do not give people bottled water. Just by doing this we save 17 000 or 18 000 bottles a year. We give them tap water out of a cup.*

[Operator 4] *A lot of the boat's design is to assist with being, well obviously it's got fuel and it's got carbon. But to try and punctuate that there are certain things on the boat, for example. Our propellers are recessed. So even if the whale had to come really close to the boat, there's no chance of it getting hurt. With the boat itself, we could have gone with more rigid and harder lines, however there are no hard lines. The boat is smooth curvature. So if the whale had to come up and rub against the side of the boat there's nothing that could hurt them. And also, inside in the engine rooms we do sound proofing as much as we can to make sure that there is not that much vibration coming from the boat. On the boat itself, our engines are set to reduce our emissions. And we are also actually carbon neutral. What it all means is that when a company came and assessed us, they said our emissions are at a certain point and they then helped us in certain avenues to reduce that as far as possible,*

which we've done. Then they came and did a re-assessment and they said what we needed to do is to give back. So we joined up with Reliance Compost and we have bought a lot of compost this year. So it's our way of, at least what we've taken out, we put back.

5.3 SECTION B: QUANTITATIVE RESULTS OF HERMANUS RESIDENTS AND ADVENTURE MARINE TOURISM PARTICIPANTS

Section B discusses the results obtained from the community survey conducted in Hermanus regarding the Hermanus Whale Festival as well as the marine adventure tourism participants.

5.3.1 Hermanus community results

The following section discusses the results obtained from the survey conducted on the residents of Hermanus, as discussed in chapter one. The sample size consisted of 300 sampling units, but a total of 250 completed questionnaires were obtained. This stage in the process is exploratory and quantitative in nature. The analyses conducted included descriptive statistics, in the form of frequency tables, to identify the socio-demographic detail as well as other important and relevant information. Exploratory Factor Analyses (EFA) (Section C) identified the underlying variance and covariance of the data to identify the aspects which have an influence on residents' attitude towards the Hermanus Whale Festival.

5.3.1.1 Socio-demographic information of residents

The following section of this chapter discusses the demographic details pertaining to the residents of Hermanus. The results are substantiated by visual diagrams of the results obtained.

5.3.1.1.1 Gender

The majority of residents were male (73%), while 27% were female, as indicated in Figure 5.2. This is in accordance with the findings of Giddy (2017:6) who identified that the majority of adventure tourism participants are mainly male.

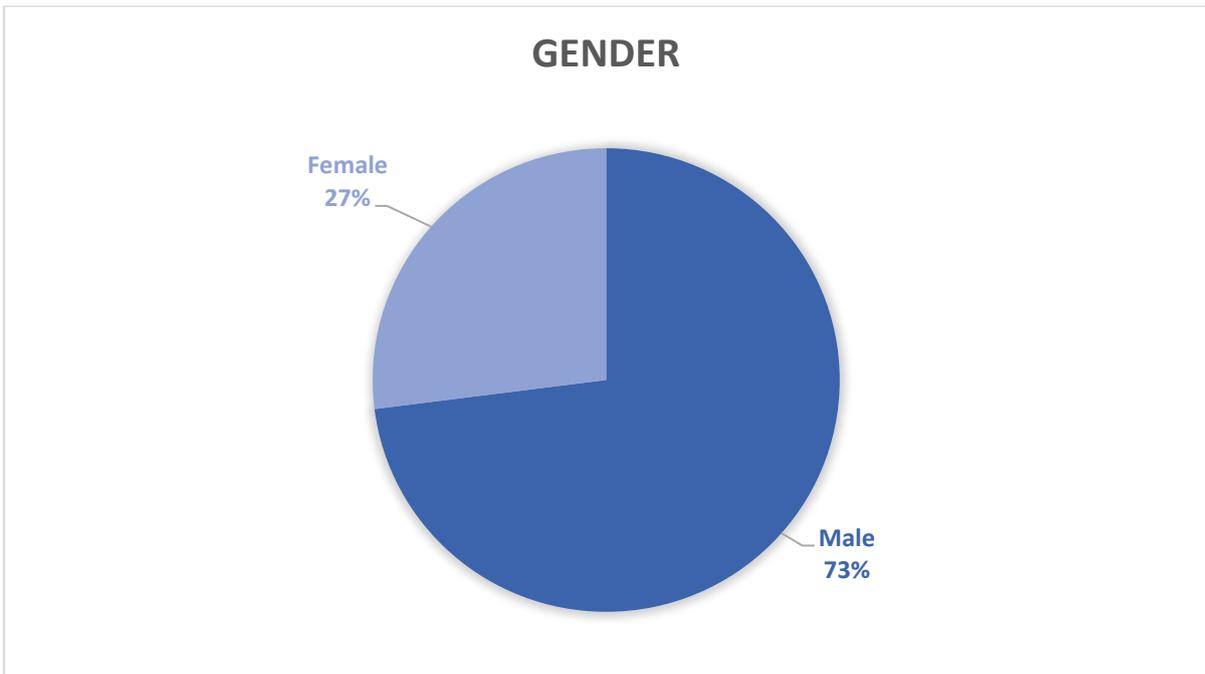


Figure 5.2: Gender of residents of Hermanus

5.3.1.1.2 Age of residents

Residents were asked to indicate their year of birth, from which the average age of respondent was determined. The majority of residents (29%) indicated that they were between the ages of 35 and 49 years, while 26% were between 25 and 34 years of age. The average age of residents in Hermanus was 38.4 years, as indicated by Table 5.1. According to Overstrand Municipality (2010:4), the municipal district in which Hermanus is situated, a large number of residents of the town are between the ages of 15 to 40 years, which corresponds with the result obtained from this research. Therefore, indicating the credibility of the surveys conducted.

Table 5.1: Age of residents of Hermanus

Age Category	Frequency
<19 years	6%
20-24 years	14%
25-34 years	26%
35-49 years	29%
50-64 years	15%
65+ years	10%
Average age	38.4 years

5.3.1.1.3 Occupation

Twenty-seven percent (27%) of residents, as shown in Figure 5.3, indicated that they were sales personnel, while 22% indicated that they were self-employed and 14% said that they were managers. Nine percent (9%) of the residents were working in administration, artists, casual workers, marketers, receptionists, students and writers, 7% were professionally employed, 4% were pensioners, while 2% were employed in the civil service, home duties, or they are unemployed. According to the study conducted by Overstrand Municipality (2010:12), 25% of the community is employed in wholesale and retail, accounting for the largest percentage of residents employed as sales personnel, business owners and managers (Overstrand Municipality, 2010:14). Even though the study is seven years old, the results are still in correspondence with the results obtained from the study in 2010.

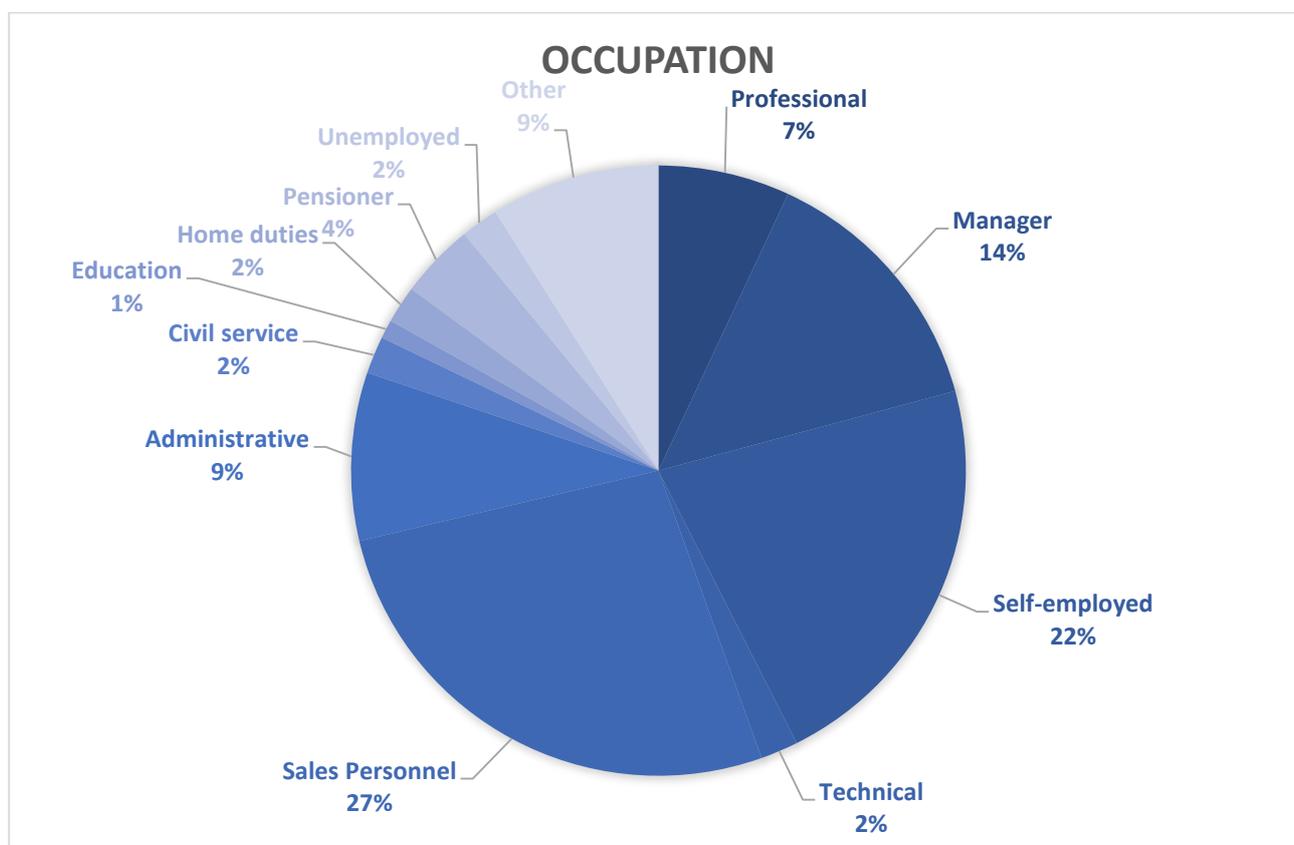


Figure 5.3: Occupation of residents of Hermanus

5.3.1.1.4 Highest level of education

Forty-seven percent (47%) of residents indicated Grade 12 as their highest level of education, while 33% indicated that they had a diploma or degree from a tertiary institute and 8% had other qualifications such as Grade 8, Grade 9, or Grade 10 (Table 5.2). This is once again in correspondence with the results from the impact study conducted on Hermanus (Overstrand Municipality, 2010:16) where the highest percentage (38%) of residents are semi- or unskilled employees, which corresponds with the results obtained from this survey.

Table 5.2: Highest level of education of residents of Hermanus

Level of education	Percentage
No school	3%
Grade 12 (Matric)	47%
Diploma, degree	33%
Post-graduate	5%
Professional	4%
Other (Grade 8, Grade 9, Grade 10)	8%

5.3.1.1.5 Number of years residing in Hermanus

Sixty-six percent (66%) of residents had lived in Hermanus for less than 19 years, while 19% had lived there for 20 to 24 years and 15% had lived in in Hermanus for 25 years or more. The average number of years were calculated as 15 years, as indicated by Table 5.3. No previous results were identified for the number of years residents had been residing in the area, making this the first of its kind.

Table 5.3: Number of years living in Hermanus

Number of years	Percentage
<19 years	66%
20 – 24 years	19%
25> years	15%
Average number of years	15.03 years

5.3.1.1.6 Impact of the Hermanus Whale Festival on residents' personal quality of life

The largest percentage of residents indicated that the festival had mostly no effect on their personal lives (45%), while 27% indicated that the festival had a very positive effect and 19% indicated that the festival has a slightly positive effect on their personal lives (Figure 5.4). It is therefore clear that the festival had neither a positive or negative impact on the quality of life of the residents of Hermanus, as indicated by Figure 5.4. The necessity therefore arises for the festival to have a positive impact on the quality of life of the residents. According to Yolal *et al.*, (2016:12), the community benefits are drawn from festivals having a strong positive relationship to the quality of life

of residents. This indicates that the higher the perceived benefits of the festival are, the more positive the impacts of the festival will be on the quality of life of residents (Yolal *et al.*, 2016:13).

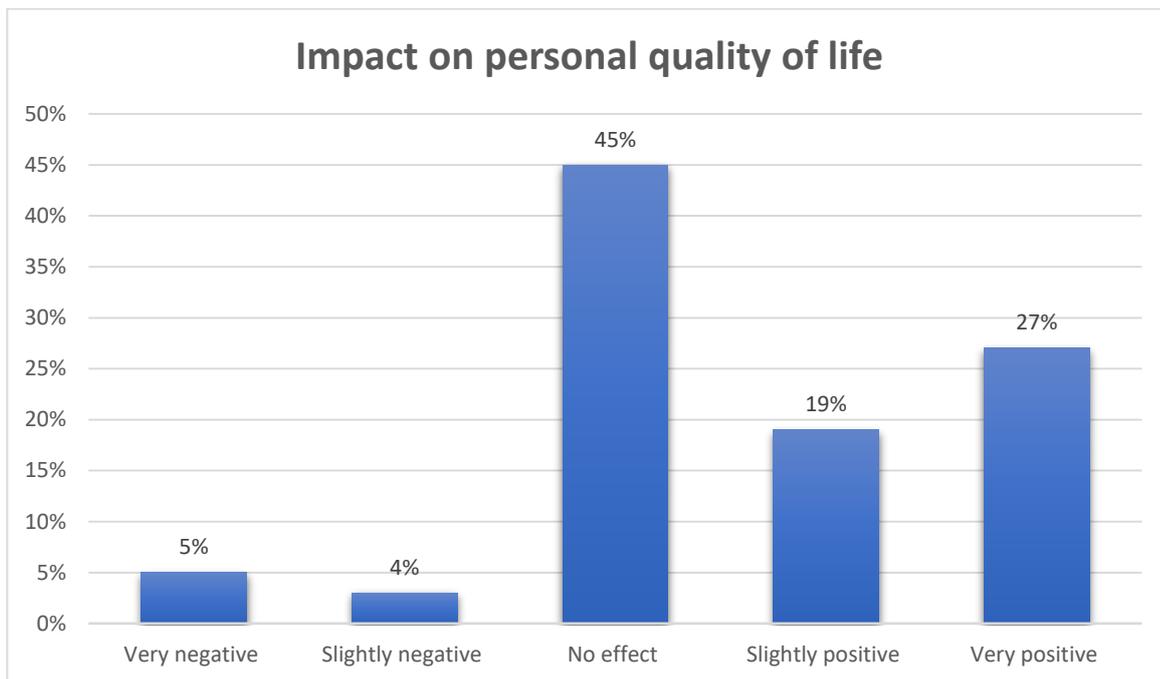


Figure 5.4: Impact of the Hermanus Whale Festival on personal quality of life

5.3.1.1.7 Impact of the Hermanus Whale Festival on the community of Hermanus

The largest number of residents indicated that the festival had a very positive impact on the community of Hermanus (45%), while 26% indicated that it had no effect on the community and 24% indicated that the festival had a slightly positive impact on the community. According to Yolal *et al.* (2016:13), there was a strong positive correlation between benefits offered by the festival and community participation. The more the community is involved with a festival, the more positive the impacts of a festival will be on the community. Such benefits include positivity about the festival, increased income, pride in the town and the community and improved living conditions. It is clear from Figure 5.5 that the community should be more involved with the festival. This can be incorporated during the planning phase of the festival each year, providing more entrepreneurial activities for residents at the festival (such as selling food and crafts and displaying local talent).

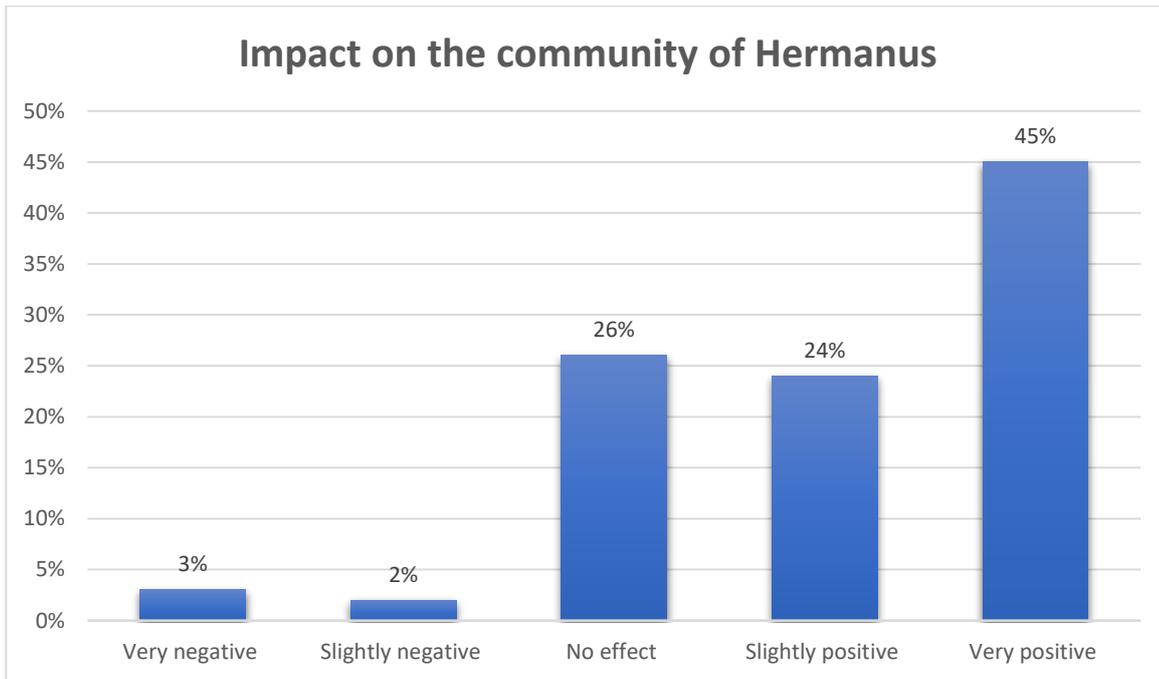


Figure 5.5: Impact of the Hermanus Whale Festival on the community of Hermanus

5.3.1.1.8 Working at the Hermanus Whale Festival

As indicated by Table 5.4, a small percentage (11%) of the residents indicated that they worked at the festival, while 89% indicated that they did not work at the festival. Those working at the festival were mostly owners, managers or employees in the hospitality industry, such as restaurants, take away shops and accommodation establishments. The organisers of the festival should try to involve more residents with the operations of the festival. This can be done by offering residents the opportunity to sell food, arts, crafts, or to perform. The number of local residents working at the festival should be increased to maximise the benefits which the festival has on the community. According to Saayman, Saayman and Joubert (2013:443), the Wacky Wine Festival held annually in Robertson, Western Cape, created a total of 5 additional job opportunities per wine farm involved in the event. This amounted to a total of 240 job opportunities for local residents at 48 different wine farms (Saayman *et al.*, 2013:443). The Hermanus Whale Festival (89 694 visitors in 2015) is smaller than the Wacky Wine Festival (16 076 visitors in 2009), therefore the number of job opportunities will be less (Van der Riet-Neethling, 2015; Saayman *et al.*, 2013:443).

Table 5.4: Working at the Hermanus Whale Festival

Working at the Hermanus Whale Festival	Percentage
Yes	11%
No	89%

5.3.1.1.9 Level of interest in the Hermanus Whale Festival

Forty-six percent (46%) of residents indicated that they were indeed interested in the festival and attended whenever possible, while 26% indicated that they had no interest in the festival, but would attend it for the sake of friends and family. Sixteen percent (16%) indicated that they were avid fans of the festival and attended it as many times as possible, as evident from Table 5.5 below. Even though the majority of the residents indicated a positive interest towards the festival, it is important to keep raising awareness for the festival and increase attendance. According to Doxey (1975), residents will move through various stages of irritation regarding tourism to a destination. The same is evident with festivals, where the longer the festival has been running, the more annoyed, antagonistic, or resigned residents will become (Doxey, 1975). The Hermanus Whale Festival celebrated its 26th year of existence in 2017, which, if related with the results obtained from the qualitative interviews (c.f. 5.2.12), suggests that residents' loyalty towards the festival has diminished over time. One way of enhancing attendance is to offer residents opportunities to have fun at the festival, which includes spreading the locations for the programme activities out across town, to have public transport available which will eliminate the need for more parking availability and to offer residents discounts on entrance to areas such as the Coke Music Tent. Another way to enhance this is by changing the programme of the festival to include new products and services, such as more educational programmes on the whales. In terms of the product life cycle of the festival, a change in the programme can help to revive the festival and therefore draw in more visitors, before it reaches the decline stage (George, 2015:78).

Table 5.5: Level of interest in the Hermanus Whale Festival

Level of interest	Percentage
I am avid fan of this festival and try to attend as many as possible	16%
I am interested in this festival and attend when I can	46%
I am not interested in this festival, but I sometimes attended it because friends and family are interested	26%
I have absolutely no interest in this festival and do not wish to attend it	12%

5.3.1.2 Evaluation, importance and impacts

The following section discusses the factors of evaluation according to the residents of Hermanus, the aspects of importance of the festival and impacts of shark cage diving and whale watching on the community.

5.3.1.2.1 Residents' evaluation of the Hermanus Whale Festival

Residents were asked to evaluate the following statements according to a five-point Likert scale, where '1' = *totally disagree* and '5' = *totally agree*. Residents had to evaluate the extent to which certain aspects had an influence on their experience of the festival, as indicated in Table 5.6. The following aspects were identified as having the highest mean scores:

- The exposure to the region is excellent (4.05)
- The area fits the purpose of the festival (3.87)
- The festival is well marketed (3.75)
- The festival is accessible to residents (3.73)
- Information is readily available (3.66)
- The festival is well organised (3.61).

Residents' evaluation of the festival was positive, in general. This indicates that residents do feel that the festival is beneficial for the community and the town. Festival organisers should aim to further increase residents' evaluation of the festival by means of increasing the benefits which residents draw, such as providing more information on events hosted at the festival, making it more accessible for the community and improving marketing efforts (Yolal *et al.*, 2016:12). By increasing the benefits residents' positive attitude towards the festival will increase further and be maintained over the long term.

Table 5.6: Residents' evaluation of the Hermanus Whale Festival

Hermanus Whale Festival	Mean	Level of Agreement
The festival is accessible to residents	3.73	Agree
The festival is well marketed	3.75	Agree
Information is readily available	3.66	Agree
The festival is well organised	3.61	Agree
The area fits the purpose of the festival	3.87	Agree

The exposure to the region is excellent	4.05	Agree
---	------	-------

5.3.1.2.2 Importance of the events at the Hermanus Whale Festival for participation

Residents were asked to rate the importance of the following events for spectators/participants at the festival. The events were rated according to a five-point Likert scale, where '1' = *not at all important* and '5' = *extremely important*, as indicated by Table 5.7. The following events were identified as having the highest mean values, making these the most important events to participants:

- The Total Whale Marathon (3.53)
- Eco-marine village (3.5)
- Whale and Wheels Classic Car Show (3.44)
- Berg and Beach trail run (3.41)
- Street parade (3.38)
- Go Rally: Cape to Hermanus (3.29)
- Coke music stand (3.24)
- Whale Festival sporting events at Benguela Cove (3.21)
- Watershed Live (3.12)
- Civil show (3.09).

The most important events were identified as The Total Whale Marathon (mean value of 3.53) and the Eco-Marine Village (mean value of 3.5), as indicated in Table 5.7. The Hermanus Whale Festival is known as the “only eco-marine festival in South Africa” which explains the importance of the eco-village, as this is one of the elements on which the festival is founded. It is therefore clear that residents are positively inclined towards receiving a learning experience on the marine environment and the whales, which is a pillar of sustainability. From the results it is however clear that the community perceives all events hosted at the festival as important. This is due to the enhanced business opportunities created by the programme, resulting in increased economic benefits, improved quality of life and increased awareness for environmental conservation (Daly *et al.*, 2015:35).

Table 5.7: Importance of the events at the Hermanus Whale Festival for participation

Events	Mean	Level of agreement
Watershed Live	3.12	Important
Eco-marine village	3.5	Very important

Coke music stand	3.24	Important
Petzl Wolf trails	3.07	Important
Whale Festival sporting events at Benguela Cove	3.21	Important
Whale and Wheels Classic Car Show	3.44	Important
The Total Whale Marathon	3.53	Very important
Berg and Beach trail run	3.41	Important
Go Rally: Cape Hermanus	3.29	Important
Civil show	3.09	Important
Street parade	3.38	Important
Treasure hunt	3.03	Important
Chris Chameleon	3.08	Important

5.3.1.2.3 The impact of shark cage diving and whale watching on the community

Respondents were given the opportunity to indicate the extent to which certain aspects of shark cage diving and whale watching tourism have an impact on the community of Hermanus. Thirty-two aspects were measured according to a six-point Likert scale, where 1 = *strongly disagree* and 6 = *strongly agree*. According to Table 5.8, residents indicated the strongest agreement with the following statements:

- The image of the city/town has improved (4.88)
- Opportunities for shopping have increased (4.79)
- More people are aware of Hermanus as destination (4.69)
- Prices of some goods and services have increased (4.65)
- The overall cost of living has increased (4.38).

In general, residents indicated that these two marine adventure activities had a moderate impact on the community. This implies that residents' awareness of the positive impacts offered by whale watching and shark cage diving in the vicinity can still be enhanced, even though they did recognise a positive impact on the community. Residents should be educated further on the benefits which these activities have, such as economic benefits, increased tourism to the area and improved image of the town. Operators can thus increase awareness amongst the community by distributing information on the benefits offered, growth in the sector and opportunities for residents to become part of the activity (Dobson, 2008:55; Parsons, 2012:2). A lack of literature in South Africa on the

impacts of shark cage diving and whale watching operations on the community suggests that this result is the first of its kind.

Table 5.8: The impact of shark cage diving and whale watching on the community

Impacts	Mean	Level of agreement
The image of the city/town has improved	4.88	Moderately agree
More tourists visit the area	4.01	Somewhat agree
More people are aware of Hermanus as a destination	4.69	Moderately agree
The overall appearance of the area has improved	4.08	Somewhat agree
There are opportunities for people to have fun	4.32	Somewhat agree
The economy of the area has improved	3.65	Somewhat agree
There are more opportunities for entrepreneurs	4.19	Somewhat agree
The maintenance of public facilities has improved	3.84	Somewhat agree
Trading in the area has increased	3.80	Somewhat agree
The living standards of locals have improved	4.36	Somewhat agree
Infrastructure in the area have improved	4.79	Moderately agree
Residents have more pride in their community	4.14	Somewhat agree
Interactions between locals and visitors have increased	4.65	Moderately agree
Friends visit me	4.04	Somewhat agree
Opportunities for shopping have increased	4.79	Moderately agree
Damage to the environment has increased	3.86	Somewhat agree
Excessive drinking and/or drug use has increased	4.15	Somewhat agree
Disruptive behaviour has increased	4.01	Somewhat agree
Incidents of crime have increased	4.25	Somewhat agree
Noise levels in the area have increased	4.25	Somewhat agree
Prices of some goods and services have increased	4.65	Somewhat agree
The overall cost of living has increased	4.38	Somewhat agree

Traffic congestion in the area has increased	3.91	Somewhat disagree
Residents get irritated with the number of people attending	3.97	Somewhat agree
The rights of local residents have increased	3.34	Somewhat disagree
Litter in the area has decreased	3.34	Somewhat disagree
Parking availability in the area has increased	4.09	Somewhat agree
Public funding for community activities has increased	3.68	Somewhat agree
Employment opportunities in the area have increased	3.65	Somewhat agree
Opportunities for local businesses have increased	3.87	Somewhat agree
Entertainment opportunities have increased	3.98	Somewhat agree
The turnover for local businesses has increased	2.59	Somewhat disagree

5.3.2 Results on marine adventure tourism (whale watching and shark cage diving)

The following section discusses the results obtained from the survey on marine adventure participants. The profiles of the respondents are analysed and travel behaviour (consisting of travel motives, experiences and satisfaction) is discussed, as well as the willingness to pay for marine wildlife such as the conservation of sharks and whales.

5.3.2.1 Socio-demographic information of marine adventure participants

This section of the chapter discusses the demographic details of the participants of shark cage diving and whale watching. A total of 301 participants were included in the survey, which includes both whale watching participants and shark cage diving participants. The results are discussed and substantiated by means of visual diagrams.

5.3.2.1.1 Gender

Respondents were mostly female (53%), while 47% indicated they were male, as indicated in Figure 5.6. Catlin and Jones (2010:389) found similar results from a study on whale shark tourism at Ningaloo Marine Park, Australia. The study also indicated a higher percentage of female participants (53%) to male participants (47%). Interestingly however, literature states that, in recent times, gender participation in adventure activities have migrated from mostly men, to equal distribution amongst men and women, as seen in Figure 5.6 (Giddy, 2017:6; Giddy & Webb, 2016:356).

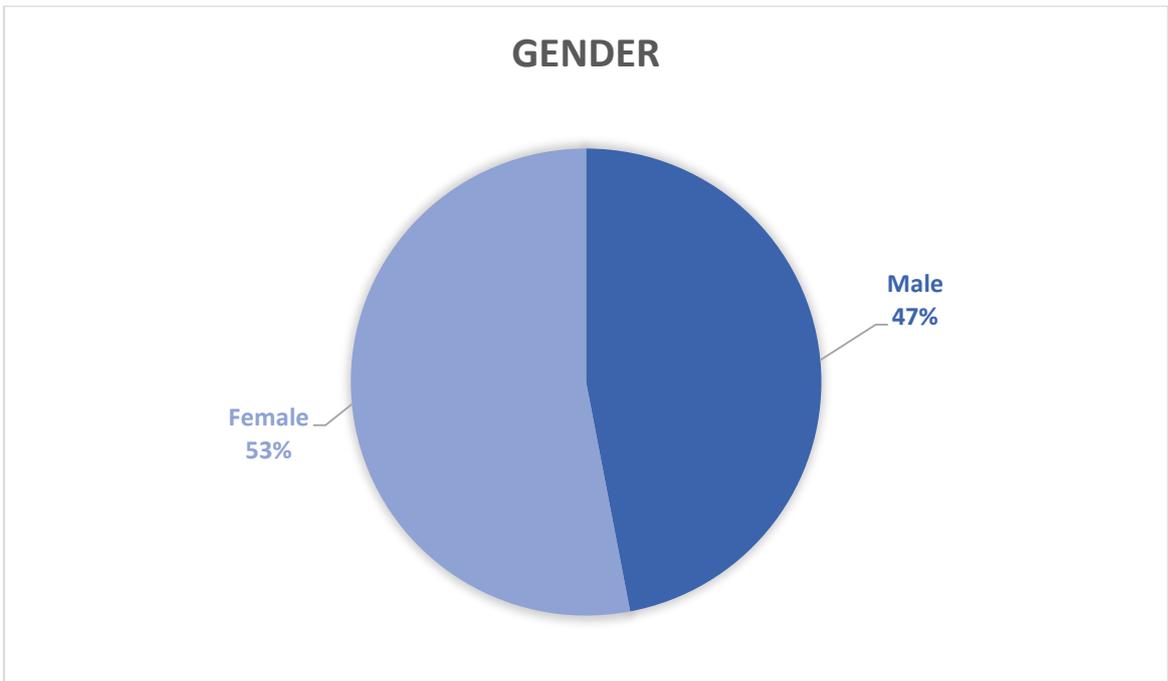


Figure 5.6: Gender of marine adventure participants

5.3.2.1.2 Average age of participants

Table 5.9 indicates that the majority of participants (26%) were between the ages of 36 and 45 years of age, while 22% were aged between 26 and 35 years and 18% were aged between 46 and 55 years. The average age of adventure participants, in general, have been identified by various authors as between 30 and 40 years (Giddy, 2017:6; Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5), while this result indicates that marine adventure participants is 38.33 years of age. This finding is also in accordance with that of Wongthong and Harvey (2014:342) who identified that the average age of scuba divers in Thailand is under the age of 40 years.

Table 5.9: Age of marine adventure participants

Age	Percentage
>25	24%
26-35 years	10%
36-45 years	26%
46-55 years	18%
56-65 years	15%
65+ years	7%
Average age	38.33 years

5.3.2.1.3 Home language

The majority of participants indicated that their home language was English (54%), while 35% indicated other languages, such as German, French and Swedish (Figure 5.7). This is in correspondence with the results obtained from the Department of Home Affairs in 2015 which indicated that Germany and France are amongst the top five leading countries for overseas tourists to South Africa (Lombard, 2016). The reason for the higher number of international visitors participating in the activities is the fact that shark cage diving or whale watching is seen as a bucket list attraction for those visiting Cape Town, as identified by the results obtained from the qualitative interviews (c.f. 5.2.11). This implies that international visitors only visit the Cape Town area once and they therefore participate in activities which the region is famous for, while domestic visitors are able to participate in the future (c.f. 5.2.11). Furthermore, the conditions for viewing whales and sharks in South Africa are considered as premier conditions due to the natural occurrence of great numbers of whales and sharks (Dicken & Hosking, 2009:227).

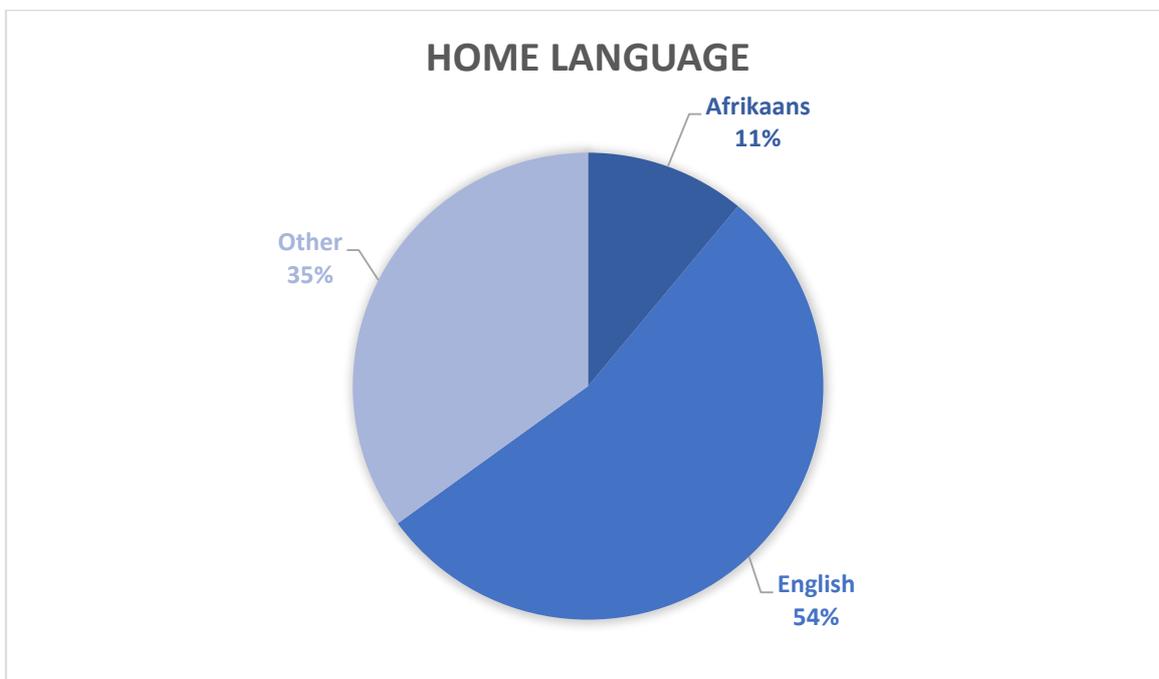


Figure 5.7: Home language of marine adventure participants

5.3.2.1.4 Highest level of education

The largest number of education of participants had a diploma or degree from a tertiary institute (37%), followed by a professional qualification (23%) or a post-graduate qualification (20%). This is indicated in Figure 5.8. According to a study conducted on the demand for whale watching in Loreto Bay National Park, Mexico, (Avila-Foucat, Gendron, Revello-Fernandes, Popoca & Ramirez, 2017:40), the level of education of respondents participating in whale watching activities are mainly well-educated. This result is therefore in correspondence with the results obtained by Avila-Foucat *et al.* (2017:40).

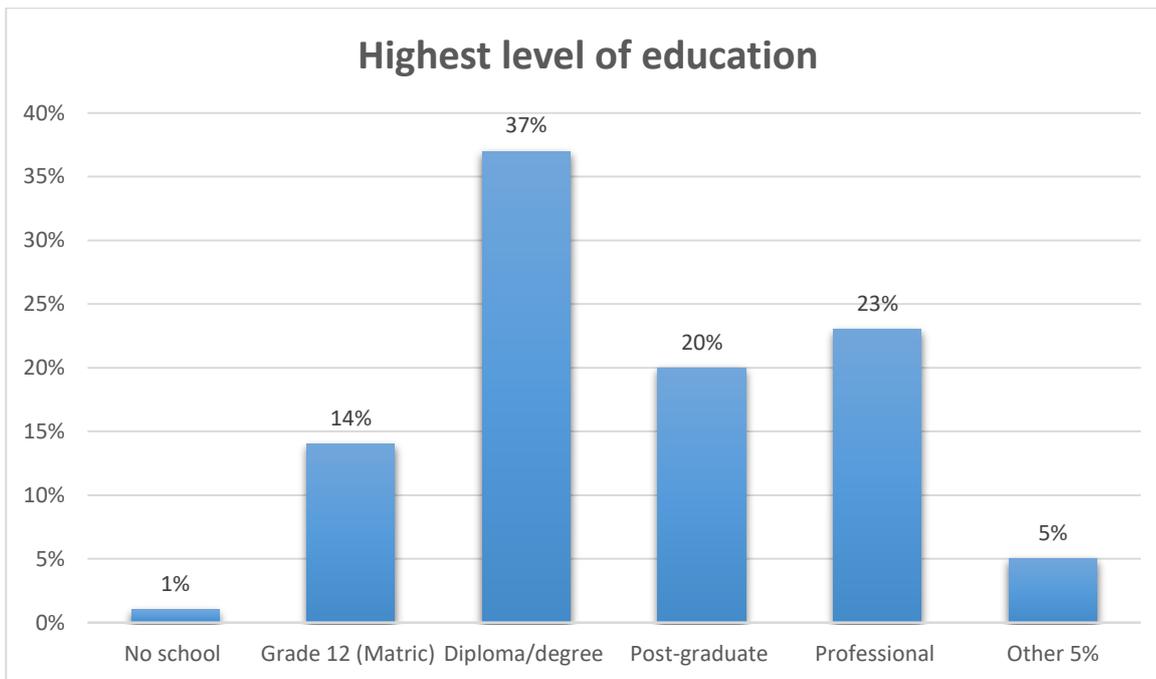


Figure 5.8: Highest level of education of marine adventure participants

5.3.2.1.5 Country of origin

The majority of respondents indicated that they did not reside in South Africa (64%), but originated mostly from countries such as the United Kingdom, United States of America, Germany, Sweden, France and Switzerland (c.f 5.2.11) (Dicken & Hosking, 2009:227). Those who did originate from South Africa (25%) resided mostly in Gauteng and the Western Cape (16%) respectively (Table 5.10). According to the results obtained on the impact of tourism to Hermanus (Overstrand Municipality, 2010:3), 55% of visitors were of international origin in 2010. Therefore, this result is in correspondence with the findings obtained from Overstrand Municipality (2010:3), that Hermanus does attract a large percentage of foreign tourists. But an increase in the number of international visitors can be identified.

Table 5.10: Province of residence of marine adventure participants

Province of residence	Percentage
Gauteng	16%
Free State	1%
Limpopo	1%
Mpumalanga	0.33%
North West	0.33%
Northern Cape	0.33%
Eastern Cape	1%

Western Cape	16%
Outside RSA borders	64%

5.3.2.1.6 Type of visitor

As evident by Figure 5.9, the majority of participants indicated that they were day visitors to the area (51%), while 46% indicated that they were overnight visitors. Overnight visitors tended to stay in the area for an average of two nights. International tourists often participated in tour programmes which incorporated a number of destinations and activities, often leaving the tourist little time to stay in one location. Tourists want to do and see as much as possible in a limited period of time, therefore shark cage divers and whale watchers will participate in the activity and move on to the next location or activity.

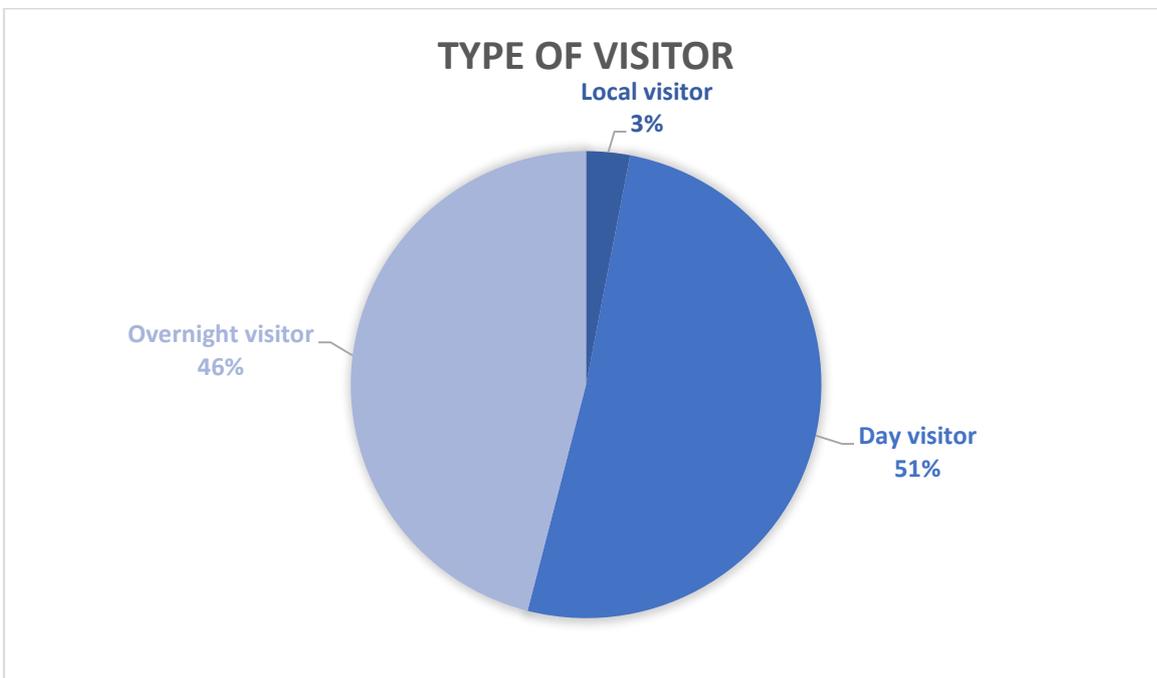


Figure 5.9: Type of marine adventure participant visitors

5.3.2.1.7 Annual gross income

Thirty-three percent (33%) of participants indicated that they had an annual gross income of more than R672 001, while 12% indicated that they earned less than R20 000 per annum and 11% indicated that they earned between R221 001 and R305 000 per annum (Table 5.11).

Table 5.11: Annual gross income of marine adventure participants

Gross income	Percentage
<R20 000	12%
R20 001 – R140 000	6%

R140 001 – R221 000	10%
R221 001 – R305 000	11%
R305 000 – R431 000	9%
R431 001 – R552 000	10%
R552 001 – R672 000	9%
>R672 001	33%

5.3.2.1.8 Heard about the operator

Forty percent (40%) of participants suggested that they had heard about the operator via the operator’s website, while 33% indicated other forms of communication, such as travel agencies, and 19% indicated word-of-mouth (c.f 5.2.10) (Table 5.12). This quantifies the fact that online marketing plays a big role in raising awareness for the operator (c.f. 5.2.10). Operators should thus ensure that they have an updated, user-friendly website where potential participants can find information pertaining to the activity, pricing and location, amongst others.

Table 5.12: Where marine adventure participants heard about the operator

Where participants heard about the operator	Percentage
Television	1%
Website	40%
Email	1%
Newsletter	1%
Magazines	2%
Word-of-mouth	19%
Office signage	3%
Other (Travel agencies)	33%

5.3.2.2 Participation

This section discusses aspects pertaining to participation, previous participation and future participation in whale watching and shark cage diving.

5.3.2.2.1 Participation in other marine activities

Participants had to indicate the frequency at which they participated in other marine activities according to a five-point Likert scale, where 1 = *never* and 5 = *always*. Participants indicated the highest frequency of participation in the following activities, as indicated by Table 5.13:

- Snorkelling (2.2)
- Scuba diving (1.7)
- Sea kayaking (1.5)
- Wave rider (1.5).

The activities listed in Table 5.13 were identified as popular marine activities in South Africa (Giddy, 2017:8), even though the data indicates that few participants were interested in other marine activities. This begs the question of whether the market for whale watching and shark cage diving differs from markets for other marine adventure activities. Giddy (2017:8) identified novelty and status as major influencing factors amongst participants of adventure activities in the Garden Route, Western Cape, which relates to this finding because the results indicate that participants were not dedicated marine adventure participants and one can conclude that in this case, it was about the two species that they wanted to see and experience. Therefore, shark cage and whale watching in this case attracted different markets than other marine adventure activities.

Table 5.13: Participation in other marine activities

Marine activities	Mean	Level of agreement
Surfing	1.4	Never
Scuba diving	1.7	Never
Sea kayaking	1.5	Rarely
Wave rider	1.5	Rarely
Snorkelling	2.2	Rarely
Deep sea fishing	1.4	Never

5.3.2.2.2 Previous participation in marine activities

The majority of participants (41%) indicated that they had not participated in whale watching or shark cage diving previously, while 10% indicated once before and 8% indicated more than three times before. Table 5.14 is indicative of the responses to this question. This result implies that whale watching and shark cage diving are perceived as once-in-a-lifetime activities, or bucket list activities which participants experienced once in their lifetime on average.

Table 5.14: Previous participation in marine adventure activities

Number of previous participation	Percentage
None	61%
1 time	15%
2 times	11%
3 times	5%
4+ times	8%

5.3.2.2.3 Future participation in marine activities

In addition to the question above, participants were asked whether they would participate in the activity again in the future. Eighty-seven percent (87%) of participants said they would definitely do it again, while 13% they would not (Figure 5.10). Interestingly, the majority of respondents had not participated in these activities before, while the majority also indicated that they would participate again in future. This result corresponds with that of Giddy (2017:8) who identified that the majority of adventure participants will participate in similar adventure activities again in the future. Giddy (2017:8) does mention, however, that participants of activities such as skydiving, bungee jumping and scuba diving had participated in similar activities between one and four times previously.

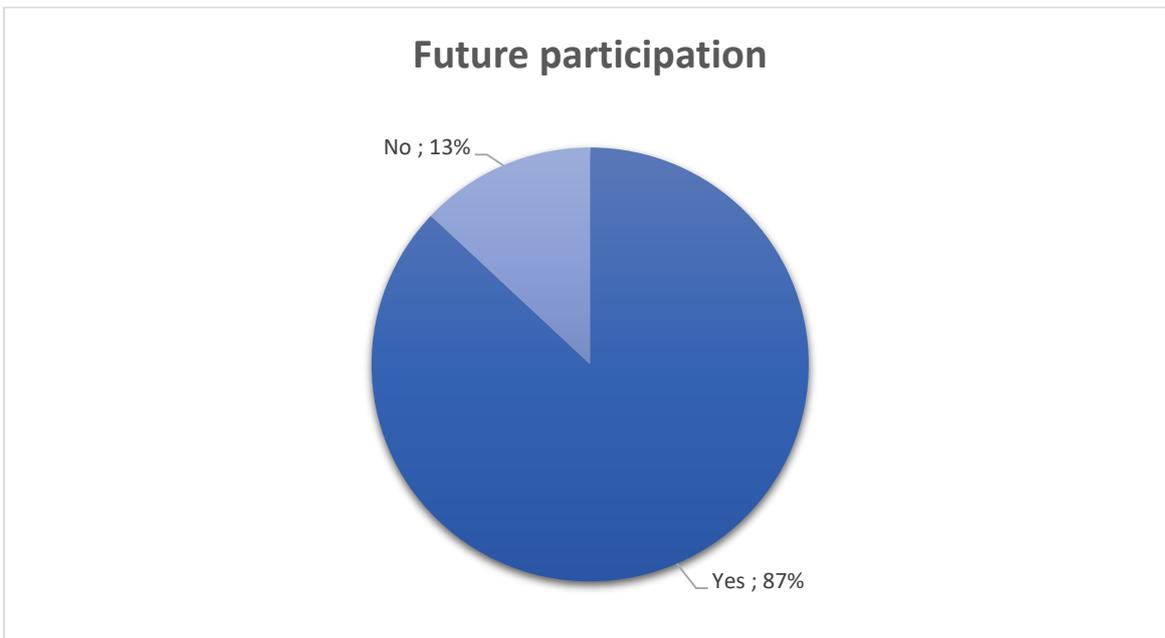


Figure 5.10: Future participation in marine adventure activities

5.3.2.3. Motives to participate and experiences

The motives to participate and the factors which influence the experience for participants are identified and discussed below.

5.3.2.3.1 Aspects influencing the motives to participate in shark cage diving and whale watching

Participants were asked to indicate the importance of motives to participate in the particular activity based on a five-point Likert scale, where 1 = *not at all important* and 5 = *extremely important*. From the results, the following aspects were identified as the most important reasons why participants decided to participate in shark cage diving or whale watching:

1. Whales excite me (4.24)
2. Sharks excite me (4.23)
3. Dolphins excite me (4.18)
4. For new experiences (4.14)
5. To experience thrill and excitement (3.73).

From Table 5.15, it is clear that the prospects of seeing marine animals, such as whales, sharks and dolphins, had a big influence on the participation motives of marine adventure participants. This indicates that operators should use the prospects of viewing other animals during the trip in marketing material to attract more participants. Furthermore, Giddy and Webb (2016:353) identified similar results where participants of adventure activities in the Garden Route rated thrill as an important motivating aspect.

Table 5.15: Motives of shark cage divers and whale watchers to participate in the activity

Motives to participate	Mean	Level of importance
Primarily for educational reasons	3.04	Important
To photograph marine life	3.11	Important
It is a spiritual experience	2.22	Slightly important
It is value for money	2.30	Slightly important
It is part of my lifestyle	2.48	Slightly important
For my well-being	2.45	Slightly important
To overcome risks	2.06	Slightly important
For new experiences	4.14	Very important
To overcome a fear for whales/sharks	1.81	Not at all important

The feeling of success after the activity is over	2.60	Slightly important
To experience thrill and excitement	3.73	Important
Because it is challenging	2.62	Slightly important
The following excite me:		
Sharks	4.23	Very important
Whales	4.24	Very important
Dolphins	4.18	Very important
Seals	3.55	Important
Penguins	3.62	Important

5.3.2.3.2 Aspects influencing the experience of shark cage divers and whale watchers

Participants were asked to indicate the level of influence which certain aspects had on their total experiences. The aspects were rated on a five-point Likert scale, where 1 = *no influence at all* and 5 = *great influence*. The following aspects were identified as having the greatest influence on the experience derived by marine adventure participants (Table 5.16) (c.f. 5.2.14):

- To be in close proximity to the animal (4.18)
- Experiencing a closeness to nature (3.94)
- Helpful and knowledgeable guides (3.93)
- Professionalism of the staff/guides (3.91)
- Variety of animals (3.88).

The results clearly identify the fact that participants derived a memorable experience from the animals and staff. Operators cannot control nature (weather and animals), but they can improve the level of knowledge and helpfulness of the staff through training and constant improvement. Operators should thus ensure that guides and staff can answer a wide range of questions and deliver high quality service (Moscardo & Ballantyne, 2008:244).

Table 5.16: Aspects influencing the experience of shark cage divers and whale watchers

Aspects influencing experiences	Mean	Level of importance
Variety of animals	3.88	Big influence
Ease of accessibility of the operator	3.38	Some influence
To learn more about the animal	3.77	Big influence

To learn more about the viewing process	3.22	Some influence
To be in close proximity to the animal	4.18	Big influence
The comfort of the boat	3.01	Some influence
Friendliness of the staff	3.77	Big influence
The behaviour of the whales or sharks	3.82	Big influence
Calm conditions of the sea	2.93	Some influence
Seasickness	2.63	Some influence
Location of the operator	2.92	Some influence
Price of the trip	3.17	Some influence
Atmosphere on land and on board	3.21	Some influence
Internal appearance of the boat	2.91	Some influence
Helpful and knowledgeable guides	3.93	Big influence
Knowledge and skills of the skipper	3.81	Big influence
Quality of the environment (pollution)	3.76	Big influence
The people who I share the experience with	3.41	Some influence
Reputation of the operator	3.49	Some influence
Being able to purchase photographs/videos of my experience	2.56	Some influence
Being familiar with the animal	3.31	Some influence
Experiencing a closeness to nature	3.94	Big influence
Professionalism of the staff/guides	3.91	Big influence
Prompt service and response	3.68	Big influence
Individual attention	3.26	Some influence
Extras received on the trip (lunch/coffee)	3.06	Some influence

5.4 SECTION C: RESULTS PERTAINING TO THE FACTOR ANALYSES

This section discusses the results obtained from the factor analyses of the impacts of whale watching and shark cage diving on the community of Hermanus, the motives to participate and experiences

of marine adventure participants. The results obtained group important aspects together that are needed to develop a sustainable management framework for marine adventure products. Furthermore, in order to draw conclusions and make recommendations on the marine adventure tourism sector (objective 5, section 1.4.2), it is necessary to identify the aspects, such as the motives to participate and experiences, of the market as these are important to know for sustainability manage marine adventure tourism products. The results obtained regarding the aspects contributing to the satisfaction of marine adventure participants are also discussed in this section.

5.4.1 Factor analysis on the impact of shark cage diving and whale watching on the community

In order to determine the factors which have an impact on the community of Hermanus, an Exploratory Factor Analysis (EFA) was conducted. The factor analysis was conducted by means of a Principal Component Analysis with Oblimin-Kaiser normalisation. Three factors were identified on a total of 33 variables, as indicated in Table 5.17, which explained 60% of the variance and were labelled as follows; factor 1 - *awareness*, factor 2 - *negative aspects* and factor 3 - *community benefits*. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.892, which is highly acceptable and the Bartlett's test of Sphericity was significant ($p < 0.001$) (Field, 2009:643). The Cronbach's alpha (α) for each of these factors ranged between 0.880 and 0.960, indicating that all three factors have above average construct reliability ($\alpha > 0.6$) (Hair, Anderson, Tatham, & Black, 1995). The inter-item correlations range from 3.629 to 4.280 and the mean values range from 0.473 to 0.634. Therefore, all factors are statistically acceptable.

Factor one, which is labelled *awareness*, has a mean value of 4.13 and a Cronbach's alpha of 0.960, making this the second most important factor impacting on the community of Hermanus. The factor is made up of underlying concepts such as *the image of the city or town has improved, more tourists visit the area, more people are aware of Hermanus as a destination, the overall appearance of the area has improved, there are opportunities for people to have fun, the economy of the area has improved, there are more opportunities for entrepreneurs, the maintenance of public facilities has improved, trading in the area has increased, the living standards of locals have improved, infrastructure in the area have improved, interactions between locals and visitors have increased, friends visit me, and opportunities for shopping have increased.*

According to Bennett and Dearden (2014:111) aspects such as job creation and improvement of infrastructure, were important perceived community impacts resulting from a marine protected area in Thailand. The same was identified by Daldeniz and Hampton (2013:507) who state that employment and business opportunities and differing economic linkages have increased considerably in Malaysia due to scuba diving activities in the area. Research conducted in South Africa by Scholtz (2014:126) identified economic improvement as an impacting factor of three communities in South Africa, namely Soweto, Jeffrey's Bay and Clarens. This factor comprised of

aspects such as *more jobs are created, more business opportunities are created and the community earns more money.*

The second factor is labelled *negative aspects* and consist of underlying aspects such as *damage to the environment has increased, excessive drinking and/or drug use increased, disruptive behaviour has increased, incidents of crime have increased, noise levels in the area have increased, prices of some goods and services have increased, the overall costs of living have increased, traffic congestion in the area has increased and residents get irritated with the number of people attending.* This factor was rated as the most important factor with a mean value of 4.28 and a Cronbach's alpha of 0.889. According to Bennett and Dearden (2014:111) factors such as natural capital, social capital, physical capital, financial capital and cultural capital were negatively impacted by the emergence of a national marine park in Thailand. The authors state that the local community perceived these impacts to be negative impacts on the livelihood and suggest that necessary policy improvements should be implemented in order to salvage the relationship between the community, management of the park and the government. In the same context, Scholtz (2014:126) identified *environmental degradation and increased costs of living* to be an impacting factor of tourism on the community, Jeffrey's Bay, a well-known surfing hot spot in South Africa.

Thirdly, the factor labelled *community benefits* has a mean value of 3.63 and a Cronbach's alpha of 0.920, making this the least important influencing factor. *Community benefits* consist of aspects such as *the rights of local residents have increased, litter in the area has decreased, parking availability in the area have increased, public funding for community activities has increased, employment opportunities in the area have increased, opportunities for local businesses have increased, entertainment opportunities have increased and the turnover for local businesses have increased.*

This indicates a general negative attitude amongst residents of Hermanus towards shark- and whale tourism in the area and suggest that residents do not experience the desired level of benefits from the sector. Operators should increase awareness of the benefits of shark cage diving and whale watching for community members by arranging workshops, information sessions and attracting the local market to participate in the activity. According to Doxey's Irridex, local residents become irritated with tourists as tourism in the area increase. Doxey states that tourists will move through five various stages, from euphoria (visitors are welcomed), apathy (contact between residents and tourists become formal), annoyance (residents start to have misgivings about tourism), to the final stage called antagonism (residents openly express their irritation with visitors) (Doxey, 1975). Scholtz (2014:126) identified that *community upliftment and pride* and *community protection and education* are important impacting factors of tourism on three communities in South Africa (Soweto, Jeffrey's Bay and Clarens). These factors comprise aspects such as *improved lifestyles, educational opportunities, learning about other cultures, residents are part of tourism planning, the community is*

well-known, community pride, positive community image and respect between tourists and local residents. This finding is in correspondence with that of Scholtz (2014:126).

Table 5.17: Community impacts of shark cage diving and whale watching

ASPECTS	Factor 1: Awareness	Factor 2: Negative aspects	Factor 3: Community benefits
The image of the city/town has improved	0.900		
More tourists visit the area	0.878		
More people are aware of Hermanus as a destination	0.860		
The overall appearance of the area has improved	0.840		
There are opportunities for people to have fun	0.741		
The economy of the area has improved	0.728		
There are more opportunities for entrepreneurs	0.685		
The maintenance of public facilities has improved	0.666		
Trading in the area has increased	0.611		
The living standards of locals have improved	0.597		
Infrastructure in the area have improved	0.561		
Residents have more pride in their community	0.557		
Interactions between locals and visitors have increased	0.543		
Friends visit me	0.531		
Opportunities for shopping have increased	0.487		
Damage to the environment has increased		0.912	
Excessive drinking and/or drug use has increased		0.854	
Disruptive behaviour has increased		0.821	
Incidents of crime have increased		0.795	

Noise levels in the area have increased		0.602	
Prices of some goods and services have increased		0.565	
The overall cost of living has increased		0.541	
Traffic congestion in the area has increased		0.519	
Residents get irritated with the number of people attending		0.478	
The rights of local residents have increased			0.801
Litter in the area has decreased			0.762
Parking availability in the area has increased			0.704
Public funding for community activities has increased			0.650
Employment opportunities in the area have increased			0.576
Opportunities for local businesses have increased			0.548
Entertainment opportunities have increased			0.512
The turnover for local businesses has increased			0.423
Cronbach's Alpha	0.960	0.889	0.920
Mean	4.13	4.28	3.63
Inter-item correlation	0.571	0.473	0.634

*Extraction method: Principal component analysis with Oblimin-Kaiser normalisation

**Total variance explained: 60.16%

5.4.2 Factor analysis on the motives of adventure participants in marine adventure activities

In order to determine the travel motives of marine adventure participants, a principal component factor analysis was conducted, with Oblimin-Kaiser normalisation. Four factors were identified from 16 concepts, labelled *experiences*, *marine species*, *lifestyle* and *personal achievement*. The factors identified explained a total variance of 64%. The Bartlett's test of was significant ($p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.784, which is highly acceptable (Field, 2009). The Cronbach's Alpha coefficient (α) for the factors range from 0.600 to 0.849, indicating that all four factors have above adequate construct reliability ($\alpha > 0.6$) (Hair *et al.*, 1995).

The inter-item correlations range from 0.345 to 0.536 and mean values range from 2.34 to 3.95. Therefore, all factors are statistically acceptable, as indicated in Table 5.18.

Factor one was labelled *experiences* and included two aspects, namely *for new experiences* and *to experience thrill and excitement*. With a mean value of 3.93, this factor is ranked as the second most important factor for marine adventure participants. This factor has been identified as a significant travel motive amongst many adventure participants, including water-based, marine-based and land-based adventure activities (Terblanche, 2011:92; Geldenhuys *et al.*, 2014:99; Buckley, McDonald, Duan, Sun & Chen, 2014:10; Bosch, 2015:118). It can be assumed that this market is driven by new experiences and discovery and they will try new adventure activities for the sake of the experience.

The second factor, labelled as *marine species*, has a mean value of 3.95 and is therefore ranked as the most important factor for participation in whale watching and shark cage diving. The underlying aspects of this factor include the possible sighting of *sharks, seals, penguins, dolphins* and *whales*. This has been confirmed as a factor of motivation by Geldenhuys *et al.* (2014:99) as well as Tiedt (2011:69) who identified the variety of marine species as an attraction for marine tourists and scuba divers. In terms of whale watching and shark cage diving participants this factor can be determined as a first of its kind. Participants therefore participate in shark cage diving and whale watching purely for the chance of being close to one of these animals.

The third factor is labelled as *lifestyle* and consists of aspects such as *for my well-being, it is part of my lifestyle, it is a spiritual experience, it is value for money* and *primarily for educational reasons*. The mean value of this factor is 2.53, ranking it as the third most important factor for participants. It has been confirmed by Jeong (2014:02), Petrick and Durko (2015) and Mehmetoglu and Normann (2013) as a motive of marine tourists and adventure tourists alike. Although this factor is ranked as third, it is still a significant motive because adventure participants are often devoted to chasing a thrill and being part of new and exciting activities. Accordingly, Tiedt (2011:69) identified the factor *education/knowledge seeking* as an important travel motive for marine tourists to marine parks in South Africa (Addo Elephant National park and Tsitsikamma National Park). Furthermore, one of constructs identified as an important element for sustainable tourism management is offering an educational element with the service (Saayman, 2009:8). Therefore, this finding is important for the establishment of the sustainable management framework for marine adventure tourism.

Lastly, the factor labelled as *personal achievement* is ranked as the least important factor seeing as the mean value is 2.34. This factor consists of underlying aspects such as *the feeling of success after completing the activity, to overcome risks, to overcome a fear* and *because it is challenging*. This proves that participants in general do not regard whale watching or shark cage diving as too challenging an activity, thus confirming the classification of these activities as mentioned in Chapter 2 (c.f. 3.2.1). Geldenhuys *et al.* (2014:99) identified a similar aspect, namely personal challenge, to be of least motivation to scuba divers at Sodwana Bay, South Africa, as well. It can therefore be

assumed that marine adventure participants do not participate in such activities for the purpose of personal achievement.

Table 5.18: Motives to participate of marine adventure participants

ASPECTS	Factor 1: Experiences	Factor 2: Marine species (Whales, sharks, dolphins, sea birds)	Factor 3: Lifestyle	Factor 4: Personal achievement
For new experiences	0.791			
To experience thrill and excitement	0.764			
Sharks		0.535		
Seals		0.873		
Penguins		0.839		
Dolphins		0.821		
Whales		0.747		
For my well-being			0.869	
It is part of my lifestyle			0.839	
It is a spiritual experience			0.630	
It is value for money			0.545	
Primarily for educational reasons			0.488	
The feeling of success after completing the activity				0.780
To overcome risks				0.778
To overcome a fear				0.754
Because it is challenging				0.711

Cronbach's Alpha	0.600	0.849	0.729	0.770
Mean	3.93	3.95	2.53	2.34
Inter-item correlation	0.443	0.536	0.345	0.453

*Extraction method: Principal Component Analysis with Oblimin-Kaiser Normalisation

**Total variance explained: 64.17%

5.4.3 Factor analysis on the experiences of marine adventure participants

To identify the experiences of participants of whale watching and shark cage diving an Exploratory Factor Analysis was conducted by means of principal component analysis with Oblimin-Kaiser Normalisation. The factors identified (Table 5.19) explained 59% of the variance and were labelled as *client service*, *sea conditions*, *educations* and *add-ons*. The Bartlett's test of Sphericity was significant ($p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.883. Twenty-six aspects were measured to yield the five factors, with Cronbach's alpha coefficients (α) ranging from 0.714 to 0.855. According to Field (2009), these values are highly acceptable. Indicated in Table 5.13, the mean values of the five factors range from 2.94 to 3.84, while the inter-item correlations range from 0.357 to 0.468, making these values just as reliable. The values achieved from this factor analysis is statistically and theoretically acceptable.

The first factor, labelled as *client service*, consists of underlying aspects such as *helpful and knowledgeable guides*, *knowledge and skills of the skipper*, *professionalism of the staff or guides*, *quality of the environment*, *reputation of the operator*, *prompt service and response* and *price of the trip*. With a mean value of 3.68, this factor is ranked as the second most important aspect contributing to a valuable experience of whale watching or shark cage diving. Similar factors have been rated very highly by participants of whale shark diving (Dicken & Hosking, 2009:229). These participants identified the overall quality of the operator and the dive as very important to their overall experience (Dicken & Hosking, 2009:229).

Secondly, the factor labelled *sea conditions* consist of aspects such as *calm conditions of the sea*, *seasickness*, *location of the operator* and *atmosphere on land and on-board*. This factor is ranked as least important to the experience of participants due to a mean value of 2.94. Although the conditions of the sea were not favourable at all times, participants still ranked these aspects as least important. This factor has not been identified as an influencer from previous research, making this finding unique.

The third factor, *education*, consist of aspects such as *to learn more about the animal*, *to learn more about the viewing process*, *friendliness of staff*, *ease of accessibility of the operator*, *the comfort of the boat* and *variety of animals*. The mean value of this factor is measured at 3.51, therefore ranking it as the third most important factor for a valuable experience. An educational experience has been identified as important for tiger shark divers in the Aliwal Shoal, South Africa (Dicken & Hosking,

2009:230), as well as for scuba divers in Sodwana Bay, South Africa (Geldenhuys *et al.*, 2014:99). Furthermore, Saayman (2017a) state that educational programmes and opportunities are important for visitors to Blue Flag beaches in South Africa, implying that marine tourists in general are no longer satisfied with passive activities, but being actively involved in the service delivery process, such as through educational activities, are strong indicators of a good experience.

Fourthly, *closeness proximity to marine nature* is ranked as the most important factor that can enhance an experience for marine adventure participants. This factor consists of aspects such as *being familiar with the animal, experiencing a closeness to nature, to be in close proximity to the animal and the behaviour of whales and sharks*. This factor has a Cronbach's alpha coefficient of 0.714 and a mean value of 3.83, which are both highly acceptable values. Furthermore, Pearce, Strickland-Munro and Moore (2017:369) state that the presence of marine megafauna, such as whales and sharks, contributed greatly towards the creation of an awe-inspiring experience for whale watching participants in Australia. Evidence therefore indicates that being able to see the animal in its natural habitat and being close to the animal is a determining factor for a great experience. Kruger and Saayman (2017:609) also identified similar results from a study conducted on the aspects influencing the experiences of nature tourists in Canada. The authors (Kruger & Saayman, 2017:609) identified that being close to nature and animals had a great influence on the experiences of these tourists.

The last factor, *add-ons*, has a Cronbach's alpha coefficient of 0.789 and a mean value of 3.05, ranking this factor as the fourth most important factor for marine adventure participants. The underlying aspects for this factor include *being able to purchase photographs and videos of my experience, extras received on the trip (such as coffee and lunch), individual attention, internal appearance of the boat and the people who I share the experience with*. Add-ons, such as lunch and purchasing photos and videos of the trip, is not as important for marine adventure participants, but it does contribute to the overall experience of the trip. In contrast to this result, Neuhofer *et al.* (2014) explains that technological tools, such as photographs and videos, have a great influence on the experience of tourists in general. This, therefore enhances the fact that marine adventure tourists are not conventional tourists, seeing as additional add-ons to the experience has little influence on their overall experience.

Table 5.19: Experiences of marine adventure participants

ASPECTS	Factor 1: Client service	Factor 2: Sea conditions	Factor 3: Education	Factor 4: Proximity to marine nature	Factor 5: Add-ons
Helpful and knowledgeable guides	0.805				

Knowledge and skills of the skipper	0.694				
Professionalism of the staff/guides	0.668				
Quality of the environment	0.652				
Reputation of the operator	0.640				
Prompt service and response	0.597				
Price of the trip	0.509				
Seasickness		0.778			
Calm conditions of the sea		0.776			
Location of the operator		0.565			
Atmosphere on land and on-board		0.431			
To learn more about the animal			0.814		
To learn more about the viewing process			0.711		
Friendliness of the staff			0.537		
Ease of accessibility of the operator			0.509		
The comfort of the boat			0.488		
Variety of animals			0.453		
Being familiar with the animal				0.590	
Experiencing a closeness to nature				0.588	
To be in close proximity to the animal				0.503	
The behaviour of the whales/sharks				0.493	

Being able to purchase photographs/videos of my experience					0.792
Extras received on the trip (lunch/coffee)					0.752
Individual attention					0.702
Internal appearance of the boat					0.410
The people who I share the experience with					0.316
Cronbach's Alpha	0.855	0.724	0.767	0.714	0.789
Mean	3.68	2.94	3.51	3.83	3.05
Inter-item correlation	0.468	0.403	0.357	0.392	0.430

*Extraction method: Principal Component Analysis with Oblimin-Kaiser Normalisation

**Total variance explained: 59.64%

5.4.4 Aspects contributing to the satisfaction of marine adventure participants

Respondents were asked to indicate the level of influence which nine aspects, as indicated by Table 5.20, have on their overall experience with the activity according a five-point Likert scale (1 = *no influence at all* and 5 = *great influence*). In order to determine the factors contributing towards a satisfying experience for marine adventure participants, an exploratory factor analysis was conducted which yielded only one factor. The Cronbach's alpha coefficient (α) (0.958) and the inter-item correlation (0.716) were both highly acceptable, while the Kaiser-Meyer-Olkin measure of sampling adequacy was measured as 0.930. The Bartlett's test of Sphericity was significant ($p < 0.001$). The factor yielded explained 74.25% of the total variance. Furthermore, descriptive statistics were used to identify the aspects which were ranked as most important and least important for a satisfying experience. Nine aspects were measured, amongst which *friendliness of the staff* was ranked as the most important aspect (mean value of 4.28). Respondents are in direct contact with staff members, such as guides and marine biologists, during the trip. Therefore, the friendliness and welcoming attitude of staff toward participants have a great influence on the overall level of satisfaction. In accordance with the findings of to Lück (2015:29), *professionalism and friendliness of staff* was ranked as an important factor contributing to the satisfaction of visitors on marine mammal tours in New Zealand.

Secondly, the *knowledge of the operator and staff* and *clear briefing and instructions* were ranked as the second most important aspects influencing marine participants' experience (mean value of 4.20). This finding corresponds well with that of Lück (2015:30), who identified the knowledge of the operator, staff and guides as important aspects to the overall experience of marine visitors. Kruger and Saayman (2017:609) identified the factor *primary and secondary interpretation* as an important factor for a satisfactory experience of tourists to national parks in Canada. This factor included aspects such as *interactive field guides* and *well-informed naturalists and fisheries personnel to answer questions*. It is therefore in accordance with the results from this research.

Thirdly, the *operator's view on whale and shark conservation management* is also an aspect of importance to the overall level of satisfaction (mean value of 4.17) and the operator's view on marine conservation aspects (mean value of 4.16). Lück (2015:30) highlights the finding stating that tourists on educational marine mammal trips in New Zealand have strongly disagreed with receiving less information about conservation opportunities available to them or how the operator contributes to conservation. This is in accordance with the results from this study and suggests that operators should place emphasis on conservation of whales and sharks on such trips and provide information on ways in which participants can become involved with conservation activities.

Other aspects which were measured included *standard of the equipment used* (4.14), *information and interpretation regarding marine animals* (4.11), *service delivered by the operator* (4.11) and *environmental friendly practices implemented* (4.07). As indicated in Table 5.6, all mean values range between 4.07 and 4.28, suggesting a relatively small variance between the aspects, suggesting that all aspects are of equal importance to participants and attention should be given to such aspects of the trip as environmental friendly practices, maintenance of equipment and information on marine animals as well as those aspects rated as having the greatest influence on participants' level of satisfaction.

Table 5.20: Aspects influencing the level of satisfaction of marine adventure participants

ASPECTS	MEAN	ST. DEVIATION
Friendliness of the staff	4.28	0.863
Knowledge of the operator and staff	4.20	0.940
Clear briefing and instructions	4.20	0.904
Operators' view on whale and shark conservation management	4.17	0.942
Operators' view on marine conservation aspects	4.16	0.925
Standard of the equipment used	4.14	0.886
Information and interpretation regarding marine animals	4.11	0.938
Service delivered by the operator	4.11	0.961

Environmentally friendly practices implemented	4.07	0.978
--	------	-------

5.5 SECTION D: RESULTS OBTAINED FROM THE CLUSTER ANALYSIS AND CROSS-TABULATIONS

This section discusses the results obtained from the cluster analysis and the cross tabulations pertaining to participants of whale watching and shark cage diving. In order to fully understand the marine adventure tourism sector in South Africa, it is necessary to gain in-depth knowledge on the market it serves. The results obtained from this cluster analysis therefore contributes to achieving objective five, which aims to draw conclusions and make recommendations on the sector for marine adventure tourism.

5.5.1 Results of the cluster analysis

A one-way ANOVA was conducted on the motivational factors of marine adventure tourism participants. A hierarchical cluster analysis using Ward’s method of Euclidian distances and Tukey’s honest significance test was performed. A six-cluster solution was selected as the most discriminatory, as indicated in Figure 5.11. The results of the multivariate analysis were used to identify the six clusters, with the significant differences between them ($p < 0.05$).

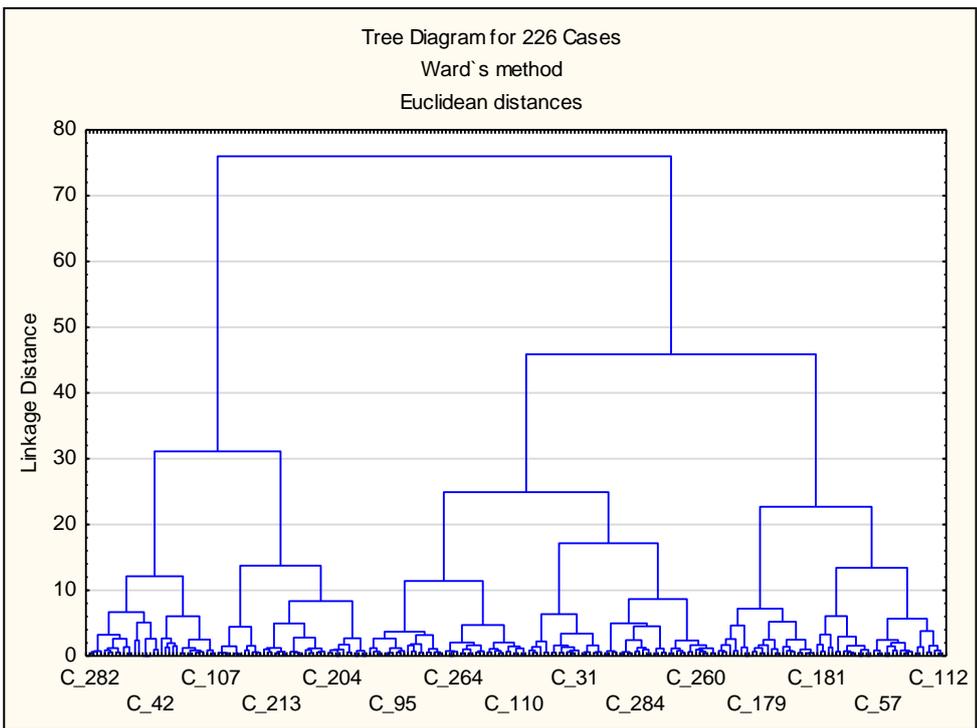


Figure 5.11: Six-cluster solution: Ward’s method with euclidian distance measures

5.5.2 Identification of clusters

As indicated by Table 5.21, the ANOVA test indicate that all motivational factors contributed to the differentiation between the six clusters ($p < 0.05$). The results indicate that *experiences* and *marine species* are the two most important motives for participation in shark cage diving and whale watching amongst all clusters. The taxonomy of the clusters is T²RACE, indicating the different clusters,

namely Thrill seekers, Thalassophiles, Risk takers, Adventure junkies, Consorts and Experience seekers. The results from the Cross-tabulation with Ward method (Table 5.22) and one-way ANOVA with Tukey's post hoc test (Table 5.23) is in correspondence with the results obtained from the personal interviews relating to the target market of marine adventure participants, as discussed in section 5.2.11. Each cluster is discussed with reference to all three tables below (Tables 5.21; 5.22 and 5.23).

Table 5.21: ANOVA and Tukey's post hoc multiple comparison results for marine adventure participants

Motives to Participate	Thrill seekers	Risk takers	Thalassophiles	Consorts	Experience seekers	Adventure junkies	F-Ratio	Sig. Level
Experiences	4.06 ^d	4.56 ^b	3.54 ^e	2.54 ^f	4.09 ^c	4.67 ^a	50.34	<0.05
Marine species	4.34 ^c	4.16 ^d	4.42 ^b	2.91 ^f	3.52 ^e	4.62 ^a	36.78	<0.05
Lifestyle	2.32 ^c	3.09 ^b	1.98 ^f	2.06 ^d	2.01 ^e	3.96 ^a	53.93	<0.05
Personal achievement	3.55 ^b	2.11 ^c	1.11 ^f	1.67 ^e	2.05 ^d	3.73 ^a	95.85	<0.05

The first cluster, namely *thrill seekers*, rated the motivational factor *marine species* as most important for participating in shark cage diving and whale watching, as indicated in Table 5.21. *Lifestyle* was rated as the lowest motivational factor, indicating that this is not a usual activity for this group. The opportunists consist mostly of female participants (70%) with an average age of 31.67 years, as indicated in Table 5.22, they are mostly international visitors (56%) and they are day visitor (56%). They earn between R140 001 and R221 000 per annum (11%), and spent an average of R3 656.44 during the trip. This cluster has not participated in similar activities previously because they indicated the lowest score (0.31), according to Table 5.23, but indicated that they will participate in the activity again (79%) and will indeed contribute towards whale (75%) and shark (72%) conservation (Table 5.22). The thrill seekers indicated that being satisfied with the operator (4.35), being close to marine nature (4.08) and being educated about the marine environment (3.49) as the most important influencing factors for a good experience (Table 5.22). Because this cluster rated *marine species* and *experiences* with a high score, the most important aspect of motivation for these participants to engage in an activity which is out of the ordinary, such as whale watching and shark cage diving.

The second cluster, the *risk takers*, once again indicated that the experience derived from the activity is the most important motivational factor for participation (Table 5.21). *Marine species* was rated as the second most important factor, while *lifestyle* was ranked as the third important factor. As indicated in Table 5.22 and Table 5.23, the risk takers have an average age of 36.65 years and are

mostly male (61%), they also originate mostly from international destinations (69%) and they have indicated that they are day visitors (52%). They earn between R221 001 and R305 000 (14%) and spent the highest average amount on services and products during the trip (R5232.71), according to Table 5.22. Almost all risk takers indicated that they will participate in this activity again in the future (95%) and they have strong inclinations towards contributing towards shark- (90%) and whale (90%) conservation (Table 5.22). The risk takers were thus named because of the high value they place on experiences gained, marine species and the contribution that is made towards their lifestyle. This indicates that they will participate in such activities on a regular basis. This cluster rated *satisfaction with the operator* (4.45) the highest influencing factor, while they felt *sea conditions* (2.79) to be the lowest influencing factor to the overall experience (Table 5.8). The risk takers participate the most in other activities such as sea kayaking (1.54) and snorkelling (2.48).

The cluster named the *thalassophiles* indicated *marine species* to be the most important motivational factor, while *personal achievement* was ranked as the lowest factor, according to Table 5.21. The *thalassophiles* have an equal amount of male and female participants (50% each), with an average age of 34.32 years, they are mostly from international destinations and earn amongst the highest income bracket, being between R305 001 and R431 000 (17%) (Table 5.20). These visitors tend to stay overnight (55%), but they have the lowest score of all clusters for participating again in the activity in the future (64%), which suggests that they enjoy participating in marine adventure activities. Such as shark cage diving and whale watching. They have, however, indicated a positive inclination towards conservation of whales (79%) and sharks (78%), as indicated in Table 5.22. The *thalassophiles* rated *satisfaction with the operator* (4.13) most important for having a good experience, while *sea conditions* were rated as least important (2.79). The *thalassophiles* participate in other marine activities such as snorkelling (2.18), sea kayaking (1.64) and surfing (1.45) as well (Table 5.23). This cluster feels comfortable on a boat and in the marine environment. This cluster enjoys participating in various activities, rather than focussing on one or two single activities.

The fourth cluster, named the *consorts*, indicated the lowest scores for all factors, suggesting that this cluster comprises of people who are either acting as a companion or are neutral about the activity. Table 5.22 identifies this cluster as having the most members per group participating in the activity (5.21) and members of this cluster pay for an average of 2.04 people, which serves as evidence for the fact that they are merely companions. This cluster ranked *marine species* as highest, while *personal achievement* was ranked as the lowest. This contributes to the idea that they value the activity itself as less important and are therefore there on behalf of their companions. The average age of the *consorts* are 42.74 years, which indicates that they are the oldest participating cluster (Table 5.20). The majority of participants are female (56%), from international countries, they earn between R221 001 and R305 000 per annum (19%), but they spent the least on extra services and products while on the trip (R2122.00) and they are either day visitors or overnight visitors (50% each) (Table 5.23). The *consorts* have indicated they will, indeed, participate

in the activity again in the future (97%), even though the motivational scores indicated otherwise. They scored participation in snorkelling (2.0) and wave rider activities (1.48) highest, while surfing (1.21) and fishing (1.25) have been scored lowest. Consorts tend to participate in activities rated as soft adventure, rather than hard adventure activities. They have also indicated a positive inclination towards conservation of whales (83%) and sharks (80%) (Table 5.22). They rated aspects such as *satisfaction with the operator*, *client service delivered* and *closeness to nature* lower than all other clusters, but as important to having a good experience. This serves as further evidence of the fact that they were not participating in the activity because of their own will (Table 5.23). The fact that the consorts have the lowest motivational scores, but indicated a positive attitude towards participating again and contributing to conservation, suggests that their participation in the activity has had a positive effect on the attitudes and potentially the behaviour, of this cluster.

The fifth cluster, *experience seekers*, ranked the motivational factor *experiences* as the most important factor, while *lifestyle* was ranked as lowest. This cluster places high value on gaining experiences from activities such as whale watching and shark cage diving. The majority of the experience seekers are 37.58 years of age (Table 5.22), female (55%), originating from international destinations (73%), they earn between R221 001 and R305 000 per annum (12%) and spent an average of R4169.36 on additional services and products during the trip (Table 5.20). They are day visitors (68%) with a strong inclination to participate in the activity again in the future (95%). The experience seekers will also contribute towards the conservation of whales (82%) and sharks (80%), as indicated in Table 5.22. Furthermore, they participate in other marine activities, such as snorkelling (2.07) and scuba diving (1.60). This cluster indicated that *satisfaction with the operator* (4.19) and *being close to nature* (3.66) are the most important aspects for a good experience (Table 5.23).

The last cluster, *adventure junkies*, ranked all motivational factors with the highest scores amongst all other cluster, suggesting their excitement and eagerness to participate in the activity is high. The two factors that stood out as most important motivational factors are *experiences* and *marine species*. This cluster is devoted to participating in activities involving marine species such as whales and sharks. They are also the people who will return for another activity in the future (88%), according to Table 5.22. The adventure junkies have an average age of 35.27 years, they are mostly female (58%), with international origins, earning between R305 001 and R431 000 per annum (17%) and they are mostly day visitors (56%). This cluster spent an average amount of R3558.43 during the trip and will contribute towards the conservation of whales (74%) and sharks (73%), even though they represent the lowest scores from all clusters (Table 5.22). This cluster rated *client service delivered*, *sea conditions*, *being educated on the marine environment*, *experiencing closeness to nature* and *add-ons on the trip* as having a big influence on the overall experience of the trip (Table 5.23). Furthermore, they participate in other marine activities as well, such as *surfing* (1.74), *scuba diving* (1.91), *wave rider* (1.68) and *fishing* (1.82) (Table 5.23). The adventure junkies are thus highly

motivated to participate in activities such as shark cage diving and whale watching for the adventure and experience derived from it, but are less inclined to contribute to the conservation of the species on which these activities focus.

Marine adventure activity operators can use this information to determine the needs and wants of the market. This information can be used to attract more specific markets, which will affect the growth of the industry, the social community and the economy positively. By having more people participating in activities such as shark cage diving and whale watching operators can have a positive effect on educating the public on conservation and protection of these species and the marine environment, thereby influencing changed behaviour amongst participants.

Table 5.22: Cross-tabulation with Ward's Method results for marine adventure participants

	Cluster 1: Thrill Seekers	Cluster 2: Risk takers	Cluster 3: Thalassophiles	Cluster 4: Consorts	Cluster 5: Experience seekers	Cluster 6: Adventure junkies	Chi- square
Gender	Female * (70.06%)	Male (60.8%)	Male/Female** (50%)	Female (55.9%)	Female (55%)	Female (57.7%)	0,083
Language	English (64.7%)	English (56%)	Other (50%)	English** (42.5%)	English* (72.5%)	English (62.5%)	0,094
Origin	International (79.4%)	International** (68.6%)	International* (80%)	International (73.5%)	International (75.6%)	International (65.4%)	0,382
Education	Diploma/degree (55.9%)	Diploma/degree * (40%)	Diploma/Degree ** (33.3%)	Diploma/degree (41.2%)	Diploma/deg ree/post- graduate (33.3%)	Diploma/ degree (50%)	0,593
Type of visitor	Day visitor (55.9%)	Day visitor (52%)	Overnight visitor (55%)	Day visitor/ overnight visitor ** (50%)	Day visitor* (67.5%)	Day visitor (56%)	0,009~
Heard about the operator	Office signage (48.5%)	Website (36.2%)**	Website (50%)*	Website (42.4%)	Office signage (39.5%)	Website (44%)	0,735
Participate again	Yes (79.3%)	Yes (95.1%)	Yes** (64.3%)	Yes (96.8%)	Yes * (95.2%)	Yes (88.4%)	0,000~
Conservation of whales	Yes (75%)	Yes (90.2%)*	Yes (78.9%)	Yes (83.3%)	Yes (82.1%)	Yes** (73.9%)	0,466
Conservation of sharks	Yes (71.9%)	Yes* (90%)	Yes (78.4%)	Yes (80%)	Yes (79.5%)	Yes** (72.7%)	0,387

* Indicates that the group differs significantly from the group where ** is indicated in the row

Table 5.23: One-way ANOVA with Tukey's post hoc test results for marine adventure participants

	Cluster 1: Thrill Seekers	Cluster 2: Risk takers	Cluster 3: Thalassophiles	Cluster 4: Consorts	Cluster 5: Experience seekers	Cluster 6: Adventure junkies	F-Ratio	Sig. Level
Age	31.67**	36.65	34.32	42.74*	37.58	35.27	2.39	<0.05
Spending	R3656.44	R5232.71*	R3531.18	R2122.00**	R4169.36	R3558.43	1.21	<0.05
Size of the travelling group	4.58	5.08*	2.8.**	5.21	2.93	4.19	1.19	<0.05
Previously participated in the activity	0.31**	1.36	1.13	0.96	0.55	1.85*	1.79	<0.05
Satisfaction with the operator	4.35	4.45*	4.13	3.38**	4.19	4.35	9.66	<0.05
Client service	3.67	3.93	3.60	3.16**	3.64	4.01*	5.69	<0.05
Sea conditions	3.29	2.79	2.81	2.70**	2.75	3.36*	3.52	<0.05
Education	3.49	3.66	3.31	3.12**	3.48	4.10*	7.70	<0.05
Closeness to nature	4.08	3.99	3.72	3.27**	3.66	4.43*	9.65	<0.05
Add-ons	3.43	3.06	2.60	2.57**	3.02	3.64*	7.74	<0.05
Surfing	1.19**	1.60	1.45	1.21	1.32	1.74*	2.13	<0.05
Scuba diving	1.53	1.84	1.35	1.39**	1.60	1.91*	2.35	<0.05
Sea kayaking	1.34	1.54*	1.64	1.39	1.33**	1.36	1.37	<0.05

Wave rider	1.45	1.48	1.34**	1.48	1.34**	1.68*	0.75	<0.05
Snorkel	2.00**	2.48*	2.18	2.00**	2.07	2.26	1.34	<0.05
Fishing	1.28	1.48	1.21**	1.25	1.34	1.82*	2.20	<0.05

* Indicates that the group differs significantly from the group where ** is indicated in the row

5.6 CONCLUSION

The focus of this chapter was to analyse the results obtained from the qualitative and quantitative surveys conducted. Firstly, in terms of the qualitative data collection, personal interviews were conducted with four operators of whale watching and shark cage diving. Other operators were also contacted for the opportunity to conduct an interview with them, but these operators were either unavailable or unwilling to participate, therefore the low number of personal interviews. The results from the interviews suggest that operators feel strongly about stronger regulations of the sector in terms of feeding the animals, poaching and illegal operations. It also indicates that operators value the element of educating their participants on the animals, marine environment and conservation highly and therefore emphasised this during the interviews. It is further identified that social media and online marketing, such as websites, are preferred above traditional marketing tools, such as pamphlets. The reason for this is that it is cheaper to run social media marketing, for example, than it is to print and distribute 100 brochures.

The quantitative results identified the demographic profile of both the community of Hermanus and the participants. The social community of Hermanus has an average age of 38 years, they are mostly employed as sales personnel, with Grade 12 (matric) as the highest level of education and they have been residing in Hermanus for 15 years on average. The residents have a positive attitude towards the Hermanus Whale Festival and feel that the festival and similar operations have a positive impact on their quality of life. The most important impact of the festival and whale watching activities in Hermanus was measured as negative aspects, such as increased crime, disruptive behaviour, excessive drinking and drug abuse and increased noise levels. The second impacting factor is awareness of Hermanus as a tourist destination, which results in improved conditions for residents, such as improved appearance of the area, more opportunities, increased employment and improved living standards and infrastructure. Even though the factor *negative aspects* was identified as having the highest impact, residents are still positive and cope with the increase in negative impacts for the duration of the festival.

The profile of marine adventure participants was identified as female, aged 38 and originating from international countries, such as America, Germany and Sweden. Furthermore, they have high levels of education, such as a diploma or degree from a tertiary institute and earn an annual income of more than R672 001 per annum. The most important motive for participation in the activity was measured as the opportunity to see marine species, while personal achievement was ranked as the least important motive for participation. Additionally, being close to nature was identified as the most important factor contributing to a valuable experience, while conditions of the sea was identified as the factor which influences the experience of participants the least. In terms of aspects contributing to the satisfaction of participants, friendliness of the staff was the most important factor.

Furthermore, six clusters for participants were identified, namely Thrill seekers, Risk takers, Adventure junkies, Consorts and Thalassophiles (T²RACE). The ANOVA results suggest statistically

significant differences ($p < 5$) between the clusters based on the demographic details, motives for participation and factors of satisfaction.

In conclusion, the results obtained from both surveys can be used by marketers and operators to improve their service offering and sustainable practices, but it will also be used for the development of the sustainable management framework for marine adventure tourism products. This relates to the goal of this study and can be used by operators to improve the sustainability of the sector.

Chapter 6

Conclusions and Recommendations

Sharks are beautiful animals, and if you're lucky enough to see lots of them, that means that you're in a healthy ocean. You should be afraid if you are in the ocean and don't see sharks.

~Sylvia Earle

6.1 INTRODUCTION

Chapter 6 aims to discuss the results of this study according to the aims and objectives set in Chapter 1. By discussing the results, the conclusions and recommendations would be formulated and the sustainable management framework for marine adventure tourism products established.

The goal of this study was to develop a sustainable management framework for marine adventure tourism products. The focus of this research was placed on shark cage diving and boat-based whale watching in Hermanus and Gansbaai, Western Cape, South Africa. In order to achieve this, the following objectives were set in Chapter 1.

- Objective one, two and three: these objectives were aimed at conducting in-depth literature analyses on relevant topics, namely marine tourism management, adventure tourism and sustainable tourism. Important aspects were discussed such as the management aspects pertaining to marine tourism, the concept of adventure tourism with important theories, as well as three pillars of sustainability. Relevant literature was identified and discussed to formulate a clear understanding of these concepts and the industry of marine adventure tourism. These objectives were met in Chapters 2, 3 and 4 of this thesis.
- Objective four: in order to collect primary data for this research, three surveys were conducted. Firstly, personal interviews were conducted with whale watching and shark cage diving operators to gain insight into the operations of the sector and operators' general attitude towards sustainability. Secondly, the residents of Hermanus were approached and asked to complete a questionnaire pertaining to their attitude on whale watching and shark cage diving. Thirdly, the participants of shark cage diving and whale watching were asked to complete a questionnaire pertaining to their attitudes towards conservation and sustainability of the sector, experiences and motivations. This objective was met in Chapter 5 of this thesis, where the results are analysed and discussed.
- Objective five: the fifth and final objective is to draw conclusions, establish the management framework and to make recommendations pertaining to the literature review,

the empirical results and to identify any comparisons or differences between the literature and results. Furthermore, the contributions of this research are indicated, along with the limitations of this research and future research opportunities. This objective is met in this chapter and the sustainable management framework is established and discussed as well.

6.1.1 Personal journey as a PhD student

Appreciation for natural beauty comes in all shapes and sizes. Natural beauty does not only refer to landscapes and the ocean, but to man-made buildings and wondrous opportunities as well. I am an avid supporter of nature conservation in all its forms, but my true passion has always been for the ocean and marine life. From my earliest memory the ocean has played a big role in my life. As a child my parents often took me to the beach for daily excursions or for holiday. I would spend hours at the beach, swimming in the ocean and snorkelling with my parents. As the time passed and I grew up, this did not change. I continued to develop a fondness for the ocean, with the spectacular beauty and its calming effect. It is these memories and the passion for the ocean that was instilled in me since an early age that made me choose the path I walked with this thesis.

Having had the opportunity to grow up with the ocean instilled both a fear and an appreciation for its beauty and power. Being a surfer and scuba diver myself, I spend much of my free time in the water, which has made me realise the extreme importance of our oceans. Not only is it home to many species of marine animals and plants, but man cannot survive without it. It is a source of food, pleasure and provides for transportation, to name a few. As humans, we have an immense responsibility of taking care of our oceans to ensure that future generations can enjoy the resources it provides as we are enjoying it today. Humans have come with many ways to enjoy the ocean both for pleasure and for financial gain. Marine adventure tourism is one such way. Scuba diving, surfing, shark cage diving, whale watching, sea kayaking and many other activities, have been established over the years as leisure activities for people to enjoy. With this enjoyment however, we have caused more damage than good.

The Great Barrier Reef in Australia has declined and we see reefs in South Africa decline as well. Sharks have been said to be conditioned as a result of shark cage diving activities, and the number of whales found along our coast have seemingly decreased as well. Whether or not the decline in numbers is due to tourism activities cannot be said. My years studying at university have equipped me with the skills and capabilities necessary to identify problem areas within both management and tourism and to be able to identify solutions to these problems.

Therefore, it soon became apparent to me that humans' influence on our oceans are having dire consequences on the environment and marine life. It was this combination of passion for

the oceans, education and the realisation of unsustainable practices that made me decide to base my PhD thesis on the sustainable management of marine adventure tourism products. I believe that activities such as shark cage diving and whale watching are necessary to enhance an appreciation of our oceans, but it should be managed appropriately to ensure that as low a human impact as possible is left behind.

Throughout this journey, I was taught many life lessons along with the valuable knowledge I gained from this research. Life will never be without struggles, but the key to survival is the way in which we approach these struggles. A positive attitude and being open to the opinions of others can help you to see things in a new perspective, which is often necessary. Aside from this, I learnt that criticism and feedback should be taken in a positive light as well, as this is a valuable way of learning and improving yourself. As a PhD student, I was faced with multiple challenges that each made me a stronger individual. One lesson I will take with me is to make time for reflection. We live busy lives and often do not find the time to identify ways in which we can improve our lives to improve our environment. From an academic perspective, I do believe that education is a valuable gift. Even though this research has been extensive, I believe there is still much more to learn about marine adventure tourism.

The purpose of this chapter is, therefore, to draw conclusions on the literature discussed and the empirical results, as well as to establish the sustainable management framework for marine adventure tourism products in South Africa. The contents of this chapter are discussed in the order indicated by Figure 6.1 below.

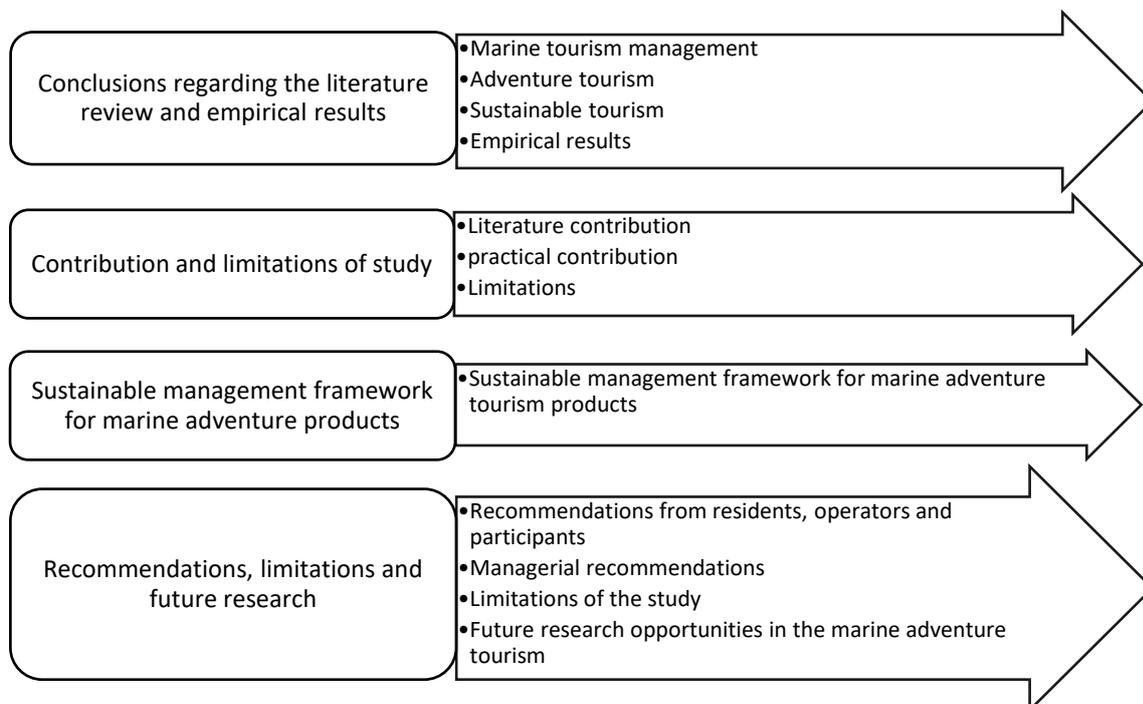


Figure 6.1: Outline of chapter

6.2 CONCLUSIONS REGARDING THE RESEARCH

The following section discusses conclusions which can be drawn from the literature review and empirical results conducted. First, conclusions are drawn from the analyses on sustainable tourism management, adventure tourism and marine tourism and second of empirical results.

6.2.1 Conclusions regarding the literature analysis on marine tourism

This section highlights the most important conclusions drawn from the literature analysis on marine tourism, as discussed on Chapter 2.

- Marine tourism is not a new phenomenon but is growing in interest. The industry started with the establishment of the three 'S's' tourism; sun sea and sand (c.f. 2.2.1).
- Marine tourism is defined as all recreational activities which involve travelling away from one's normal place of residence to a destination where the focus is placed on the marine environment (c.f. 2.2.2). The marine environment is, in turn, defined as waters which are saline and tide-affected (c.f. 2.2.2).
- Four sub-sectors of marine tourism can be identified, including cruise tourism, nautical tourism, coastal tourism and marine event and festival tourism (c.f. 2.2.3). Shark cage diving and boat-based whale watching are categorised as nautical tourism (c.f. 2.2.3). Nautical tourism involves boat-based activities, or navigational tools and takes on any body of water (c.f. 2.2.3).
- The spectrum of marine recreation opportunities was developed by Clark and Stankey (1979) (c.f. 2.2.4) and identifies five classes of remoteness, characterised by experiences, the environment, locations and examples. As the degree of remoteness increase, the degree of human impacts will decrease (c.f. 2.2.4).
- Shark cage diving is therefore classified as *nautical tourism*, forms part of the activity group *motorised water-based activities* and is categorised as *semi-remote*. Boat-based whale watching is classified as *nautical tourism*, *motorised water-based activities* and *semi-remote* (c.f. 2.2.4).
- Wildlife tourism is defined as people's encounters with non-domesticated animals in the animal's natural habitat. The tourist will be able to photograph the animal, practice hunting, view and feed the animal (c.f. 2.3).
- Marine wildlife tourism is therefore defined as people's encounters with marine animals, such as whales, sharks and dolphins, in the ocean (natural habitat) for the purposes of viewing and photographing the animals (c.f. 2.3).
- Duffus and Dearden (1990) identified the core components of non-consumptive wildlife tourism as the wildlife user, the historical relationship and species and habitat (c.f. 2.3).

- Experiences of marine wildlife tourism is influenced by social and physiological aspects, psychological aspects, educational and conservational benefits (c.f. 2.3.1).
- Factors have been identified which can either enhance or decrease the tourists' experiences, including quality of the encounter with the animal, the knowledge and experience of the crew, proximity of the animals to the boat, size of the group, the duration of the trip, construction of the boat for viewing, positioning of the boat and issues of sea-sickness (c.f. 2.3.1).
- Marine wildlife tourists desire interaction with marine animals where the experience incorporates a learning aspect and well-structured interpretive programmes are focussed on conservation aspects and environmental-friendly practices (c.f. 2.3.1). Whale watching participants have the best experiences when the whale is close to the boat.
- Marine tourism experiences should be entertaining and educational in nature (c.f. 2.3.1).
- The type of animal encountered, the authenticity of the experience and the authenticity of the marine environment is important for a quality marine wildlife experience (c.f. 2.3.1).
- Marine wildlife tourism envelopes a component of marine ecotourism because the activity takes place in a natural environment, it is managed and developed sustainably, it benefits the community and provides resources for conservation (c.f. 2.3.2).
- The characteristics of marine ecotourism offerings can be divided into two groups, namely specialist operators (who focus on a specific species such as whales) and opportunists (who integrate marine species sighted on a trip into the offering based on opportunity) (c.f. 2.3.2).
- Important factors for the management of tourism, in general, include planning, organising, leading, control and functional areas of management, such as financial management, marketing management, operational management, and human resources management (c.f. 2.4.1).
- Effective management can only take place if all parties work together, objectives are specified, effectiveness versus efficiency is practiced and processes are implemented for the management of a changing environment (c.f. 2.4.1).
- Management of marine tourism activities includes accurate and effective planning (c.f. 2.4.1.1), an accurate and effective organisational structure (c.f.2.4.1.2), a good leader with the ability to achieve goals (c.f. 2.4.1.3), applicable control processes (c.f. 2.4.1.4) and the implementation of appropriate functional management processes (c.f. 2.4.1.5).
- Three areas of marine tourism which should be managed include natural systems, socio-cultural systems and management systems. The natural system includes the ocean, animals and plants, for example, the migratory patterns of the whales that should be kept in mind when planning activities. The socio-cultural system includes the human element

of a community and the interaction between the natural system and humans. Lastly, the management system includes the government, policies, regulations, programs and non-government organisations (c.f. 2.4.2).

- Orams (1999) suggests that four strategies influence the effective management of marine tourism, namely regulatory management strategies, physical management, economic strategies and educational strategies (c.f. 2.4.2.1).
- Management techniques include prohibition, manage and ignore (c.f. 2.4.2.1).
- Management of marine wildlife tourism involves the management of tour leaders, conservation management, management of educational and interpretation programs, implementation of policies, accurate planning, effective marketing and financial management and management of stakeholder needs (c.f. 2.4.2.2).
- Studies suggest that there is a need for a proper sustainable management framework for marine tourism operators which considers education, conservation, environmental impacts, economic growth, resource management, government involvement, sustainable development and future-oriented approach (c.f. 2.4.2.2).
- A management framework for successful marine tourism management comprises of planning (economic, conservation, community, stakeholders, benefits and impacts), organising (management structures, organisational structure, goals and objectives, communication, line of authority), leading (educational programmes, interpretation, guides, interaction, conservation, preservation), control (permits and licenses, regulation, conservation, preservation, impacts, human interaction, physical management), financial management (profitability, growth, income for conservation, increased fees), marketing management (perceptions, profile, communication, awareness, understanding), operations management (policies, codes of conduct, implementation of planning strategies) and human resource management (hiring correct staff, employee satisfaction, training, hiring local residents) (c.f. 2.4.2.3).
- Aspects of importance for the effective, sustainable management of the shark cage diving and whale watching sector is a limited daily bait allowance, monitor compliance with regulations, the creation of awareness and limited areas for operational purposes to ensure resources (sharks and whales) are not abused (c.f. 2.4.2.5).
- A code of conduct representing the regulations for shark cage diving in the Azores (Bentz *et al.*, 2013) identified five areas with which operators should comply, namely activity preparation, human safety, wellbeing of the animal, operator's attitude and miscellaneous (c.f. 2.4.2.5).

6.2.2 Conclusions regarding the literature analysis on adventure tourism

The following conclusions are drawn from the literature review on adventure tourism and can be seen as the most important conclusions. These conclusions are drawn from Chapter 3:

- Adventure tourism is defined as a leisure activity which takes place in an unusual, sometimes exotic and remote wilderness setting. These activities are characterised by high levels of risk, excitement, tranquillity and personal challenge. The outcome of adventure tourism experiences is often unknown and will vary according to the level of the participant's experience and skills (c.f. 3.2).
- The characteristics of adventure tourists are unique and include more travel experience, higher inclination towards fun and adventure while on holiday, more independence, higher flexibility, changed values, changed lifestyles and changed demographics (c.f. 3.2).
- Adventure tourism is subdivided into soft and hard adventure categories. Soft adventure tourism is characterised by low-risk activities; participants need little prior experience and tourists can participate in multiple activities per trip, such as whale watching. Hard adventure activities are characterised by high levels of risk and danger and tourists participate in one such activity per trip, such as scuba diving (c.f. 3.2.1).
- A second method for subdividing adventure tourism activities is that of Adventure Quadrants. Activities are classified according to the level of challenge each poses and the level of independence each involves. The consistent variable amongst these two activities is the fact that each proposes that adventure tourism activities vary according to the level of risk offered, skills and experience needed by participants (c.f. 3.2.1).
- The lifestyle of tourists has a great impact on whether or not they will be interested in adventure tourism activities. Therefore, the profile of adventure tourists has been identified as people in their mid-forties or – fifties, educated and are active thrill seekers. They are willing to spend significant amounts of money on adventure-related activities (c.f. 3.2.2).
- Adventure tourists are motivated by their expectations, the level of service received, the want to visit a particular destination, status, the need to experience thrill, fear and risk and unexpected outcomes (c.f. 3.3).
- Theories, such as Maslow's hierarchy of needs, Iso-Ahola's seeking and escaping dimensions and the push and pull theory, and sunlust and wanderlust have been developed with the aim of understanding the motives of tourists. These theories focus on tourism in general and can be used to identify the motives of tourist sectors, such as marine tourism. These theories have two aspects in common, namely inner and external motives which drive tourists to participate in a tourism activity. Both of these motivations

can be realised by means of effective and efficient management of tourism activities, which will influence tourists' choice to participate in the activity (c.f. 3.3).

- Social and physiological aspects, psychological aspects, educational benefits and conservation benefits can be derived by participation in adventure activities (c.f. 3.4).
- Factors influencing the experience of adventure tourists include emotions, previous experiences, demographic detail, expectations, personal opinions and level of skills (c.f. 3.4).
- In order to explain the levels of experience derived from adventure tourism activities, three theories have been discussed in the literature review. The stages of adventure (c.f. 3.4.1) identify four levels, namely play, adventure, frontier adventure and misadventure, measured according to the level of risk versus competence. Secondly, the adventure experience paradigm (c.f. 3.4.2) states that adventure experiences are derived from the perceived level of risk versus competence and adds the following categories to the stages of adventure; exploration and experimentation, peak adventure and devastation and disaster. Thirdly, the adventure activity scale (c.f. 3.4.3) measures experiences according to the level of difficulty versus volume.
- The common variable amongst these theories is the fact that adventure tourism experiences are largely derived from the level of risk, competence or skills of tourists and perceptions of tourists. These theories further state that the lower the level of competence required from the participant, the lower the level of risk and the higher the volume of activities which tourists can participate in during a single trip.
- Marine adventure tourists' experiences are influenced by social and physiological aspects (benefits sought and escape), psychological aspects (excitement, novelty, intensity, and uniqueness), educational aspects (learning about wildlife) and conservation benefits (environmental awareness, supporting nature conservation and protecting endangered species) (c.f. 3.5; 5.5).
- Factors that can either enhance or decline the experience of participants to whale watching and shark cage diving include quality of the trip, knowledge and friendliness of the crew, proximity of the animals, number of passengers on boards, duration of the trip, the boat itself, position of the boat to the animals and sea-sickness (c.f. 3.5).

6.2.3 Conclusions regarding the literature analysis on sustainable tourism management

The following can be seen as the main conclusions regarding sustainable tourism management, as discussed in Chapter 4):

- Sustainability can be defined as development which meets the needs of the present while not compromising the ability of future generations to meet their needs. This further refers to the long-term survival of the product, service, economy, community, or environment (c.f. 4.2).
- Sustainable tourism leads to the management of resources which ensures that economic, social and aesthetic needs are met while also ensuring that cultural integrity, biodiversity and life support systems are maintained (c.f. 4.2).
- Sustainability consists of three pillars, namely economic viability, social equity and environmental efficiency (c.f. 4.2). An interrelationship between these three pillars can be identified, which ensures the effective and long-term viable management of tourism products (c.f. 4.2).
- Sustainable tourism development can be characterised by various general concepts (slow and long-term development and local control), development strategies (planning, concern for landscapes, local employment and local developers and vernacular architecture), as well as tourism behavioural concepts (mental preparation, quiet behaviour, tactful and sensitive and repeat visitation) (c.f. 4.2).
- Many advantages of sustainability can be identified, such as employment opportunities, respect for cultural and natural heritage, improvement of the quality of life and maintenance and improvement of heritage. Disadvantages, however, include overcrowding, traffic congestion, development and conflict between local community members and tourists (c.f. 4.2.1).
- Various interpretations amongst academics and industry experts exist which hinders the identification of applicable strategies for sustainable management (c.f. 4.2.2).
- The first leg of sustainability includes economic efficiency and states that all stakeholders' opinions and needs should be taken into account. This includes the even distribution of socio-economic benefits amongst those with stable employment (c.f. 4.3).
- Economy benefits include a contribution to foreign exchange, to government revenue, generation of employment opportunities and the creation of business opportunities (c.f. 4.3.1).
- Three economic valuation models have been identified in the literature, namely the travel cost method, the choice modelling experiment and the contingency valuation method. The travel cost method allows the estimation of the monetary value of goods and services in the country. Secondly, the choice modelling experiment is used to measure the willingness to pay of visitors for the provision of tourism service and activities. Thirdly, the contingency valuation method is used to estimate the value which individuals place on non-market goods (c.f. 4.3.2).

- Environmental conservation is seen as the conservation of natural resources, such as landscapes, fauna, flora, water, soil and minerals (c.f. 4.4).
- The definition of the term 'environment' is given as the external surroundings in which an organism lives. This is made up of biodiversity, the spatial environment and the social environment (c.f. 4.4).
- Various types of conservation can be identified, including marine conservation, conservation of forests, conservation of grazing lands, wildlife conservation, soil conservation and carrying capacity conservation (c.f. 4.4).
- Tourism causes many negative impacts on the environment, including exploitation of natural resources, draining of wetlands, the introduction of harmful species, pollution and litter and poaching (c.f. 4.4.1).
- A unique interaction is identified between tourists and members of the host community. This relationship leads to certain social impacts relating to the change in value systems, behaviour, social relationships, lifestyles and community structures (c.f. 4.5).
- A culture is the essence of a community and refers to a way of life of a particular group of people relating to their behavioural patterns, values and perceptions (c.f. 4.5.1).
- Three elements are identified which make up the host community, namely the economic system, the residents, and the community infrastructures and services (c.f. 4.5.2).
- Key socio-cultural impacts of tourism can be identified to have an effect on the host community, such as gambling, prostitution, crime, rural and urban migration, health issues, the demonstration effect, language barriers, commoditisation and staged authenticity (c.f. 4.5.3).
- Positive impacts can also be identified through, such as preservation of culture and heritage, cultural pride, cross-cultural peace and understanding, improved infrastructure and provision of community facilities and public services (c.f. 4.5.3).
- Various models have been developed which aids understanding and management of social impacts, namely Doxey's Irridex Model, Butler's Lifecycle Model, Dogan's Framework and The Social Exchange Theory (c.f. 4.5.4). The common variable between these models is the fact that as tourism to an area increases the number of undesirable activities increase as well and management of resources need to be effective and efficient. These models follow a general approach and are therefore not focussed on specific tourism communities. The management method of resources will vary from resource to resource and should be customised to ensure the sustainable management of the resources aimed to be conserved. A gap in the literature has therefore been identified for the development and implementation of a sustainable management framework focussed on marine adventure tourism resources specifically.

- Three sustainability management frameworks have been identified from the literature and the following key concepts have been identified as important in all three frameworks. Firstly, the local community should be involved in decision-making, operations and tourism activities to ensure positive attitudes are harboured regarding the tourism industry. Secondly, education and awareness raising are important concepts to ensure that community members and the public are educated on the importance of the marine environment. Thirdly, management functions such as marketing and adherence to legislation are important to ensure successful management of the business. Lastly, management should be able to make informed decisions regarding the economic efficiency of the operation, environmental conservation and social equity (c.f. 4.7).
- A clear need for a sustainable management framework is identified which should be focussed on all three of the pillars of sustainability, namely economic efficiency, environmental conservation and social equity. If these three pillars are not appropriately managed the sustainability of the specific tourism industry cannot be ensured in the long-term.

6.2.4 Conclusions regarding the empirical results of this research

The following conclusions can be drawn from the empirical results of this study. These conclusions can be seen as the most important information derived from the primary information collected for this research. Conclusions from both the qualitative and quantitative results are discussed.

6.2.4.1 Conclusions regarding the results from the personal interviews with the operators (qualitative results)

The following conclusions are drawn from the qualitative results of this research:

- Number of years in operation, number of boats owned, number of staff and role in the operation: operators have been in operation for an average of 18 years (c.f. 5.2.1), each operator owns one boat per operation (c.f. 5.2.2) and they have an average amount of 25 permanent staff members and 13 temporary staff members (c.f. 5.2.3). It should be noted that temporary staff members include marine and research volunteers. Respondents assumed the role of either the owner or the manager in charge of the operation (c.f. 5.2.4).
- The average price per person per trip and number of months in operation: the average price per person per trip for whale watching equals R850, while the average amount for shark cage diving per person per trip equals R1650 (c.f. 5.2.5). Whale watching operations run for an average of 6 months per year, from June to December, while shark cage diving operations run for 12 months of the year (c.f. 5.2.6).

- Training provided: all staff members have trained appropriately at each operation, this includes health and safety training, safety at sea, skipper training, first-aid training and administrative training (c.f. 5.2.7).
- Does the company have a website: regarding marketing, all companies have a fully operational website on which tourists can book and pay for their trips (c.f. 5.2.8). It is emphasised, however, that operators prefer participants to pay on the day as this excludes the risk of having to postpone or cancel the trips due to unruly weather conditions.
- Attendance to marketing shows, other marketing tools used and identification of the target market: operators do attend marketing shows such as the Tourism Indaba and the World Travel Market exposition (c.f. 5.2.9). These shows prove to benefit operators through raising awareness, educating the public and offering opportunities to identify new competitors in the market. Other marketing tools used include social media, such as Facebook, online marketing and blogs and printed advertisements such as pamphlets and brochures (c.f. 5.2.10). All operators have identified their target markets as largely comprising of international tourists, mostly from Germany, Egypt, Japan and Britain (c.f. 5.2.11).
- Relationship to the Hermanus Whale Festival and attitudes towards conservation: operators have reported no relationship with the Hermanus Whale Festival, as this festival does not benefit operators in terms of revenue generation, raising awareness or acquiring participants (c.f. 5.2.12). Operators are, however, positive towards the idea of contributing to conservation, but preference is given to supporting conservation projects as a company and informing participants about these projects. Operators do feel that participants should be given a choice as to whether or not they want to contribute towards conservation projects (c.f. 5.2.13).
- Management advantage and understanding the concept of sustainability: the management advantage identified by each operator is centred on a unique element of the company, such as attention to detail, service excellence and experience in the sector (c.f. 5.2.14). Furthermore, operators do understand the concept of sustainability and strive towards the implementation of sustainable practices in multiple areas of the company, including recycling, community participation and conserving natural resources (c.f. 5.2.15).
- What should be done to keep the industry sustainable and what is being done regarding education: when asked what should be done to keep the industry sustainable, operators identified the need for stronger regulation of rules and permits and increased security against poaching (c.f. 5.2.16). All operators aim to educate participants by briefing them on the environment, animals and safety precautions before the group boards the boat, while at sea, marine biologists and/or tour guides are on board to answer questions and

elaborate on certain concepts and a debriefing is conducted afterwards where participants are informed about the importance of conservation of the environment. Operators reach out toward the local community by arranging beach clean-ups and offering educational programs for school groups (c.f. 5.2.17).

- Measures in place to look after the environment while on a trip: at the moment operators implement sustainability measures in the form of approaching the animals responsibly, behaving sustainably, contributing towards conservation, employing local community members and training them and behaving conscientiously towards the environment and community (c.f. 5.2.18).

6.2.4.2 Conclusions regarding the results from the residents of Hermanus (quantitative results)

The following conclusions can be drawn from the quantitative results of this research. The quantitative conclusions are divided into two sections, namely the conclusions drawn from the survey on the Hermanus community and the conclusions that can be drawn from the survey on marine adventure participants. The conclusions regarding the community survey of Hermanus is first:

- Residents of Hermanus are mostly male with an average age of 38 years. They are sales personnel with a Grade 12, or matric, qualification who have been living in Hermanus for an average of 15 years (c.f. 5.3.1).
- While few of them are directly involved with the festival, the majority does attend the festival whenever possible. The residents, therefore, do not display high levels of attachment to the festival, but perceive it as a valuable form of entertainment (c.f.5.3.1).
- Whale watching and shark cage diving has a positive impact on the community of Hermanus in terms of the awareness raised of Hermanus as a tourism destination, the appearance of the town, opportunities for entertainment, an improved economy, improved infrastructure, shopping opportunities, increased entrepreneurial opportunities and improved living standards. It also has a negative impact on the community in terms of increased noise and crime, excessive alcohol and drug abuse, disruptive behaviour, increased prices and cost of living, traffic congestion and general irritation amongst residents (c.f. 5.3.1.2).
- Regarding the impact of the festival on personal quality of life, residents felt like there was no real impact, either positive or negative (c.f. 5.3.1.7).
- Residents harbour positive attitudes towards the Hermanus Whale Festival and suggest that the festival has impacted their community and personal lives in a positive manner.

Benefits indicated as a result of the festival include increased income, improved living standards and increased community pride (c.f. 5.3.1.8).

- The minority of residents work at the festival. They are mostly shop owners, managers, or employees in the hospitality industry. It is also clear that residents are interested in the festival and attends when they can (c.f. 5.3.1.9).
- Hermanus residents are interested in the festival, but awareness should be raised continuously to increase the level of interest shown by the local community. This can be done by means of offering residents opportunities and changing the programme of the festival to include new products and service, such as educational programmes (c.f. 5.3.1.10).
- Residents evaluated the festival as excellent exposure for the community, the area is suitable for the purpose for the festival, the festival is well-marketed and accessible and the festival is well-organised. This further indicates positive attitudes displayed regarding the Hermanus Whale Festival, but festival organisers should aim to improve residents' attitudes even further by providing more opportunities for residents to be part of the festival (c.f. 5.3.1.11).
- Residents indicated that the most important events at the festival were The Eco-Marine Village and the Total Whale Marathon. This further enhances the idea of residents wanting more educational programmes and information on the whales and the marine environment (c.f.5.3.1.12).
- The most important impacts from the Hermanus Whale Festival on the community include the fact that the image of the town has improved, more opportunities for shopping have arisen, awareness of Hermanus as a tourist destination has increased, but the overall cost of living in the area has increased as well. This is in partial due to increased tourism activities in the area. Where the demand for tourism activities increase, the cost of living will increase as well (c.f. 5.3.1.13). Therefore, the factor analysis identified three important factors, namely awareness, negative aspects and community benefits. The most important factor was identified to be awareness, while community benefits were identified as the least important (c.f. 5.4.1). This suggests that shark cage diving and whale watching contribute more towards raising awareness for the importance of the marine environment and the animals (whales and sharks) while community benefits derived from the activities should be enhanced, such as employment opportunities and purchasing locally.

6.2.4.3 Conclusions from the participants of marine adventure tourism products (quantitative results)

- Marine adventure participants are female with an average age of 38 years, they are English speaking and originate from international countries, such as Germany, America

and Sweden. They have a diploma or degree from a tertiary institute and mostly earn more than R600 000 per annum (c.f. 5.3.2).

- Participants are day visitors to the area who heard about the operator by means of a website or travel agent. Participants earn an annual gross income of R672 001 (c.f. 5.3.2).
- They rarely participate in other marine adventure activities, such as snorkelling and scuba diving and have not participated in either whale watching or shark cage diving beforehand (c.f. 5.3.2.11) but would participate in it again in the future (c.f. 5.3.2.12). Other marine activities in which marine adventure participants often participate include scuba diving, surfing, sea kayaking and wave rider (c.f. 5.3.2.10).
- The aspects which influence participants' motives for participation in whale watching and shark cage diving is because animals such as whales and sharks excite them, because it holds new experiences and for the thrill and excitement which is offered by the experience (c.f.5.3.2.13).
- The factor analysis, therefore, identified four important motives for participation in shark cage diving and whale watching activities. These factors include experiences, marine species, lifestyle and personal achievement. The most important motive being marine species, while personal achievement ranked as the least important motive (c.f.5.4.2).
- Aspects influencing the experience of shark cage divers and whale watchers include being in proximity to whales and sharks, being close to nature, the knowledge and helpfulness of staff and the variety of animals seen on the trip (c.f. 5.3.2.14). These aspects should be focussed on when offering an experience in marine adventure tourism.
- Therefore, the factor analysis on factors of importance for a valuable experience identified being close to nature and the level of client service which is offered by the operator as very important (c.f. 5.4.3).
- The satisfaction of participants is mostly influenced by the friendliness of the staff, knowledge of the staff and operators and clear briefings and instructions pertaining to the trip. Although these factors were identified as the most important for ensuring satisfaction, all aspects tested are of importance, such as quality of the equipment, educating participants, views on conservation and environmentally friendly practice implemented (c.f. 5.4.4).
- Six clusters were identified, namely thrill seekers, risk takers, thalassophiles, adventure junkies, consorts and experience seekers (T²RACE). Statistically significant differences were identified between all six clusters. Each cluster has a unique element on which operators can focus on attracting a more specific market and to ensure more satisfied participants (c.f. 5.4.5). Similarities were identified between each of the clusters, such as the factors for *experiences* and *marine species* ranking most important across all clusters.

Differences, however, was identified from the fact that not all clusters valued *experiences* and *marine species* equally high. *Adventure junkies* are the most enthusiastic cluster, while *consorts* are merely along in support of a friend or family.

6.3 CONTRIBUTIONS AND LIMITATIONS OF THE STUDY

The aim of the study was to develop a framework for the sustainable management of marine adventure tourism activities in South Africa, namely whale watching and shark cage diving. A thesis submitted in the fulfilment of a *Philosophiae Doctor* should make one or more contributions to the field of study. This can be either a literature contribution, methodological contribution and/or a practical contribution. The contribution of this study is two-fold, seeing as literature and practical contributions are made.

Literature contribution

Firstly, with regards to the literary contribution, this study offers insight into marine tourism management, marine adventure tourism and sustainable tourism. The sector is put into perspective for operators of marine adventure tourism activities as well as researchers in the field. The following literature contributions are made:

- The study identified the various areas of marine tourism management, adventure tourism management and sustainable tourism management. The important managerial aspects of marine tourism have been identified and a model has been established from existing literature (See page 47). This has also been used in the sustainable management framework for marine adventure tourism products in this study.
- A model was created to explain sustainability of tourism offerings as part of ecotourism. The model identifies where the three areas of sustainability fit in with the pillars of ecotourism.
- The impacts of shark cage diving and whale watching on the local community have been identified by means of primary research. This makes a contribution pertaining to literature on community impacts. These aspects have also been used in the framework for sustainable management of marine adventure products (see section 6.4) established in this thesis.
- The impact factors of marine adventure tourism practices, specifically whale watching and shark cage diving, on the community have been identified. The factors aid the identification of which positive impacts should be enhanced, such as education and job creation, while negative impacts, such as pollution and rowdy behaviour, should be minimised.

- The interviews with the operators helped to identify what the industry should be doing to become more sustainable, such as more research conducted on shark- and whale behaviour and educational programmes. The interviews identified the fact that stronger government regulations should be implemented to eliminate illegal operations in the sector.
- The market for marine adventure tourists was described by identifying the profile, the taxonomy of market clusters (T²RACE), motives to participate, factors influencing satisfaction and factors influencing the experience of participants. This contributes to deeper understanding of the demand side of marine adventure tourists.

Practical contribution

In terms of the practical contribution, this thesis developed a sustainable management framework for marine adventure tourism products. This framework was established through utilising existing literature as well as the empirical results obtained in this study. The framework's contribution lies in the fact that it is combining the internal and external environments, the supply and demand side as well as the inputs to produce a comprehensive sustainable management framework (outputs) which can be implemented to ensure sustainable management of the marine adventure operation.

Limitations to the study

The following limitations have been identified pertaining to the study. Recommendations are made accordingly for future research.

- Due to an unavailability of a list of population members, non-probability with convenience sampling was used. Future research should make use of probability sampling with simple random sampling methods. This will ensure validity and reliability of the data.
- A limited number of community members were willing to participate in the survey. The implementation of probability with simple random sampling will minimise this problem. Furthermore, an extended period of time is necessary to ensure a higher number of participants are included in the survey.
- Merely four operators were willing to participate in the qualitative survey. The inclusion of more operators in the survey will provide more comprehensive results.
- The study was conducted within the borders of South Africa, therefore the findings are not applicable to other destinations. This can, however, be tested by conducting similar studies at other destinations offering shark cage diving and whale watching.
- This study focussed on two marine adventure activities, namely shark cage diving and whale watching. Other activities, such as stand-up paddle boarding, scuba diving and

wave rider, should be researched to provide a more holistic view of sustainability on the marine adventure tourism sector of South Africa.

6.4 A SUSTAINABLE MANAGEMENT FRAMEWORK FOR MARINE ADVENTURE PRODUCTS

The primary goal of this study was to develop a sustainable management framework for marine adventure tourism products. In order to do so, a literature analysis was conducted along with primary data collection, of which the findings have been utilised to establish this sustainable management framework. The framework consists of the external environment (political, legislative, technological, climatic and cultural), the internal environment (managerial functions and the functional environment) and the demand and supply side as well as the inputs and outputs. In the end the framework establishes the guidelines for sustainable management of marine adventure products in the form of the outputs. Figure 6.2 is a visual representation of the framework.

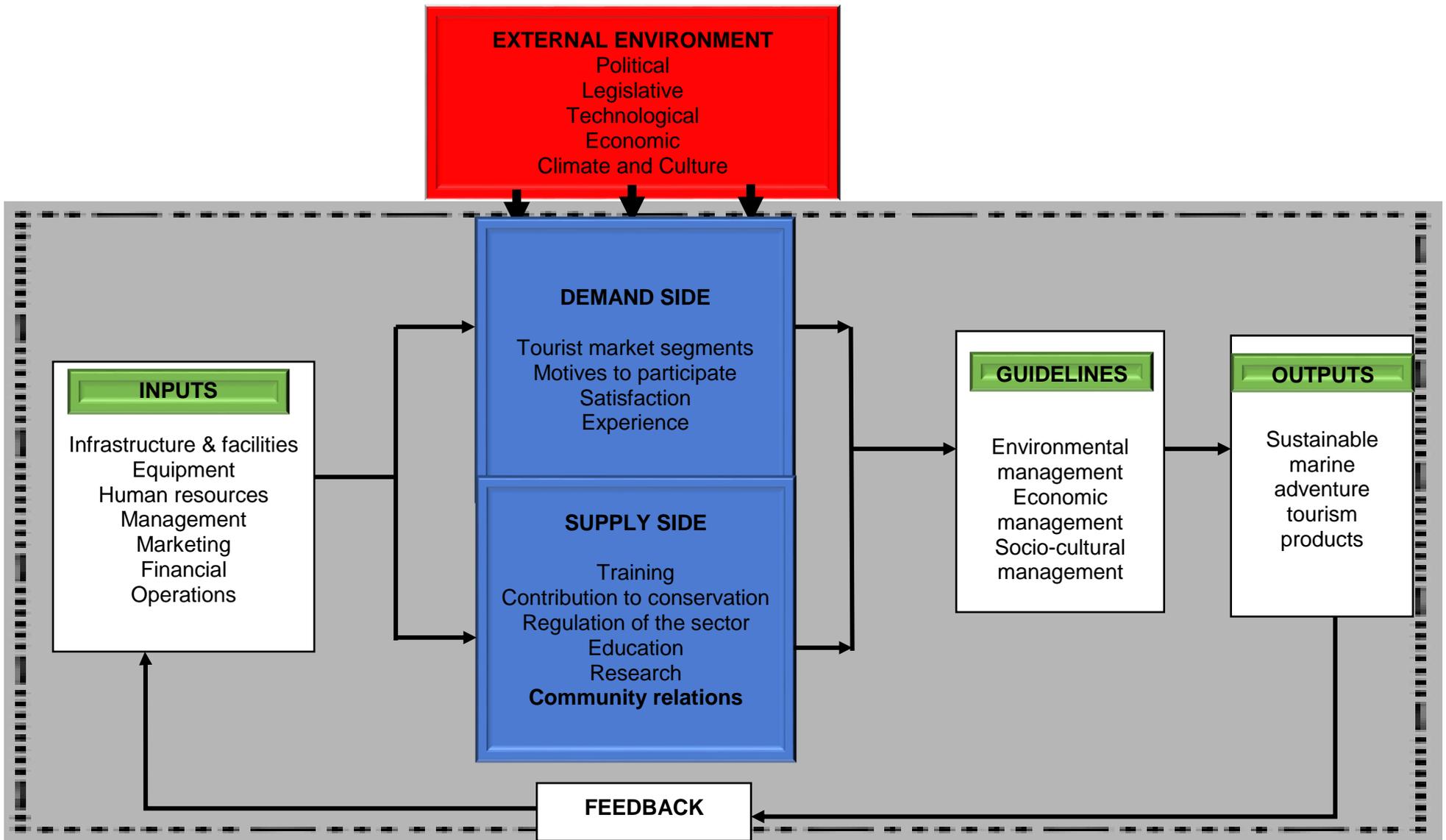


Figure 6.2: A sustainable management framework for marine adventure products

6.4.1 External environment

The external environment consists of the political environment, the legislative environment, the technological environment, the economic environment, the climate and the cultural environment. These environments influence the inputs of the operation, which consists of the managerial functions (planning, organising, leading and control), the functional environment (financial management, marketing management, operations management and human resource management), infrastructure and facilities and equipment. As the inputs change, the demand and supply sides of the operation will change. In turn, the demand and supply side have an influence on the guidelines which should be followed to ensure that the sector is managed sustainably (outputs). Therefore, operators should take notice of both the demand (market segmentation, motives, factors influencing the experience and satisfaction) and supply side aspects (what operators offer) to ensure proper sustainable management of the sector. The following external environmental aspects are discussed.

6.4.1.1 Political environment

The political environment refers to the political status of the country and can influence travel patterns and create new opportunities for operators. Furthermore, changes in the political environment, such as political instability and strikes will have a great influence on the tourism industry of a country. Tourists want to feel safe when travelling to a new country and they will not want to visit a country where their safety is compromised.

6.4.1.2 Legislative environment

Legislation by government is seen as external as new legislation can have a positive or a negative effect on their operations. Governments implementing new policies or establishing new trade relations with other countries can greatly influence the travel patterns of visitors. For example, South Africa government introduced a new law for child trafficking, namely the Prevention and Combatting of trafficking in Persons Act no 7 of 2013 (South Africa, 2013) which aimed at decreasing child trafficking. But in turn it led to immense decreases in international tourism numbers. This is a typical example on an external aspect that the operator has no control over. The changes in laws can therefore have an impact on the tourism industry, as experienced in South Africa.

The legislative environment further includes all the laws and regulations with which operators should adhere. The following laws should be adhered to:

- White Shark Cage Diving Policy and Regulations under the Marine Living Resources Act no 18 of 1998 (South Africa, 1998a)
- The Marine Living Resources Act No. 18 of 1998 (South Africa, 1998a)
- The National Environment Management Act No 107 of 1998 (South Africa, 1998b)
- The National Biodiversity Act No 10 of 2004 (South Africa, 2004)
- The National Protected Areas Act No 57 of 2003 (South Africa, 2003)

- The Sea Birds and Seals Protection Act No 46 of 1973 (South Africa, 1973)
- The International Convention for the Preservation of Pollution from Ships Act No 2 of 1986 (South Africa, 1986)

Furthermore, operators should also be in possession of the correct permits to operate. Whale watching and shark cage diving operators should possess a permit to operate within a specific area of the marine environment. For example, operators in Gansbaai should have a permit to operate within the Dyer Island marine protected area. The following regulations should therefore be adhered to (Marine Living Resources Act no 18 of 1998):

- Permits should be applied for annually
- The operator should have a permit to operate, as well as a license for the vessel used for the activity
- Each operator is allowed one boat and fees payable for the license will depend on the size of the vessel
- Shark cage diving and whale watching activities are only permitted in certain areas in South Africa, including Dyer Island, Seal Island in False Bay, Quoin Rock, Seal Island in Mossel Bay and Algoa Bay
- The vessel should be registered with SAMSA (South African Maritime Safety Authority)
- One or more tour guides should be employed
- Operators should keep a logbook of every trip with details of the trip
- Operators should have an operational plan and managerial plan in place when applying for the permit.

Any drastically changes in the above-mentioned legislation will have an impact on the operator as operations will need to be adapted accordingly.

6.4.1.3 Technological environment

The technological environment is continuously changing. The internet, for example, has changed the tourism industry in the past decade as tourists are able to research their trips on the internet, which provides convenience and a wealth of information. Operators need to ensure that they are aware of the latest trends in the technological environment to improve their offering. For example, have a function on the website which allows potential participants to book the trip via the website. This ensures convenience and ease of access.

Furthermore, the availability of tourist information on the destination and the offering (whale watching or shark cage diving activity) is becoming more important as the sophistication of travellers improve. Tourists are well-educated on offerings and the destinations they want to visit through the availability of the internet. Operators should therefore ensure that the information they communicate is up to date.

With the impact of the internet comes the impact of social media. Participants can easily damage the reputation of the operator with negative “word of mouth” on social media sites such as Facebook and Twitter.

Another aspect of the technological environment that should be kept in mind is the establishment of new and improved booking systems. Operators can implement new booking systems as a means of simplifying the process and providing improved efficiency and effectiveness.

Furthermore, new developments in the technology of boats, engines and equipment should be identified and implemented, such as low carbon emission boat engines and engines with reduced noise. New equipment, such as new designs for shark cages, new lifejackets and new diving equipment should be purchased when necessary to improve the experience for participants.

6.4.1.4 Economic environment

The economic environment of a country will have an influence on the number and type of visitors received, but also on local operations. The South African economy is largely based on market principles and products and services are exchanged according to demand and supply factors. Furthermore, an economic recession can influence the spending patterns of the market negatively and less money will be available to spend on leisure activities such as shark cage diving and whale watching. Operators of marine adventure activities should take note of the economic situation of the country to determine the spending patterns of the market and to ensure that participant numbers will continue to increase.

International participants often have more spending money available due to the strength of their local currency against the rand. At the time of this research, the Rand was R16,45 per Euro, indicating a weak Rand. Therefore European visitors will be able to spend more on leisure activities than South Africans will be able to due to the weak Rand. If the rand strength increase, it will impact on visitors in South Africa.

6.4.1.5 Weather / Climate change

Weather conditions should be acknowledged as the chance of bad or stormy weather conditions can impact on operations. Bad weather conditions, as is often experienced in the Western Cape, will compromise business operations because the operator will not be able to take participants out on sea. In certain cases, stormy weather, strong winds and rain can last for multiple days, which means that operations will have to shut down for the duration of the bad conditions.

Climate change, or global warming, has an impact on the ocean and its species. For example, whales come to the South African coastline every year from June to November. In recent years it was discovered that the whales are starting to arrive later each year (Findlay & Best, 2016:250). Therefore, this can impact on operations.

6.4.1.6 Cultural environment

There are two sides regarding the cultural environment that are of importance, namely the local cultural environment and the culture of the international tourists.

The local culture has a strong influence on tourism activities at a destination. Negative attitudes and perceptions can be brought very easily and will negatively impact the operation. The local culture should be supported and should benefit from the operation to ensure that positive attitudes and perceptions are harboured regarding the operation. Positive attitudes can be influenced by the following:

- Contribute to economic well-being of the community by referring business to local businessman, such as restaurants, shops and accommodation.
- Contribute to infrastructural improvements, such as better parking facilities in busy areas and road signage.
- Arrange regular clean-up excursions to remove litter and to improve the image of the destination.

The market for whale watching and shark cage diving is extremely diverse in culture and nationality. This means that a variety of people with differing cultural backgrounds will participate in the activity. Barriers can arise regarding communication and understanding between differing cultures. In terms of such barriers, the operator can implement the following:

- A guide that can speak an additional language, such as Mandarin, German, French, or isiXhosa, is an advantage as this guide can translate necessary information where necessary.
- In case of food being supplied as part of the activity, the operator determined food specifications of his tourists, for example Halaal food for Indians.

The external environment has an influence on the inputs of the operation, the internal environment, as well as the demand and supply sides. The concepts indicate above (external environment) should therefore be kept in mind for the following section of this discussion, which includes the inputs of the operation.

6.4.2 Inputs

The operator should have certain aspects in place to ensure the success of the operation. These aspects include appropriate infrastructure, proper equipment, appropriate facilities, the managerial functions (planning, organising, leading and control) and the functional environment (marketing, operational management, financial management and human resource management). Each aspect is discussed below.

6.4.2.1 Infrastructure and facilities

The following aspects are important regarding infrastructure and facilities from a supply side:

- Parking

- Signage
- Boat
- Storage
- Meeting facilities
- Audio visual equipment
- Enough seating for all participants
- Bathroom, dressing room and showers

Parking: Infrastructural elements include the availability of parking for participants and signage. There should be enough parking available at the facility to ensure that participant's vehicles are safe and out of the way. This also suggests that vehicles should be able to enter and exit the parking area without causing traffic congestion, therefore separate entrances and exits should be planned for.

Signage: Proper signage should also be supplied which can direct participants to the operator's facility. This includes road signage and office signage to indicate where the facility is.

Infrastructure on the boat: This includes storage space as well as a harbour and launch area. The harbour area should be located a distance away from the bathing area. Easy boarding for participants should be ensured by a ramp which connects the land with the boat. This will ensure safe embarkation and disembarkation for participants.

A storage area: A storage area is needed to store equipment, such as lifejackets, wind jackets and diving equipment. The storage area should be neat and clean and should be large enough to store all the equipment easily. Equipment used for the activity and that with which participants will be in direct contact with, should be stored away from any chemicals and harmful products to ensure the safety of participants. Chemicals and harmful products, such as cleaning chemicals, should be stored in a safe place where members of the public cannot come into contact with it and should not be disposed of in the ocean.

The facilities offered to participants are important as this can contribute to satisfaction. The facility is where participants will most likely meet the operator for the first time. These first impressions can contribute either positively or negatively towards the experience. Facilities will be used for the briefing and debriefing sessions, photographs and videos will be sold here, meals will be provided at the facilities and any questions which participants might still have will be raised here. The following should be kept in mind regarding the facilities of the operation:

- Provide signage to indicate where the facilities are located (as mentioned previously)
- The meeting area should be big enough to accommodate a maximum number of 30 people (participants and guides)
- Audio visual equipment should be installed to show the photos and videos of the trip, as well as any other material necessary, such as safety information

- Enough seating should be available for all participants to avoid people standing around or being uncomfortable
- Bathrooms for male and female participants should be provided and it should be clean
- An area where participants can get dressed should be provided
- Showers should be available for participants of shark cage diving, if enough space is available

The availability and implementation of these aspects will influence the internal environment of the operation, which is discussed below.

6.4.2.2 Equipment

The following equipment will have an impact on management of the operation:

- Lifejackets
- Wind jackets
- Towels (if provided) and blankets for the boat
- Navigational equipment
- Boat
- Diving equipment, such as wetsuits, masks and boots
- The cage for shark cage diving

Sound equipment on the boat to ensure that all participants can hear from all areas of the boat. Equipment used should be appropriate for the activity and should be in a good working condition. This includes the fact that equipment should be suitable for a variety of people, weights and sizes. Children and adults alike should be equipped with lifejackets while in transit on the boat, a windbreaker and, in the case of shark cage diving, a wetsuit, dive boots and a mask. Crew members should ensure that the equipment fits each participant and it should not be broken, torn or disintegrated. Operators should therefore ensure that the equipment used is in excellent condition and should not compromise the safety of participants.

The cage used for shark cage diving should be made of strong material to withhold any attacks from sharks. The cage should also be large enough to ensure the safe and convenient immersion of participants. Lastly, the cage should be secured to the boat in such a way that the cage cannot loosen or disengage from the boat during the activity. The boat should also be equipped with enough seating areas for participants during transit from the shore to the site of the activity. Participants can easily fall overboard if not seated. Furthermore, the navigational equipment used by the skipper should be up to date and in excellent working condition to ensure safe transit of passengers and crew members on board. Sound equipment should also be installed on the boat which can be used by the guides or marine biologists to address participants on-board.

6.4.2.3. Management

Management consist of aspects such as planning, organising, leading and control, will have an impact on the sustainable management of the operation. These management functions are discussed below.

6.4.2.3.1 Planning

Planning refers to the operation establishing a strategy for eco-friendly practices, such as recycling, proper waste management and regulation strategies pertaining to participant and crew behaviour on-board. The areas of planning are divided between the three levels of management, namely strategic (top management) planning, tactical (middle management) planning and functional (lower management) planning.

- **Strategic planning:** These plans are executed by the owners or operator of the company and they should formulate the goal and objectives of the operation and the mission statement. These managers are in charge of long-term planning and making strategic decisions for the long-term survival of the operation. Part of strategic planning is implementing a future-oriented view for sustainable purposes, meaning that the operation should use resources effectively and sparingly to ensure that the same resources will be available for future use. Planning strategies should also be implemented for proper conservation management, community involvement, stakeholder involvement, participant benefits as well as tourism impacts. Top management is also responsible for stakeholder involvement. This includes the identification of all stakeholders, such as the government, community members, competitors, suppliers (equipment and food) and tourists.
- **Tactical planning:** Middle managers are responsible for tactical planning and include the managers of the various departments of the operation, such as marketing, operational, financial and human resources. Middle level managers should be able to plan the budget for the following year, ensure community involvement, implement the strategies as formulated by top management and ensure conservation planning is implemented as well. Planning involves the adherence to the Environmental Conservation Act 73 of 1989 (South Africa, 1989) and the Marine Living Resources Act 18 of 1998 (South Africa, 1998a). Community involvement refers to plans that should be established for involvement of the community in decision-making and participation. For example, general meetings should be held once a year to inform the community about the industry.
- **Functional planning:** Lower level management is responsible for functional planning and include general managers, the captain and crew leaders. These managers are responsible for participant benefits and minimising any negative impacts. Tourists should receive benefits relating to excellent service delivery, knowledgeable and friendly staff, feeling close to nature while participating in the activity and being close to the animals. Impacts, such as noise, litter and pollution, should be minimised. These concepts are planned for by middle management, in

accordance with the policies and strategies developed by top management and will be executed by functional management as the daily operations of the company.

6.4.2.3.2 Organising

Organising sees the establishment of a proper organisational structure which identifies the hierarchy of the operation and lines of communication. This will ensure that all employees are aware of their role in the operation and what their duties and responsibilities are. Employees who are aware of their role in the operation are much more motivated, productive and positive about their job, which will result in satisfied participants. This can be done by means of the following:

- Establishing an organisational structure (organogram) of the operation where all positions in the company are indicated.
- Each employee should receive a clear and comprehensive job description, as well as a code of conduct and a code of ethics. These codes should explain how employees are expected to behave and what they are not allowed to do according to government regulation as well as company rules.
- Through establishing the organisational structure, the lines of communication will also be indicated and all employees will be aware of who they should approach with issues or ideas.
- Training should be provided to all employees of the operation, including the skipper, on-board crew and office staff. Each employee should receive training which is applicable to their position in the operation, which will further enhance the effectivity of daily operations. General training requirements should also be met for all employees working on-board, such as health and safety training, first-aid, safety at sea and firefighting.
- Client services should be optimised by focussing the use of all resources on the objectives set during planning. By ensuring resources are used effectively and client service is optimised, a memorable experience can be created and satisfaction can be ensured.

6.4.2.3.3 Leading

Leading refers to setting goals, objectives and a clear vision and mission statement, which has been mentioned above as part of strategic planning. This will further serve to guide all employees in their work, while leading an example of sustainable practices to the public.

- The goal and objectives of the operation should include the concept of sustainability to ensure that this concept is taken into account. The goals and objectives of the operation should be clear and it should be communicated to all employees. For example, the goal of a shark cage diving operation could be to provide a once-in-a-lifetime opportunity for tourists while incorporating a sustainable approach.
- A management advantage can be established by identifying the unique element which sets the operation apart from others, for example attention to detail during service delivery or additional

extras offered to participants which they were not expecting. This management advantage should be communicated to all employees and should be implemented across the operation.

- Leading also refers to complying with industry regulations and policies, such as maximum approach distance from whales, not dumping waste in the ocean, anti-chumming regulations and not feeding animals.
- Leadership in the form of tour guides or marine biologists. They act as leaders on the trip and should ensure that an educational element is added to the experience.

6.4.2.3.4 Control

Control incorporates the elements of monitoring compliance with government regulations, conducting research on the industry, monitoring daily operations, giving feedback to employees, measuring performance of the operation in terms of goals, objectives and the mission statement and implementing findings to ensure better performance, improved sustainable practices and effective management.

- Permits and licenses should be maintained according to the government regulations as stipulated above.
- Furthermore, control measures should be implemented for human interaction with the animals, such as no touching animals, no feeding of animals, vessels are not allowed to approach seal colonies closer than 10 meters (South Africa, 1973), vessels are not allowed to approach whales closer than 50 meters (South Africa, 1998a) and no swimming with the animals.
- Physical management strategies can also be implemented as a means of control, such as a boardwalk on which participants can walk safely to the vessel.
- Tour guides and marine biologists should ensure that proper behaviour is practiced, such as not touching whales or sharks, but they should also provide participants with information relating to the animals and the marine environment. These guides will ensure that the interaction between participants and animals is controlled but still providing a satisfactory experience.

6.4.2.5 Human resources

Human resources refer to the employees working for the operator. Employees deliver the service and the operator should ensure that the correct people are employed in the appropriate positions. Skills needed for each position should be identified and training needs should be identified accordingly. Positions for whale watching and shark cage diving operations include:

- Skipper for the boat
- Crew members working on-board
- Photographer or videographer (if applicable)
- Marine biologists or tour guides
- Receptionist or secretary

- Marketers
- Accountant or financial executive
- Operational staff
- Human resource manager

These categories/positions can differ from operation to operation, depending on the size and the objectives of the operations. The following factors have been identified as important for human resource management within marine adventure tourism:

- Crew members on-board shark cage diving and whale watching boats should receive training in order to know how to attract sharks without feeding them, how to set up the cage to ensure participants are safe and where participants can move around on the boat to ensure they do not fall overboard in come into harm.
- Training needs should be identified by the human resources department and implemented to ensure that all employees' training is up to date. This include first-aid training and health and safety training when current qualifications expire.
- Staff should be satisfied with their jobs to ensure high levels of service delivery. This can be ensured by paying employees appropriate wages and salaries for their positions and ensuring they are taken care off.
- Regular meetings should be held to ensure that staff members are aware of the latest developments in the operation and to communicate important happenings.
- Good communication should be facilitated throughout the operation. In other words, all staff members across the hierarchy should receive regular communication and all staff members should be aware of the lines of communication within the operation.
- Contracts should be signed by each employee which states the conditions of employment, the employee's job description, working hours, leave days, family responsibility leave and maternity leave.
- Rules and regulations regarding leave days for employees should be predetermined and should be captured in the contract signed by employees (South Africa, 1997).

6.4.2.6 Marketing management

Marketing management includes conducting effective marketing research on the target market of the sector, their wants and needs and how these wants and needs can be satisfied.

- Marketing should be primarily online marketing by means of a social media presence, a well-established website and attendance to marketing shows such as WTM Africa, the Tourism Indaba and the Getaway show.
- Proper social media marketing should be conducted, along with online advertising. A proper website should also be established which allows participants to book online, gather information and read up on the sector.

- Further education can be ensured through the use of a website or other online platforms such as blogging and newsletters. Continuous marketing research should be conducted on the market for whale and shark tourism. It is important that operators know who their market is, what they want and how they can be satisfied. This will ensure long term profitability and continuous support from the market.
- During off-peak seasons, such as the case of whale watching during summer months, the operator should come up with new and innovative ways of attracting tourists. Ecotours can be hosted where participants are taken on a trip on the ocean to identify and learn about other marine species and the marine environment. Events can also be hosted, such as sundowner cruises or birthday parties, where the operator will take a group of people on a cruise while they enjoy drinks and snacks on-board.

6.4.2.7 Financial management

Firstly, financial management should contribute to establishing competitive pricing and should monitor income generation for the operation and conservation contributions.

- A budget should be set up for the year ahead, which incorporates the budgets for all the departments, including financial, marketing, operations and human resources. This budget will indicate the total expenses of the operation, the expected income and the anticipated profit. The operator should ensure that the budget is adhered to throughout the year.
- The price of the activity is important and should be set according to the resources used and expenses of the operation, anticipated profit and what the market expects. If the price is too high tourists will not want to participate, if the price is too low on the other hand, it will indicate a low-quality experience and participants will be hesitant. The average price for whale watching is identified as R850, while the average price for shark cage diving is R1700. This is calculated as the price per person per trip.
- Whale watching is very seasonal, therefore operators should ensure to market the activity well during the months of June to December, because this is the time when whale watching operations will receive most of their income. Therefore, proper marketing will result in an increased number of participants, which will cause an increased income for the operation.
- Lastly, some contribution should be made to environmental conservation. This can include conducting research on the behaviour of species or migration patterns, or operators can donate money to a specific research cause. Contributions can also be derived from the participants or a specific cause, such as shark research.

6.4.2.8 Operations management

Operations management should ensure that daily operations are conducted in such a manner that the goals and objectives of the operation are met.

- Service delivery should be monitored, improved and kept up to standard by monitoring the delivery process, staff productivity and participant satisfaction. This can be done by means of internal research, such as identifying gaps in the process and areas requiring improvement.
- If new services are being implemented, operations management should ensure that the transformation or implementation of the service is as smooth as possible by ensuring all employees are well aware of their roles and responsibilities.
- Controlling bookings and check-ins should be done correctly and attention should be paid to avoid overbooking. A proper booking system is therefore very important and frontline employees should understand the program and know how to work it properly. Therefore, training for these employees should be conducted.
- The boat should be clean and ready when the participants arrive for the activity.
- Briefings before the activity should be managed and participants should receive clear and comprehensive instructions regarding the activity, behaviour on-board and safety regulations. Upon completion of the activity, participants should receive a debriefing session where they are educated on the animals, the marine environment and conservation opportunities.
- Operations should ensure that the photographs and videos (if applicable) is ready for purchase upon completion of the activity to ensure efficient service.
- The meal (if supplied) should be ready and available upon the arrival of participants after the activity is completed.

6.4.3 Demand side factors

The demand side factors include those factors that make up the market, including market segmentation (or profile), motives of participation, aspects influencing satisfaction and aspects influencing the experience of participants. The following demand side aspects are important

- Profile
- Clusters
- Motives
- Experiences

The profile of marine adventure participants has been identified as English-speaking males, aged 36 to 45 years, with a diploma or degree from a tertiary institution. They originate mostly from international countries, such as United Kingdom, United States of America, Germany and Sweden (c.f. 5.3.2.1.5).

This market can be divided into six clusters, as identified by the primary data collection of this research. In order to conduct effective marketing and to ensure a satisfactory experience, operators should be aware of the six clusters and their needs. These clusters include the thrill seekers, risk takers, thalassophiles, consorts, experience seekers and adventure junkies. Each of these clusters have different characteristics (c.f. 5.5.2).

- For example, **thrill seekers** place high value on personal growth, the experience derived, achieving personal goals and overcoming a fear.
- The **risk takers**, on the other hand, place high value on the overall experience that is derived and are motivated by the positive contribution which participation in the activity will make towards their lifestyles.
- **Thalassophiles** are highly motivated by marine species such as whales, sharks, dolphins and penguins. Their main motive for participation in these activities are the prospects of seeing marine animals.
- **Consorts** are seen as the companions in the group. These are the participants who are mostly accompanying family members or friends.
- **Experience seekers** place high value on being satisfied with the operator and the service, therefore operators should ensure that an excellent service is delivered. This can be accomplished by being helpful, friendly and knowledgeable.
- **Adventure junkies** are therefore participating in the activity because it is something out of the ordinary for them and offers a once-in-a-lifetime experience.

In order to ensure that all six clusters are satisfied with the service, marine adventure operators can use the following as a guideline:

- Indicate the close proximity of animals to the vessel by means of photographs and videos
- Allow participants to comment on their experience with the operator on the website where potential participants can read it
- Ensure staff members are well-trained and knowledgeable by providing them regular training opportunities in the field
- Indicate the variety and types of animals that have been spotted in the area previously
- Explain the viewing process clearly by briefing participants beforehand on the importance of safety, the process to be followed and what to expect
- Pay attention to detail while delivering the service, such as comfort of participants, providing snacks on-board and providing a meal after the activity is completed

Part of knowing the target market is understanding the reasons why participants participate in the marine adventure activities. The results obtained from this research clearly indicate participants' motives to participate in shark cage diving and whale watching activities. Operators should keep these motives in mind when conducting marketing, as this will ensure the correct market is attracted. Four key motives have been identified, namely experiences, marine species, lifestyle and personal achievement. Firstly, the factor named experiences refer to the fact that participants want to have new and thrilling experiences. The operator should therefore make the activity as thrilling and unique as possible, by enhancing the experience with good service and new approaches.

In terms of the second factor, *marine species*, operators should keep the following aspects in mind:

- Make use of photographs and videos to showcase the animals that can be seen on the trip, such as whales, sharks, penguins and seals.
- Allow participants to take their own photographs during the trip.
- Monitor the species in the area and where they can be found to be able to take participants to those areas in the hope of spotting the animals. For example, seals colonise on Dyer Island in the Gansbaai area and operators can take participants to the area to show them the seals.

Thirdly, *lifestyle* refers to the fact that participants take part in marine adventure activities on a regular basis and that these activities form part of their lifestyle. The following should be kept in mind:

- These participants have knowledge on the marine environment and have participated in similar activities previously. Operators should therefore ensure that these participants are kept entertained by providing information (include an educational element in the trip) on aspects of the marine environment and the animals specific to the area.
- Participants value marine adventure activities highly and operators should ensure a quality experience is offered.

Lastly, *personal achievement* refers to the concept of overcoming a fear, challenging oneself and feeling successful upon completion of the activity. This is a personal element and one which operators have little influence over, but operators should take note of the following:

- Personalise the experience by giving each participant a certificate of completion with the names on. This certificate can also double as an information leaflet which specifies details of great white sharks or whales found in the area, along with details for contributions to conservation of marine species.
- Provide participants the opportunity to move around while the boat is anchored or drifting to allow them to see the animals from various perspectives.
- Crew members and tour guides on board should explain to participants why whales and sharks are necessary for marine ecosystems, thereby giving them an opportunity to overcome a fear for these animals.

Five factors have been identified which should be kept in mind when managing the experiences of participants:

- **Client service** is an important aspect which includes the fact that staff should be helpful and knowledgeable, all staff should be professional at all times, the quality of the environment should be kept high (for example, cleanliness and hygienic facilities) and the price of the trip should be affordable to participants.
- **The conditions** of the ocean should be taken into account before embarking on the trip. Rough seas will result in seasickness and will comprise the experience of participants.

- **Education** should include informing participants about the local marine environment, marine animals found in the area and informing participants about the viewing process.
- **Closeness to the marine environment**, giving them an opportunity to view whales and sharks as close as it is allowed.
- **Add-ons**, such as opportunities to purchase photographs and videos of the trip, meals received and individual attention from guides or marine biologists are important. To ensure participants are met with a great experience, the following guidelines can be followed:
 - Be welcoming, professional and helpful at all times
 - Have a briefing session where participants are informed about the trip, what they can expect and how they should behave on-board the vessel and in the presence of the animals
 - Ensure that participants are comfortable on-board by providing jackets and blankets if necessary
 - Tour guides or marine biologists should point out and explain interesting animals or occurrences while on-board and inform participants about it
 - Provide opportunities for participants to ask questions about the animals, the viewing process, or the environment
 - Ensure participants' safety on-board by providing life jackets and informing them about safety regulations on-board the vessel and in the cage

Lastly, the aspects which contribute to the satisfaction of participants can be highlighted as follows:

- Staff members should be friendly and welcoming
- Operators should ensure that all staff members have the necessary knowledge to conduct their work effectively and to interact with participants
- A clear briefing session should be conducted before commencement of the trip to ensure all necessary information is communicated, such as safety information and procedures
- After the trip is completed have a debriefing session where participants can look at the photographs of the trip, the video, have an opportunity to purchase the photographs or video, provide an opportunity for questions, inform participants about conservation practices and how they can get involved
- Operators should ensure to highlight their view on conservation, as well as identify any conservation opportunities with which participants can become involved
- Equipment should be of a good quality and should not compromise the safety or comfort of participants
- Information should be given to participants about the marine species and the environment
- Environmental friendly practices, such as recycling, should be implemented.

6.4.4 Supply side factors

The supply side factors include the aspects which operators should be doing to improve the sustainability of the sector. According to the data collected from the qualitative interviews, these aspects include training and education for staff, contribution to conservation, educational programmes for the community and participants and further research on the animals and the sector. These aspects are discussed below:

6.4.4.1 Training

The qualifications and quality of training of staff are important from a supply side. The following should be taken into account (c.f.5.2.7):

- Training for frontline and office employees on how to interact with customers and how to operate the booking system.
- Training for crew members on on-board health and safety.
- First aid training for crew members.
- The skipper should have the required training and permit to operate.
- The crew should have training on operational elements of the boat, such as how to correctly set up the cage for shark cage diving, moving around the boat and health and safety
- Tour guides should have the necessary training on the marine environment and should be a registered tour guide with the FGASA (Field Guides Association South Africa) or the association of the particular province, such as the Cape Tourist Guides Association (CTGA).
- Training should also be provided to ground staff on environmental-friendly practices, such as recycling and proper waste removal.

6.4.4.2. Contribution to conservation

Operators can contribute to conservation in various ways, such as making a financial contribution to African Conservation Experience, ORCA Foundation (Oceans Research Conservation Africa), the Baywatch Project, SANCCOB (the South African foundation for the Conservation of Coastal Birds), beach and reef clean-ups, or South African Shark Conservancy. Operators can also choose to create their own methods of conservation, such as a research unit for whale- and shark research or a seabird conservation unit. Various ways in which money can be gathered for conservation purposes include:

- Financial contribution from participants of whale watching and shark cage diving
- A percentage of the cost per trip can be allocated for conservation purposes
- In-kind donations from donors and the community
- Fundraiser initiatives, such as a festival or donating all proceeds from one day's activities to a conservation of choice

- Information should be distributed on the website pertaining to the various marine conservation initiatives and how people can contribute to it
- A marine volunteer programme can be established that allows people to volunteer their time as a means of contributing to conservation activities, such as beach clean-up days.
- A boat engine with decreased carbon emissions should be installed to minimise pollution from the boat

6.4.4.3 Products offered

Products offered by the operator should be customised to suit the needs of the market. This means that various types of packages can be offered, depending on what participants want. For example, whale watching, shark cage diving, marine ecotours and sundowner cruises can be offered by the operator. This will not only aid penetration of different markets, but will provide an additional way of educating the public and raising awareness for conservation of the marine environment. Events that can be catered for include team building events, birthday parties and celebrations. The operator should not arrange the event, but only provide the vessel and safety equipment.

6.4.4.4. Education

Emphasis should be placed on education during the activity. This includes educating the participants, the social community and the public. Information that should be included in educational programmes for the public and for participants include the following:

- The importance of the marine environment and its survival for the fishing industry and tourism industry
- Information on the behaviour of whales and sharks
- The importance of whales and sharks for the ecosystem
- The viewing process for whale watching and shark cage diving
- Information on the migratory patterns of whales and sharks
- The impacts of pollution and global warming on the ocean and marine species.

6.4.4.5 Research

Research should be conducted to improve knowledge of whales and sharks as well as tourists. This research should include identifying the migratory patterns of both whales and sharks, their reasons for congregating on the South African coast and the influence of global warming on these animals. By identifying information pertaining to these concepts, operators will have a clear understanding of the animals and how the activity should be regulated. An incident during the 2016/2017 season that caused the sharks to disappear for approximately six weeks (Marine Dynamics, 2016). It was later discovered that Orca whales are killing the Great White Sharks, which caused the sharks to disappear. This is one topic of interest that should be explored in order to identify why Orcas kill Great White Sharks and where the sharks disappeared to.

By employing qualified marine biologists, operators can conduct their own research on the animals and the market for the sector. This type of research will include profiling and market segmentation, motives of participation, satisfaction and aspects influencing experiences.

6.4.4.6 Community relations

Three impacts have been identified which could influence the relationship between shark cage diving and whale watching operations and the community, namely awareness, negative aspects and community benefits. In terms of awareness, the operator can enhance awareness of the destination by means of the following:

- Provide opportunities for entrepreneurs in the area and increase the image of the destination further.
- By employing local residents as crew members, frontline staff, or tour operators the living standards of the local community can be enhanced and interaction between local residents and visitors can be increased.

Negative aspects arise with tourism activities in an area, such as damage to the environment, misuse of alcohol and drugs, disruptive behaviour, increased crime and traffic congestions. To avoid negative impacts on the community the following can be considered:

- By educating participants to the area on appropriate behaviour regarding the environment, destructive behaviour can be minimised or avoided. This includes informing participants on proper waste disposal and environmental-friendly behaviour, such as not feeding animals.
- The operator can contribute to the community by placing bins in areas where tourists congregate mostly. This will provide tourists to the area of a way of disposing of their litter appropriately instead of dumping litter in the environment.
- Parking should be laid out in such a manner to avoid traffic congestions. This can be done by having a separate entrance and exit for vehicles at the parking bay.

Community benefits should include a clean environment and increased entertainment opportunities. The operator should consider the following ideas pertaining to increasing community benefits:

- Open days should be held where the community can attend workshops on the marine environment and experience the activity by means of watching video recordings. Workshops can be arranged during school holidays for children in the community. These workshops can focus on educating children by means of activities suited to the various age groups, for example a colouring in competition or a puppet show. Special packages can be created for local community members as the current prices are sometimes not affordable for local communities. For example, 20% discount can be offered certain days or a special package for local residents with a reduced price. The operators should work together with the local authorities (municipality) in order to arrange such workshops.

6.4.5 Guidelines to sustainability

After the influencing factors relating to the internal, external, demand side and supply side have been discussed, the following guidelines (outputs) for sustainable management of marine adventure tourism operations can be established. The guidelines are divided into the three categories based on the core aspects of sustainability, namely environmental management, economic management and socio-cultural management.

6.4.5.1 Environmental management

- Crew members on-board a shark cage diving boat should know how to attract sharks without feeding them and how to set up the cage to ensure participants are safe
- The operator should implement environmental-friendly practices, such as boat engines with low CO₂ emissions and recycling and enforcing anti-chumming practices, as stipulated by the Marine Living Resources Act No 18 of 1998 (South Africa, 1998a).
- Operators should aim to decrease negative impacts, such as environmental damage caused by litter and oil and rowdy behaviour by tourists. This can be done by implementing certain measures, such as visitor control measures, environmental-friendly practices and opportunities for the community to participate in both the activity and decision-making.
- Operators should enforce anti-littering behaviour as well as compliance with regulations set by the government under the Marine Living Resources Act No 18 of 1998 (South Africa, 1998a).
- Operators should not approach whales at a distance closer than 50 meters.
- Operators should not throw, or allow participants to throw litter into the ocean. Instead provide a bin on the boat and remove any litter encountered in the ocean.
- Operators should not feed the animals in any way. This includes the use of chumming as a method of attracting sharks.
- Participants and operators should not touch or swim with the animals. Not only can this disrupt the animals, but it is dangerous for the participant.

6.4.5.2 Economic management

- Extending business operations to include additional services, such as a restaurant or coffee shop where day visitors can spend free time can increase the income of the operation. Marine eco-tours can be conducted during off-peak periods and conservation initiatives can be established. Through such extensions additional jobs can be created for the local residents, which contributes to increased income for residents.
- Setting competitive prices and ensuring the price charged for a trip is representative of the level of service.
- Calculate the total expenses of the operation to determine how much income is needed in order to cover all costs.

- Purchase supplies from local suppliers, such as food and equipment, instead of importing supplies from other parts of the country or the world.
- A budget should be established each year which highlights the total expected income and the expenses per department (marketing, financial, human resources and operations). This budget should be adhered to, to ensure financial growth.
- Local community members should be hired to enhance the living standards of local residents by providing them with an income.
- During off-peak seasons, such as winter months for shark cage diving and December months for whale watching, prices should be lowered to attract participants.

6.4.5.3 Social management

- Involve the local community in planning of sustainable development and expansion of the industry by hosting a general meeting once a year where the community can give their input.
- Hire employees from the local community to create jobs for residents.
- Social responsibility: Offer discounts on trips for local residents to offer them an opportunity to participate in the activity as well. Group discounts on prices can also be offered for school excursion groups.
- Hire local tour guides or give local residents the opportunity to train for tour guides. Local residents have knowledge about the environment that is useful to the operator. This will also create further employment opportunities.
- Educational programmes should be hosted for the local community on the marine environment. These programmes can be hosted at local schools to inform learners about the environment and to harbour positive attitudes towards sustainability from a young age.
- Programmes can be hosted during tourism month (September) for the local community where they can learn more about the marine environment. Promotions can also be run during this month which will encourage local residents to participate in the activity.
- Operators can run competitions on social media and in the community to encourage people to participate in conservation projects or to attend an educational programme.
- Educational programmes can be hosted at the Hermanus Whale Festival which will inform festival attendees about the whales in the area and conservation opportunities. This will contribute to increasing awareness of whales and sharks amongst local residents, and create understanding of the value of the Hermanus Whale Festival.

6.4.6 Outputs

Upon implementation of the above-mentioned framework a sustainable management approach can be ensured for marine adventure activities, such as shark cage diving and whale watching.

6.4.7 Feedback

Once outputs are achieved, the operation should be evaluated on the guidelines implemented on a yearly basis in order to identify the positive and negative aspects of the operation, as well as what is working and what is not working. Feedback can then be given to the employees of the operations based on the strengths and weaknesses of the operation and solutions can be established. Feedback will help to identify shortcomings or problems and solutions can be developed to solve these problems. The inputs of the operation should also be considered to provide comprehensive feedback. This will further help to put the problem into perspective and will enhance problem solving. The internal and external environments will therefore help operators to identify any problems within the operation and to come up with problem specific solutions.

6.5 RECOMMENDATIONS AND FUTURE RESEARCH OPPORTUNITIES

The following section discussed recommendations made by the researcher pertaining to sustainability of shark cage diving and whale watching, as well as the identification of future research opportunities in the field.

6.5.1 Managerial recommendations

The following managerial recommendations are made by the researcher regarding the management of marine adventure products, such as shark cage diving and whale watching.

- A service-oriented organisational culture of friendliness, helpfulness and professionalism should be created amongst employees of the operation. This means that employees should be satisfied in their jobs, they should not be overworked and they should receive appropriate remuneration. Satisfied employees will contribute to satisfied participants. The human resources department will be responsible for ensuring the service culture is enforced. For example, crew members can work in shifts. This will also allow for a greater number of jobs created.
- Marketing efforts should include regular blog posts on the conditions of the ocean and details of the trips taken. Information on the marine environment and new research efforts should also be communicated to the public. Not only will this increase awareness but will contribute to conservation even further. Marketing efforts should also include striking marketing material with specials and discounts, if applicable, along with the experiences of previous participants. This should be enforced by the marketing executive of the operation.
- Attention should be paid to the finer details of the service delivery process, which can enhance participants' satisfaction. This can include paying attention to aspects such as catering for vegetarian participants, offering blankets to participants on-board, offering to help participants on-board the boat and ensuring wetsuits are clean. This should be overseen and enforced by the operator.
- The operator should have regular meetings, at least once a month, to inform employees of any changes, happenings, or important aspects in the operation. These meetings should also be

used to give employees a chance to make suggestions and to acknowledge any problems amongst staff members.

- Training should be provided to staff members of all departments in the operation and should be specific to their positions. For example, marketers should receive training on online marketing, search engine optimisation and Google AdWords, while frontline employees should receive training in communicating effectively with participants and the booking system. The training needs should be identified by the operator through reviewing staff productivity on a monthly basis.
- The market taxonomy (T²RACE) should be used to produce a service which is conducive to the market. The service should include elements which participants from all six clusters can relate with, such as providing all participants a chance to view the sharks and whales from up close, if possible.
- The negative community impacts should be minimised by producing a service which benefits the community as well, such as employing local residents and enhancing the aesthetics of the city/town by having bins placed along the beach, at the harbour and in areas where tourists frequent.
- The guidelines, as established in this chapter, should be followed to ensure the sustainable management of marine adventure products in South Africa.

6.5.2 Recommendations for future research

The following recommendations can be made for future research in this regard:

- This research should be applied to other forms of marine adventure tourism to establish a framework which can be applied to marine adventure tourism products inclusive.
- The economic contribution of the complete marine adventure tourism sector should be determined.
- Research should be conducted into the core components of a general management plan for marine adventure tourism operations. The research should establish the general management plan in such a way so that it can act as a guideline for future business operations. Such a plan will provide operators the opportunity to identify any potential changes, risks, or opportunities in the market and operators will be able to manage the operation accordingly. Operators of varying activities within the scope of marine adventure tourism, such as scuba diving, snorkelling, shark cage diving, whale watching and deep-sea fishing, should be able to follow this management plan.
- Research should be conducted on the impact of shark cage diving and whale watching activities in the personal quality of life of the communities of Hermanus and Gansbaai.
- Interviews should be conducted with the local authorities to determine their level of understanding of the marine adventure tourism industry. These interviews should also identify

the gaps existing in relation to issuance of permits and licenses. Recommendations for improvement and government involvement can thus be made based on such results.

- Research should be conducted on the influence of pre-trip exposure to sustainable participant behaviour guidelines on marine adventure participants' behaviour during the trip. This is proposed to be a qualitative study with two respondent groups. The test group should undergo a presentation on sustainable participant behaviour, while the control group is not exposed to the presentation. The results obtained should be analysed to identify whether or not exposure to a presentation on sustainable participant behaviour before participating in such a trip, has an influence on participants.

Appendices

Appendix A: Sustainability criteria for tourism operators

SUSTAINABILITY CRITERIA FOR OPERATORS

A: Demonstrate effective sustainable management									
1. A sustainability management system is in place									
2. The operator complies with all relevant legislation and regulations									
3. An up to date list of legal requirements are available									
4. All compliance with permits/licenses and planning conditions are recorded									
5. All staff members are aware of their roles and responsibilities i.t.o. the environment									
6. Staff have locally required licenses/certifications relevant to their duties									
7. Staff receive on-the-job and formal training with regards to awareness									
8. A complaint system is in place for customers									
9. Images used in marketing material is of actual experiences									
10. Marketing does not promise sightings of whales/sharks which are not guaranteed									
11. Claims about sustainability is based in past performances and not future aspirations									
12. Land use, activities are in compliance with local zoning and protected area laws, regulations									
13. Licenses, permits and management plans are in compliance with local zoning and protected area laws and regulations									
14. Endangered, protected wildlife has not been displaced, habitats destroyed during any activities									
15. Buildings do not destroy scenic amenity									
16. Water courses have not been altered and runoff from buildings, parking areas and grounds are channelled and filtered									
17. The level of accessibility is clearly communicated to the customer									
18. Land use/tenure and rights to activities to activities have formal legal recognition or there is documentation of agreements by local communities and indigenous owners									
19. The operator has an interpretation program with displays, guides and/or collateral									
SECTION B: Maximise social and economic benefits and minimise negative impacts									
20. The operator makes some form of contribution for public benefit									
21. Local residents are employed									
22. Training and career opportunities are offered to local residents									
23. Purchases are mostly from local providers									
24. A documented policy is made known to all staff and management against commercial, sexual or other forms of exploitation									
25. Percentage of women and minority employees are reflected in local demographics									
26. No child labour takes place									
27. Salaries and benefits meet or exceed regulations									
28. Overtime is paid for hours worked beyond the established work week									
29. Working hours do not exceed the established legal maximums									
30. Employees receive annual paid vacation									

31. Health insurance or the equivalent is provided to all employees							
32. No increase in the number of incidents or accidents							
33. No reduction in the availability of water, waste and energy to the community as a result of the operator							
34. Community has access to public, common areas and can engage in traditional livelihoods							
35. Rights-of-way, transport and housing remain accessible and affordable to locals							
SECTION C: Maximise benefits to cultural heritage and minimise negative impacts							
36. The operator has its own code of behaviour or guidelines which is annually reviewed							
37. There is an in-kind or cash contribution to the protection and preservation of sites visited							
38. Local residents retain equitable and cost-effective access to the site							
SECTION D: Maximise benefits to the environment and minimise negative impacts							
39. Purchasing policie favours local and/or ecologically sustainable products/services							
40. The purchasing policy requires re-usable, returnable and recycled goods							
41. Awareness is created amongst staff and guests as to minimising ennergy use							
42. Water sourcing, consumption is sustainable and does not adversely effect environmental flows							
43. The Carbon Footprint per activity is monitored and is not increasing year on year							
44. Carbon offset mechanisms and used where practical							
45. Customers and staff are aware of practical measures/opportunities to reduce transport related greenhouse gas emissions							
46. Wastewater is either disposed to a munisipal or governmental approved treatment system							
47. A solid watse management plan is in place with goals to minimise waste							
48. Chemicals used are recorded on a material safety datasheet							
49. Chemicals have been reviewd to identify alternatives							
50. Chemicals are stored and handled in accordance with aproprate standards							
51. There is minimal pollution in terms of:							
Noise							
Light							
Runoff							
Erosion							
Ozone depleting compounds							
Air pollutants							
Water pollutants							
Soil contamination							
52. There is evidence of compliance wirh local to international laws for any harvesting, consumption, display, sale or trade of wildlife							
53. Operator has a program in place to ensure they do not bring in alien species, nor spread them							
54. The organisation supports and contributes to biodiversity conservation, including natural protected areas and areas of high biodiversity value							
55. Operator contributes towards environmental education in biodiversity conservation initiatives							
56. With interaction with widlife the operator has sought approval from government or sanction from experts to ensure no adverse effects							
57. Program in place to minimise impacts such as disturbance of wildlife or natural ecosystems							

Appendix B: Hermanus residents' questionnaire

RESIDENTS' PERCEPTIONS OF HERMANUS WHALE FESTIVAL 2016

SECTION A: PROFILE OF THE RESIDENTS

A1. In what year were you born?	19_____	
A2. What is your gender?	Female	1
	Male	2
A3. Occupation? Please mark only one box.	Professional	1
	Manager	2
	Self-employed	3
	Technical	4
	Sales personnel	5
	Administrative	6
	Civil service	7
	Education	8
	Home duties	9
	Pensioner	10
	Unemployed	11
	Other (Specify)	12

A4. What is the highest education level you have completed?
Please mark only one box.

No school	1
Matric	2
Diploma, degree	3
Post-graduate	4
Professional	5
Other (Specify)	6

SECTION B: OVERALL IMPACT OF THE WHALE FESTIVAL

B1. Overall, how does the Hermanus Whale Festival affect the Hermanus *community* as a whole?

Very negatively		No effect		Very positively		
-3	-2	-1	0	1	2	3

B2. Overall, how does the Hermanus Whale Festival affect *you* as individual?

Very negatively		No effect		Very positively		
-3	-2	-1	0	1	2	3

SECTION C: PARTICIPATION IN THE FESTIVAL

C1. Which of the following statements best summarises your level of interest in the festival?
Please mark only one box.

I am an avid fan of this festival and try to attend as many as possible	1
I am interested in this festival and attend when I can	2
I am not interested in this festival, but I sometimes attend it because friends and family are interested	3
I have absolutely no interest in this festival and do not wish to attend it	4

C2. Are you working at the festival?	No	1
	Yes	2

C3. Approximately how long have you been living in Hermanus?
_____ years

C4. Evaluate the Hermanus Whale Festival:	TOTALLY DISAGREE	DO NOT AGREE	NEUTRAL	AGREE	TOTALLY AGREE
The festival is accessible to residents	1	2	3	4	5
The festival is well marketed	1	2	3	4	5
Information is readily available	1	2	3	4	5
The festival is well organised	1	2	3	4	5
The area fits the purpose of the event	1	2	3	4	5
The exposure to the Province is excellent	1	2	3	4	5
Other (Specify):	1	2	3	4	5

C5. How important are the following events as spectator/ participant to the festival?

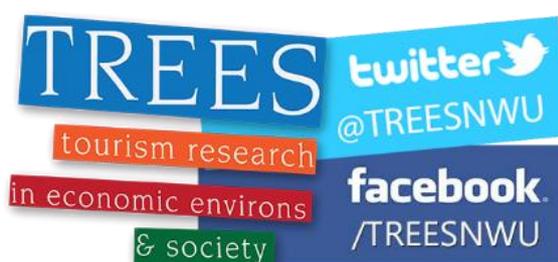
	5. Extremely important				
	4. Very important				
	3. Important				
	2. Slightly important				
	1. Not at all important				
1. Watershed Live	1	2	3	4	5
2. Eco-marine village	1	2	3	4	5
3. Coke music stand	1	2	3	4	5
4. Petzl Wolfpack Trails	1	2	3	4	5
5. Whale festival sporting events at Benguela Cove	1	2	3	4	5
6. Whale and Wheels	1	2	3	4	5
7. The Total Whale Half Marathon	1	2	3	4	5
8. Berg and Beach trail run	1	2	3	4	5
9. Go Rally: Cape to Hermanus	1	2	3	4	5
10. Clivia show	1	2	3	4	5
11. Street paarde	1	2	3	4	5
12. Treasure hunt	1	2	3	4	5
13. Chris Chameleon	1	2	3	4	5

SECTION D: SPECIFIC TOURISM IMPACTS

Please answer all questions in this section!

BECAUSE OF THE FESTIVAL....	STRONGLY DISAGREE	MODERATELY DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	MODERATELY AGREE	STRONGLY AGREE
employment opportunities in the area have increased	1	2	3	4	5	6
entertainment opportunities have increased	1	2	3	4	5	6
residents have more pride in their community	1	2	3	4	5	6
litter in the area has decreased	1	2	3	4	5	6
opportunities for local businesses have increased	1	2	3	4	5	6
public funding for community activities has increased	1	2	3	4	5	6
the rights of local residents have increased	1	2	3	4	5	6
the overall cost of living has increased	1	2	3	4	5	6
disruptive behaviour has increased	1	2	3	4	5	6
damage to the environment has increased	1	2	3	4	5	6
excessive drinking and/or drug use has increased	1	2	3	4	5	6
incidents of crime have increased	1	2	3	4	5	6
prices of some goods and services have increased	1	2	3	4	5	6
noise levels in the area have increased	1	2	3	4	5	6
interactions between locals and visitors have increased	1	2	3	4	5	6
parking availability in the area has increased	1	2	3	4	5	6
the turnover for local businesses has increased	1	2	3	4	5	6
traffic congestion in the area has increased	1	2	3	4	5	6
opportunities for shopping have increased	1	2	3	4	5	6
infrastructure in the area has improved	1	2	3	4	5	6
trading in the area has increased	1	2	3	4	5	6
more tourists visit this area	1	2	3	4	5	6
the image of the city/town has improved	1	2	3	4	5	6
the living standards of locals have improved	1	2	3	4	5	6
the economy of the area has improved	1	2	3	4	5	6
the maintenance of public facilities has improved	1	2	3	4	5	6
the overall appearance of the area has improved	1	2	3	4	5	6
there are opportunities for people to have fun	1	2	3	4	5	6
more people are aware of Hermanus as destination	1	2	3	4	5	6
there are more opportunities for entrepreneurs	1	2	3	4	5	6
residents get irritated with the number of people	1	2	3	4	5	6
friends visit me	1	2	3	4	5	6
THANK YOU FOR YOUR COOPERATION!						

Do you have any suggestions on how events such as this one can make a bigger contribution to your local community?



Research done by TREES (Tourism Research in Economic Environments and Society), North-West University, Potchefstroom Campus in collaboration with Northern Cape Tourism ©Copyright 2015

Appendix C: Marine adventure participants questionnaire

MARINE ADVENTURE ACTIVITY PARTICIPANTS 2016			
SECTION A: Demographic detail			
1. Gender	M	1	6. Highest level of education?
	F	2	No school
			1
2. Year of birth?			Matric (Grade 12)
			2
			Diploma/degree
			3
			Post-graduate
			4
3. Home language?			Professional
			5
Afrikaans	1		Other (Specify)
English	2		6
Other (Specify)	3		
			7. What is your annual gross income?
			<R 20 000
			1
4.1 Province of residence?			R20 001 - R140 000
			2
Gauteng	1		R140 001 - R221 000
Free State	2		3
Limpopo	3		R221 001 - R305 000
Mpumalanga	4		4
KwaZulu-Natal	5		R305 001 - R431 000
Nort West	6		5
Northern Cape	7		R431 001 - R552 000
Eastern Cape	8		6
Western Cape	9		R552 001 - R672 000
			7
			> R672 001
			8
			8. Which type of accommodation do you make use of ?
			Family and Friends
			1
4.2 Country of residence (if outside RSA borders)			Hotels
			2
			Guesthouse
			3
			Bed and Breakfast
			4
5.1 How many people are travelling in your group			Self-catering
Number: <input type="text"/>			5
			Camping
			6
5.2 How many people are you paying for during the Whale Festival (includnig yourself)?			10. Where did you hear about this operator?
Number: <input type="text"/>			Television
			1
			Radio
			2
5.3 If not a local resident of Hermanus, how many nights do you spend in the area?			Website
<input type="text"/>			3
			Email
			4
			Newsletter
			5
			Magazine
			6
9. What type of visitor are you?			Word-of-mouth
a. Local resident			7
b. Day visitor			Office signage
c. Overnight visitor			8
			Other (specify)
			9
			a.
			b.

11. Of all the marine animals, which one is your favourite?								
<input type="text"/>								
12. What other marine adventure activities do you participate in?				13.1 How many times have you been on such a trip previously?				
Surfing				Number: <input type="text"/>				
Scuba diving								
Sea kayaking				13.2 Would you do this again in the future?				
Wave rider (Speed boat)				Yes <input type="text"/>				
Snorkeling				No <input type="text"/>				
Deep sea fishing								
None				13.3 If "no" in 13.2, please indicate why not.				
Other (Specify)				<input type="text"/>				

14. Willingness to pay
Whale and shark numbers are under extreme pressure and generally there is lack of funding for the conservation of these species. Therefore, would you be willing to pay R30 as a conservation fee for the protection of:

14a. Whales	Yes	No	14b. Sharks?	Yes	No
-------------	-----	----	--------------	-----	----

14c. If NO, to question 14a or 14b above, rate the reasons for not supporting this initiative, where 1 is the most important reason and 4 the least important reason.

ca. I already pay tax and conservation should e funded by the government	
cb. Why should I pay when others are not?	
cc. It is too expensive.	
cd. It is not my concern.	
ce. Other reasons not listed above, please specify.	

SECTION C: Travel Motives

1. Please indicate, according to the scale provided, why you have decided to participate in this activity (i.e. whale watching or shark cage diving).

Extremely important					
Very important					
Important					
Slightly important					
Not at all important					
	1	2	3	4	5
a. Primarily for educational reasons (to learn things, increase my knowledge)	1	2	3	4	5
b. To photograph marine life	1	2	3	4	5
c. It is a spiritual experience	1	2	3	4	5

d. It is value for money	1	2	3	4	5
e. It is part of my lifestyle	1	2	3	4	5
f. For my well-being	1	2	3	4	5
g. To overcome risks					
h. So that other members of my party could learn about marine wildlife	1	2	3	4	5
i. For new experiences	1	2	3	4	5
j. To overcome a fear for whales/sharks	1	2	3	4	5
k. The feeling of success after the activity is over	1	2	3	4	5
l. To experience thrill and excitement	1	2	3	4	5
m. To be close to marine nature	1	2	3	4	5
n. To be close to a dangerous animal (such as a shark/whale)	1	2	3	4	5
o. To have a novel experience	1	2	3	4	5
p. Because it is challenging	1	2	3	4	5
q. To develop skills	1	2	3	4	5
r. To learn new skills	1	2	3	4	5
s. For fitness purposes	1	2	3	4	5
t. Adventure has unknown outcomes	1	2	3	4	5
u. The following excites me:					
1. Sharks	1	2	3	4	5
2. Whales	1	2	3	4	5
3. Dolphins	1	2	3	4	5
4. Seals	1	2	3	4	5
5. Penguins	1	2	3	4	5

SECTION C: Travel Motives

1. Please indicate, according to the scale provided, why you have decided to participate in this activity (i.e. whale watching or shark cage diving).					
Extremely important					
Very important					
Important					
Slightly important					
Not at all important					
	1	2	3	4	5
a. Primarily for educational reasons (to learn things, increase my knowledge)	1	2	3	4	5
b. To photograph marine life	1	2	3	4	5
c. It is a spiritual experience	1	2	3	4	5
d. It is value for money	1	2	3	4	5
e. It is part of my lifestyle	1	2	3	4	5
f. For my well-being	1	2	3	4	5
g. To overcome risks					
h. So that other members of my party could learn about marine wildlife	1	2	3	4	5

i. For new experiences	1	2	3	4	5
j. To overcome a fear for whales/sharks	1	2	3	4	5
k. The feeling of success after the activity is over	1	2	3	4	5
l. To experience thrill and excitement	1	2	3	4	5
m. To be close to marine nature	1	2	3	4	5
n. To be close to a dangerous animal (such as a shark/whale)	1	2	3	4	5
o. To have a novel experience	1	2	3	4	5
p. Because it is challenging	1	2	3	4	5
q. To develop skills	1	2	3	4	5
r. To learn new skills	1	2	3	4	5
s. For fitness purposes	1	2	3	4	5
t. Adventure has unknown outcomes	1	2	3	4	5
u. The following excites me:					
1. Sharks	1	2	3	4	5
2. Whales	1	2	3	4	5
3. Dolphins	1	2	3	4	5
4. Seals	1	2	3	4	5
5. Penguins	1	2	3	4	5

SECTION D: Experience

1. Please indicate the extent to which the following aspects have an influence on your experience.					
Great influence					
Big influence					
Some influence					
Slight influence					
No influence at all					
	1	2	3	4	5
a. Variety of animals (sharks/whales/seals)	1	2	3	4	5
b. Ease of accessibility of the operator	1	2	3	4	5
c. To learn more about the animal	1	2	3	4	5
d. To learn more about the viewing process	1	2	3	4	5
e. To be in close proximity to the animal	1	2	3	4	5
f. The comfort of the boat	1	2	3	4	5
g. Friendliness of the staff	1	2	3	4	5
h. The behaviour of the whales/sharks	1	2	3	4	5
i. Calm conditions of the sea	1	2	3	4	5
j. Seasickness	1	2	3	4	5
k. Location of the operator	1	2	3	4	5

l. Price of the trip	1	2	3	4	5
m. Atmosphere on land and on board	1	2	3	4	5
n. Internal appearance of the boat	1	2	3	4	5
o. Helpful and knowledgeable guides	1	2	3	4	5
p. Knowledge and skills of the skipper	1	2	3	4	5
q. Quality of the environment (pollution)	1	2	3	4	5
r. The people who I share the experience with	1	2	3	4	5
s. Reputation of the operator	1	2	3	4	5
t. Being able to purchase photographs/videos of my experience	1	2	3	4	5
u. Being familiar with the animal	1	2	3	4	5
v. Experiencing a closeness to nature	1	2	3	4	5
w. Professionalism of the staff/guides	1	2	3	4	5
x. Prompt service and response	1	2	3	4	5
y. Individual attention	1	2	3	4	5
z. Extras received on the trip (lunch/coffee)	1	2	3	4	5

2. Please indicate your level of satisfaction with regards to the following aspects.					
Great influence					
Big influence					
Some Influence					
Slight influence					
No influence at all					
	1	2	3	4	5
a. Service delivered by the operator	1	2	3	4	5
b. Friendliness of the staff	1	2	3	4	5
c. Knowledge of the operator and staff	1	2	3	4	5
d. Clear briefing and instructions	1	2	3	4	5
e. Standard of the equipment used	1	2	3	4	5
f. Information and interpretation regarding marine animals	1	2	3	4	5
g. Environmental friendly practices implemented (e.g. not too many boats per site)	1	2	3	4	5

3.1 Have the operators expressed their view regarding the impact of whale and shark tourism on the local community?								
							Yes	
							No	
3.2 If "yes" in 3.1, please shortly explain what their views are.								
4. Any further recommendations or suggestions?								
<i>Thank you for participating in this survey!</i>								
Research done by Tourism Research in Economic Environs and Society, North-West University, Potchefstroom Campus								



List of References

- Active-tourism. 2002. Official definition of active tourism. <http://www.active-tourism.com/Questions1ActTour.html> Date of access: 25 January 2017.
- Ap, J. 1990. Residents' perceptions research on the social impacts of tourism. *Annals of tourism research*, 17(4):610-616.
- Apps, K., Dimmock, K., Lloyd, D. & Huveneers, C. 2016. In the water with White Sharks (*Carcharodon carcharias*): participants' beliefs toward cage-diving in Australia. *Anthrozoös*, 29(2):231-245.
- Archer, B., Cooper, C. & Ruhanen, L. 2005. The positive and negative impacts of tourism. (In Theobald, W.T. Ed. *Global tourism*. Burlington: Elsevier Inc. p. 79-102).
- Aronsson, L. 2000. *The development of sustainable tourism*. London: Continuum.
- Askama, J.S. & Kieti, D.M. 2003. Measuring tourist satisfaction with Kenya's wildlife safari: a case study of Tsavo West National Park. *Tourism management*, 24(1):73-81.
- Avila-Foucat, V.S., Gendron, D., Revello-Fernandez, D., Popoca, E.I. & Ramirez, A. 2017. Determinants of the potential demand for whale watching in Loreto Bay National Park. *Marine policy*, 81(1):37-44.
- Baker, N. & Roberts, C. 2008. Attitude to and preferences of divers towards regulation. (In Garrod, B. & Gössling, S., eds. *New frontiers in marine tourism: diving experiences, sustainability, management*. Amsterdam: Elsevier. p. 171-187.)
- Ballantyne, R., Packer, J. & Falke, J. 2011a. Visitors' learning for environmental sustainability: testing short- and long-term impacts of wildlife tourism experiences using structural equation modelling. *Tourism management*, 32(1):1243-1252.
- Ballantyne, R., Packer, J. & Hughes, K. 2009. Tourists' support for conservation messages and sustainable management practices in wildlife tourism experiences. *Tourism management*, 30(1):658-664.
- Ballantyne, R., Packer, J. & Sutherland, L.A. 2011b. Visitors' memories of wildlife tourism: implications for the design of powerful interpretive experiences. *Tourism Management*, 32(1):770-779.

- Barendse, J. & Best, P.B. 2014. Shore-based observations of seasonality, movements, and group behaviour of southern right whales in a non-nursery area on the South African west coast. *Marine mammal science*, 30(4):1358-1382.
- Barkin, D. 2000. Social tourism in rural communities: an instrument for promoting sustainable resource management. <http://lasa.international.pitt.edu/Lasa2000/Barkin.PDF> Date of access: 30 October 2017.
- Barnett, V. 1974. Elements of sampling theory. London, UK: The English Universities Press Ltd.
- Basiron, M.N. 1997. Marine tourism industry: trends and prospects. Paper presented at the International Seminar on the Development of the Marine Tourism Industry in South East Asia, Longkwai.
- Baumgartner, C. 2009. Nachhaltigkeit im Tourismus. Von der Tourismuspolitik für Nachhaltigkeit zu einem Bewertungsschema. Innsbruck: Studienverlag.
- Baumgartner, C. 2013. Montenegro: wild beauty. (In Beckendorf, P. & Lund-Durlacher: D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p. 43-45).
- Beedie, P. 2005. The adventure of urban tourism. *Journal of travel and tourism management*, 18(3):37-48.
- Beedie, P. & Hudson, S. 2003. Emergence of mountain-based adventure tourism. *Annals of tourism research*, 30(3):625-643.
- Bennett, N.J. & Dearden, P. 2014. Why local people do not support conservation: community perceptions of marine protected area livelihood impacts, governance and management in Thailand. *Marine policy*, 44(1):107-116.
- Bentley, T.A. & Page, S.J. 2001. Scoping the extent of adventure tourism accidents. *Annals of Tourism Research*, 28(3):705-726.
- Bentley, T.A., Page, S.J. & Laird, I.S. 2001. Accidents in the New Zealand adventure tourism industry. *Safety science*, 38(1):31-48.
- Bentz, J. 2015. Optimal strategies for marine wildlife tourism in small islands. Portugal: Universidade dos Acores. (Thesis - PhD).
- Bentz, J., Dearden, P. & Calado, H. 2013. Strategies for marine wildlife tourism in small islands – the case of the Azores. *Journal of coastal research*. Special issue no 65:874-879.

- Bentz, J., Lopes, F. & Calado, H. 2016. Managing marine wildlife tourism activities: analysis of motivations and specialisation levels of divers and whale watchers. *Tourism management perspectives*, 18(1):74-83.
- Best, P.B. 2000. Coastal distribution, movements and site fidelity of right whales *Eubalaena australis* off South Africa. *South African journal of marine science*, 22(1):43-55.
- Bignoux, S. 2006. Short-term strategic alliances: a social exchange perspective. *Management decision*, 44(5):615-627.
- Bosch, Z.J. 2015. A needs analysis of adventure activities in South African National Parks. Potchefstroom: North-West University. (Dissertation - MA).
- Bostrom, M. 2012. A missing pillar? Challenges in theorizing and practicing social sustainability: introduction to the special issue. *Sustainability: science, practice & policy*, 8(1):3-4.
- Bradley, N. 2007. Marketing research: tools and techniques. Oxford: Oxford University Press.
- Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2):77-101.
- Brejla, P. & Gilbert, D. 2014. An exploratory use of web content analysis to understand cruise tourism services. *International journal of tourism research*, 16(2):157-168.
- Bruce, B.D. & Bradford, R.W. 2012. The effects of shark cage diving operation on the behaviour and movements of white sharks, *Carcharodon carcharias*, at the Neptune Islands, South Australia. *Marine biology*, 160(1):889-907.
- Brymann, A., Bell, E., Hirschon, P., Dos Santos, A., Du Toit, J., Masenge, A., Van Aardt, I. & Wagner, C. 2016. Research methodology: business and management contexts. Cape Town: Oxford University Press.
- Buckley, R. 2000. NEAT trends: Current issues in nature, eco and adventure tourism. *International Journal of tourism research*, 2(6):437-444.
- Buckley, R. 2007. Adventure tourism products: price, duration, size, skill, remoteness. *Tourism management*, 28(1):1428-1433.
- Buckley, R. 2010. Adventure tourism management. Oxford: Elsevier.
- Buckley, R. 2012a. Rush as a key motivation in skilled adventure tourism: resolving the risk recreation paradox. *Tourism management*, 33(4):961-970.

Buckley, R. 2012b. Sustainable tourism: research and reality. *Annals of tourism research*, 39(2):528-546.

Buckley, R., McDonald, K., Duan, L., Sun, L. & Chen, L.X. 2014. Chinese model for mass adventure tourism. *Tourism management*, 44(1):5-13.

Burgin, S. & Hardiman, N. 2015. Effects of non-consumptive wildlife-oriented tourism on marine species and prospects for their sustainable management. *Journal of environmental management*, 151(15):210-220.

Burns, L. & Howards, P. 2003. When wildlife tourism goes wrong: a case study of stakeholder and management issues regarding Dingoes on Fraser Island, Australia. *Tourism management*, 9(1):699-712.

Butler, R.W. 1980. The concept of a tourist area lifecycle of evolution: implications for management resources. *Canadian geographer*, XXIV, 1(5):5-12.

Butler, R.W. & Boyd, S. 2000. *Tourism and national parks: issues and implications*. Chichester: Wiley.

Cagua, E.F., Collins, N., Hancock, J. & Rees, R. 2014. Whale shark economics: a valuation of wildlife tourism in South Ari Atoll, Maldives. *PeerJ*, 12(2):515.

Wikimedia Commons. 2017. File: Map of South Africa.svg.
https://commons.wikimedia.org/wiki/File:Map_of_South_Africa.svg Accessed: 21 February 2018. .

Carpenter, G., & Priest, S. 1989. The AEP and non-outdoor leisure pursuits. *Leisure studies*, 8(1):65-75.

Cater, C.I. 2006. Playing with risk? Participant perceptions of risk and management implications in adventure tourism. *Tourism management*, 27(1):317-325.

Cater, C.I. 2010. Any closer and you'd be lunch! Interspecies interactions as nature tourism at marine aquaria. *Journal of ecotourism*, 9(2):133-148.

Catlin, J. & Jones, R. 2010. Whale shark tourism at Ningaloo Marine Park: a longitudinal study of wildlife tourism. *Tourism management*, 31(1): 386-394.

Chen, C. 2011. From catching to watching: moving towards quality assurance of whale/dolphin watching tourism in Taiwan. *Marine policy*, 35(1):10-17.

Chen, C. 2015. Regulation and management of marine litter. (In Bergmann, M., Gutow, L. & Klages, M., eds. *Marine anthropogenic litter*. New York: Springer International Publishing. p. 395-428).

- Child, D. 2006. *The essentials of factor analysis*. 3rd ed. New York: Continuum.
- Choi, H.S.C. & Sirikaya, E. 2005. Measuring residents' attitude toward sustainable tourism: development of sustainable tourism attitude scale. *Journal of travel research*, 43(4):380-394.
- Cisneros-Montemayor, A.M., Barnes-Mauthe, M., Al-Abdulrazzak, D., Navarro-Holm, E. & Sumaila, U.R. 2013. Global economic value of shark ecotourism: implications for conservation. *Fauna and flora international*, 47(3):381-388.
- Clark, R.N. & Stankey, G.H. 1979. *The recreation opportunity spectrum: a framework for planning, management, and research*. USDA forest Service, General Technical Report PNW-98, Seattle, USA.
- Coccosis, H., Edwards, J.A. & Priestly, G.K. 1996. *Sustainable tourism: European experiences*. Guilford: Biddles.
- Coetzee, W. & Saayman, M. 2009a. Sustainable development past and present. (In Saayman, M. ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 97-122).
- Coetzee, W. & Saayman, M. 2009b. Sustainability and ecotourism. (In Saayman, M. ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 123-146).
- Constantine, R. & Bejder, L. 2008. Managing the whale- and dolphin-watching industry: time for a paradigm shift. (In Higham, J. & Lück, M. eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 49-65).
- Cooper, S. 2007. *The impact of holiday homes on the environment and social capacity of Kapparis, Cyprus*. Portsmouth: University of Portsmouth. (Dissertation – BSc).
- Cooper, B. 2010. *Establishing the store attributes that black consumers consider when buying casual wear*. North-West University, Potchefstroom Campus. (Thesis – MBA).
- Cooper, D.R. & Schindler, P.S. 2006. *Business research methods*. 12th ed. New York, NY: McGraw Hill Education.
- Cordero, J.C.M. 2008. Residents' perception of tourism: a critical theoretical and methodological review. *Ciencia ergo sum*, 15(1):35-44.
- Crompton, J.L. 1979. Motivations for pleasure vacation. *Annals of tourism research*, 6(4):408-424.
- Csikszentmihalyi, M. 1975. *Beyond boredom and anxiety*. San Francisco, California: Jossey-Bass.

Csikszentmihalyi, M. & Csikszentmihalyi, I.S. 1999. Adventure and the flow experience. (In Miles, J.C. & Priest S., eds. Adventure programming. State College, Pa.: Venture. p. 153-158).

Cunningham, P.A., Huijbens, E.H. & Wearing, S.L. 2012. From whaling to whale watching: examining sustainability and cultural rhetoric. *Journal of sustainable tourism*, 20(1):143-161.

Curtin, S. 2005. Nature, wild animals and tourism: an experiential view. *Journal of ecotourism*, 4(1):1-5.

Curtin, S. 2010. Managing the wildlife tourism experience: the importance of tour leaders. *International journal of tourism research*, 12(1):219-236.

Daldeniz, B. & Hampton, M.P. 2013. Dive tourism and local communities: active participation or subject to impacts? Case studies from Malaysia. *International journal of tourism research*, 15(5):507-520.

Daly, C.A.K., Fraser, G. & Snowball, J.D. 2015. Willingness to pay for marine-based tourism in Ponta do Ouro partial marine reserve, Mozambique. *African journal of marine science*, 37(1):33-40.

Dann, G.S.M. 1977. Anomie, ego-enhancement and tourism. *Annals of tourism research*, 4(4):184-194.

Danson, T. 2012. 1000 ocean quotes. <http://beachchairscientist.com/2012/06/08/100-ocean-quotes/> Date of access: 8 November 2017.

Davenport, J. & Davenport, J.L. 2006. The impact of tourism and personal leisure transport on coastal environments: a review. *Estuarine, coastal and shelf science*, 67(1):280-292.

Davis, D., Banks, S., Birtles, A., Valentine, P. & Cuthill, M. 1997. Whale sharks in Ningaloo Marine Park: managing tourism in an Australian marine protected area. *Tourism management*, 18(5):259-271.

Davies, M.B. & Hughes, N. 2014. Doing successful research project: using qualitative or quantitative methods. 2nd ed. New York: Palgrave Macmillan.

DEA **see** Department of Environmental Affairs

Deale, C.S. 2013. Corporate social responsibility and the sustainable tourism practise of Marriott International. (In Beckendorf, P. & Lund-Durlacher, D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p.103-114).

- Dearden, P., Topelka, K.N. & Ziegler, J. 2008. Tourist interactions with sharks. (In Higham, J. & Lück, M. eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 66-90).
- Deltori, A. & Giudici, E. 2015. Marine protected areas: their contribution to sustainable tourism. *The international journal of environmental sustainability*, 10(3):1-12.
- Deming, W.G. 1996. A decade of economic change and population shifts in US regions. *Monthly Lab. Rev.*, 119:3.
- Department of Environmental Affairs (DEA). 2017. Allocation process for boat-based whale watching and white shark cage diving operating permits. Pretoria.
- Diakomihalis, M.N. 2007. Great maritime tourism evolution, structures and prospects. *Research in transportation economics*, 21(1):419-455.
- Dicken, M.L. & Hosking, S.G. 2009. Socio-economic aspects of the tiger shark diving industry within the Aliwal Shoal Marine Protected Area, South Africa. *African journal of marine sciences*, 31(2):227-232.
- Dimmock, K. & Musa, G. 2015. Scuba diving tourism system: a framework for collaborative management and sustainability. *Marine policy*, 54(1):52-58.
- Ditton, R.B., Osburn, H.R., Baker, T.L. & Thailing, C.E. 2002. Demographics, attitudes, and reef management preferences of sport divers in offshore Texas waters. *ICES journal of marine science*, 59(10):186-191.
- Dixon, J.A. & Sherman, P.B. 1990. *Economics of protected areas: a new look at the benefits and costs*. Washington DC: Island Press.
- Dobson, J. 2006. Sharks, wildlife tourism, and state regulation. *Tourism in marine environments*, 3(1):15-23.
- Dobson, J. 2008. Shark! A new frontier in tourist demand for marine wildlife. (In Higham, J. & Lück, M., eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 49-65).
- Dogan, H.Z. 1989. Forms of adjustment: sociocultural impacts of tourism. *Annals of tourism research*, 16(2):216-236.
- Doiron, S. & Weissenberger, S. 2014. Sustainable dive tourism: social and environmental impact – the case of Roatan, Honduras. *Tourism management perspectives*, 10(1):19-26.

- Douglas, N., Douglas, N. & Derret, R. 2001. Special interest tourism. Melbourne, Australia: Wiley.
- Dowling, R.K. & Weeden, C. 2017. Cruise ship tourism. 2nd ed. Oxfordshire: CAB International.
- Doxey, G. 1975. A causation theory of visitor-residents irritants: methodology and research inferences. (*In* The impact of tourism. Sixth Annual Conference Proceedings of the Travel Research Association. San Diego, <https://monash.rl.talis.com/items/0B253BC0-DB47-1698-C053-89D37FA8EF60.html> Date of access: 24 October 2017).
- Duffus, D.A. 1988. Non-consumptive use and management of cetaceans in British Columbia coastal waters. Canada: University of Victoria. (Thesis – PhD).
- Duffus, D.A. & Dearden, P. 1990. Non-consumptive wildlife orientated recreation: a conceptual framework. *Biological conservation*, 53(3):213-231.
- Duman, T. & Mattila, A. S. 2005. The role of affective factors on perceived cruise vacation value. *Tourism management*, 26(3):311–323.
- Du Toit, D.R., Biggs, H. & Pollard, S. 2011. The potential role of mental model methodologies in multistakeholder negotiations: integrated water resources management in South Africa. *Ecology and society*, 16(3):21-30.
- Dwyer, L. & Forsyth, P. 2007. Economic measures of tourism yield: what markets to target? *International journal of tourism research*, 10(2):155-168.
- Dwyer, L. & Thomas, F. 2012. Tourism yield measures for Cambodia. *Current issues in tourism*, 15(4):303-328.
- Dyer Island Cruises. 2017. Activity description. <https://dyer-island-cruises.activitar.com/services/1064?adults=0&children=99&date=2017-06-01> Date of access: 27 July 2017.
- Eagles, P.F.J. 2014. Research priorities in park tourism. *Journal of sustainable tourism*, 22(4):528-549.
- Earle, S. 1998. Call of the sea. <http://content.time.com/time/subscriber/article/0,33009,989255-5,00.html> Date of access: 8 November 2017.
- Ellis, M.J. 1973. Why people play. Englewood Cliffs, New Jersey: Prentice-Hall.
- Enya. 2017. Enya quotes. <https://www.brainyquote.com/quotes/quotes/e/enya356975.html> Date of access: 8 November 2017.

Erkus-Ozturk, H. & Eraydin, A. 2010. Environmental governance for sustainable tourism development: collaborative networks and organisation building in the Antalya tourism region. *Tourism management*, 31(1):113-124.

Evans, A. 2013. Why I won't go shark cage diving. National Geographic online. <http://digitalnomad.nationalgeographic.com/2013/11/21/why-i-wont-go-shark-cage-diving/> Date of access: 12 October 2017.

Fabinyi, M. 2008. Dive tourism, fishing and marine protected areas in the Calamianes Islands, Philippines. *Marine policy*, 32(1):898-904.

Fennell, D.A. 1999. Ecotourism: an introduction. New York: Routledge.

Fennell, D.A. 2007. Ecotourism. 3rd ed. New York: Routledge.

Fennell, D.A. 2015. Ecotourism. 4th ed. Oxford: Routledge.

Field, A. 2009. Discovering statistics using SPSS. 3rd ed. London: Sage.

Findlay, K.P. & Best, P.B. 2016. Distribution and seasonal abundance of large cetaceans in the Durban whaling grounds off KwaZulu-Natal, South Africa, 1972-1975. *African journal of marine species*, 38(2):249-262.

Foley, N.S., Corless, R., Escapa, M., Fahy, F. & Fernandez-Macho, J. 2014. Developing a comparative marine socio-economic framework for the European Atlantic area. *Journal of ocean and coastal economics*, 1(1):1-25.

Foyle, L. & Lough, C. 2007. Marine tourism and leisure plan. *Tourism development international*, 33(6):168-182.

Fuggle, R.F. & Rabie, M.A. 1996. Environmental management in South Africa. Cape Town: Juta and Company Ltd. (Pty).

Gallagher, A. & Pike, K. 2011. Sustainable management for maritime events and festivals. *Journal of coastal research*, 1(61):158-165.

Gansbaai.com. 2015. Shark cage diving in Gansbaai. <http://www.gansbaai.com/en/things-to-do/shark-cage-diving/> Date of access: 17 September 2015.

Gansbaaiinfo. 2015. Gansbaai Information. <http://www.gansbaaiinfo.com/info/index.html> Date of access: 14 September 2015.

- Garrod, B. & Wilson, J.C. 2003. Marine ecotourism: issues and experiences. Australia: Channel View Publications.
- Geldenhuys, S. 2009. Ecotourism criteria and context. (*In* Saayman, M. Ecotourism: getting back to basics. Potchefstroom: The Platinum Press. pg. 1-24).
- Geldenhuys, L. 2012. The influence of Blue Flag status on tourist decision-making in South Africa. Potchefstroom: North-West University. (Dissertation - MCom).
- Geldenhuys, L., Van der Merwe, P. & Slabbert, E. 2014. Who is the scuba diver who visit Sodwana Bay and why? *South African journal for research in sport, physical education and recreation*, 36(2):91-104.
- Geldenhuys, L., Van der Merwe, P. & Saayman, M. 2016. Setting the table for mountain tourism: the case of a South African National Park. (*In* Ritchins, H. & Hull, J.S., eds. Mountain tourism: experiences, communities, environments and sustainable futures. Canada: CAB International. p. 310-318).
- Geldenhuys, S. 2009. Ecotourism criteria and context. (*In* Saayman, M. ed. Ecotourism: getting back to basics. Potchefstroom: The Platinum Press. p. 2-24).
- George, R. 2007. Managing tourism in South Africa. Goodwood: Oxford University Press.
- George, R. 2012. Managing tourism in South Africa. Goodwood: Oxford University Press.
- George, R. 2014. Marketing tourism in South Africa. 5th ed. Cape Town: Oxford University Press.
- George, R. 2015. Managing tourism in South Africa. 2nd ed. Goodwood: Oxford University Press.
- Gerber, S.B. & Finn, K.V. 2013. Using SPSS for Windows: Data analysis and graphics. USA: Springer.
- Giddy, J.K. 2017. A profile of commercial adventure tourism participants in South Africa. *An international journal of tourism and hospitality research*, <http://dx.doi.org/10.1080/13032917.2017.1366346> Date of access: 30 October 2017.
- Giddy, K.K. & Webb, N.L. 2016. The influence of the environment on motivations to participate in adventure tourism: the case of the Tsitsikamma. *South African geographical journal*, 98(2):351-366.

- Giddy, J.K. & Webb, N.L. 2017. The influence of the environment on adventure tourism: from motivations to experiences. *Current issues in tourism*, <http://dx.doi.org/10.1080/13683500.2016.1245715> Date of access: 30 October 2017.
- Global Reporting Initiative. 2013. Sustainability reporting. <https://www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx> Date of access: 30 October 2017.
- Google maps. 2015. 34.3857592, 19.1998116, 10.75. <https://www.google.co.za/maps/@-34.3857592,19.1998116,10.75z> Accessed: 17 September 2015
- Gossling, S. & Hall, C.M. 2006. Uncertainties in predicting tourism flows under scenarios of climate change. *Climatic change*, 79(3):163-173.
- Government Gazette no 35782. 2012. 30 Oktober 2012 p. 49.
- Gravetter, F.J., Wallnau, L.B. & Forzano, L.B. 2016. Essentials of statistics for the behavioural sciences. 9th ed. Boston, USA: Cengage Learning.
- Gray, H.P. 1980. International travel – international trade. Massachusetts: Heath and Co.
- Gutierrez, E., Lamoureux, K., Matus, S. & Sebunya, K. 2005. Linking communities, tourism and conservation: a tourism assessment process. *Washington: Conservation International, The George Washington University*.
- Gursoy, D., Chen, J.S. & Chi, C.G. 2014. Theoretical examination of destination loyalty formation. *International journal of contemporary hospitality management*, 26(5):809-827.
- Hair, J., Anderson, R. E., Tatham, R. L. & Black, W. C. 1995. Multivariate data analysis. 4th ed. New Jersey: Prentice Hall.
- Hall, C.M. & Page, S. 2005. The geography of tourism and recreation: environment, place and space. 2nd ed. New York: Routledge.
- Hall, C.M. 2000. Tourism planning: planning, processes and relationships. Harlow: Prentice Hall.
- Hall, M.C. 2001. Trends in ocean and coastal tourism: the end of the last frontier? *Ocean & coastal management*, 44(1):601-618.
- Halpenny, E. 2002. Marine ecotourism: impacts, international guidelines and best practice case studies. USA: The International Ecotourism Society.
- Hamid, M.A. & Isa, S.M. 2015. The theory of planned behaviour on sustainable opportunities ad challenges. *Journal of applied environmental and biological sciences*, 5(6):84-88.

- Harriott, V.J., Davies, D. & Banks, S.A. 1997. Recreational diving and its impacts on marine protected areas in Eastern Australia. *Ambio*, 26:173-179.
- Hawai'i Pacific University. 2016. Aqua facts. <http://www.oceanicinstitute.org/aboutoceans/aquafacts.html> Date of access: 19 January 2016.
- Hermann, U.P. 2015. Development of a tourism management framework for Mapungubwe National Park. Potchefstroom: North-West University (Thesis - PhD).
- Hermanus.co.za. 2016. Demographics. <http://www.hermanus.co.za/demographics> Date of access: 20 February 2016.
- Hermanus.co.za. 2017. Demographics. <https://www.hermanus.co.za/demographics> Date of access: 12 October 2017.
- Hermanusonline. 2015. Visit Hermanus, a village by the sea in South Africa. <http://www.hermanusonline.mobi/> Date of access: 30 October 2017.
- Hermanustourism. 2015. Hermanus the seaside village. <http://www.hermanustourism.info/about-hermanus.php?category=hermanus> Date of access: 17 September 2015.
- Hermanus Whale Festival. 2015. Welcome to the Hermanus whale festival. <http://www.satourisonline.com/> Date of access: 17 September 2015.
- Higginbottom, K. 2004. Wildlife tourism: impacts, management and planning. Australia: Common Ground Publishing Pty Ltd.
- Higham, J.E.S., Bejder, L., Allen, S., Corkeron, P.J. and Lusseau, D. 2016. Managing whale-watching as a non-lethal consumptive activity. *Journal of sustainable tourism*, 24 (1):73-90.
- Higham, J.E.S., Bejder, L. & Lusseau, D. 2009. An integrated and adaptive management model to address the long-term sustainability of tourist interactions with cetaceans. *Environmental conservation*, 35(4):294-302.
- Higham, J. & Lück, M. 2008. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CAB International.
- Higham, J.E.S. & Hendry, W.F. 2008. Marine wildlife viewing: insights into the significance of the viewing platform. (In Higham, J. & Lück, M. Eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CAB International. p. 137-146).
- Holden, A. 2006. Tourism studies and the social sciences. New York: Routledge.

- Holder, J. 1988. Pattern and impact of tourism on the environment of the Caribbean. *Tourism management*, 9(2):119-127.
- Hudson, S. 2002. Sport and adventure tourism. USA: Haworth Hospitality Press.
- Inskeep, E. 1991. Tourism planning: an integrated and sustainable development approach. New York: Van Nostrand Reinhold.
- Ioannides, D. 2001. Sustainable development and shifting attitudes of tourism stakeholders: toward a dynamic framework. (In McCool, S.F. & Moisey, R. N., eds. Tourism, recreation and sustainability. New York: CABI Publishing. p. 55-77).
- Isa, S.M. & Ramli, L. 2014. Factors influencing tourist visitation in marine tourism: lessons learned from FRI Aquarium Penang, Malaysia. *International journal of culture, tourism and hospitality research*, 8(1):401-419.
- Iso-Ahola, S.E. 1989. Motivation for leisure. (In Jackson, E.L. & Burton, T.L., eds. Understanding leisure and recreation: mapping the past, charting the future. USA: Venture Publications. p.247-279).
- Jago, L., Chalip, L., Brown, G., Mules, T. & Shameem, A. 2003. Building event into destination branding: insights from experts. *Event management*, 8(1):30-14.
- James, R.J. 2001. From beaches to beach environments: linking the ecology, human-use and management of beaches in Australia. *Ocean & coastal management*, 43(1):495-514.
- Jennings, G. 2001. Water-based tourism, sport, leisure and recreation experiences. Burlington: Elsevier.
- Jennings, G. & Nickerson, N.P. 2005. Quality tourism experiences. Oxford: Butterworth-Heinemann.
- Jeong, C. 2014. Marine tourist motivations: comparing push and pull factors. *Journal of quality assurance in hospitality and tourism*, 15(3): 294-309.
- Johnson, R. & Kock, A. 2006. South Africa's White Shark cage-diving industry – is there cause for concern? (In Nel, D.C. & Peschalk, T.P., eds. Finding a balance: White shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. Proceedings of a specialist workshop. WWF South Africa Report Series – 2006/Marine/001. p. 40-59).
- Jurowski, C. & Gursoy, D. 2004. Distance effects on residents attitudes towards tourism. *Annals of tourism research*, 31(2):296-312.

- Kals, E., Schumacher, D. & Montada, L. 1999. Emotional affinity towards nature as a motivational basis to protect nature. *Environment and behaviour*, 31(1):178-202.
- Kaltenborn, B.P. & Emmelin, L. 1993. Tourism in the high north: management challenges and recreation opportunity spectrum planning in Svalbard, Norway. *Environmental management*, 17(41):<https://doi.org/10.1007/BF02393793> Date of access: 15 February 2018.
- Kapoor, P., Powell, P. & Abbott, J.L. 2006. Conventional disputes, unconventional resolutions: an analysis of dispute resolution in the meetings, incentives, conventions, and exhibition industry. *Journal of convention & event tourism*, 8(3):45-70.
- Kent, K., Sinclair, J. & Diduck, A. 2012. Stakeholder engagement in sustainable adventure tourism development in the Nanda Devi Biosphere Reserve, India. *International journal of sustainable development & world ecology*, 19(1):89-100.
- Kim, J. & Muller, C.W. 1978. Factor analysis: statistical methods and practical issues. Beverly Hills, California: Sage.
- Kim, K., Oh, I. & Jogaratnam, G. 2007. College students: a revised model of push motives. *Journal of vacation marketing*, 13(1):73-85.
- Kizielewicz, J., Haahti, A., Luković, T. & Gračan, D. 2017. The segmentation of the demand for ferry travel – a case study of Stena Line. *Economic research - Ekonomska istraživanja*, 30(1):1003-1020.
- Kleinbaum, D., Kupper, L., Nizam, A. & Rosenberg, E. 2014. Applied regression analysis and other multivariable methods. USA: Cengage Learning.
- Kokkis, H. & Tsartas, P. 2001. Sustainable tourism development and the environment. Athens: Kritiki (in Greek).
- Kollmuss, A. & Agyeman, J. 2010. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental education research*, 8(3):239-260.
- Kozak, M. 2002. Comparative analysis of tourist motivations by nationality and destinations. *Tourism management*, 23(3):221-232.
- Kreitner, R. 1989. Management. 4th ed. Boston: Houghton Mifflin Company.
- Krejcie, R.V. & Morgan, D.W. 1970. Determining sample size for research activities. *Educational and psychological measurement*, 30(1):607-610.

- Kruger, M. & Saayman, M. 2017. An experience-based typology for natural event tourists. *International journal of tourism research*, 19(5):605-617.
- Kumar, R. 2009. Sports, adventure and recreation tourism. New Delhi: SBS Publishers and Distributors.
- Kuo, J.L. 2002. The effectiveness of environmental interpretation at resource-sensitive tourism destinations. *International journal of tourism research*, 4(1):87-101.
- Kurtzman, J., Zauhar, J., Ahn, J. & Choi, S. 1998. Global understanding, appreciation and peace through sports tourism. <http://www.free-press.com/journals/jst/archive/vol3no4/global.htm> Date of access: 1 August 2016.
- Kuvan, Y. & Akan, P. 2005. Residents' attitudes toward general and forest-related impacts of tourism: the case of Belek, Antalya. *Tourism management*, 26(5):691-706.
- Lee, J.W. & Brahmastrene, T. 2013. Investigating the influence of tourism on economic growth and carbon emissions: evidence from panel analysis of the European Union. *Tourism management*, 38(1):69-76.
- Levy, D. 2017. The environmental factors determining temporal distributions of cetaceans in Mossel Bay. Cape Town: University of Cape Town (Dissertation - MA).
- Liam, C. & Cooper, C. 2009. Beyond sustainability: optimising island tourism development. *International journal of tourism research*, 11(1):89-103.
- Littig, B. & Grießler, E. 2005. Social sustainability: a catchword between political pragmatism and social theory. *International journal of sustainable development*, 8(1-2):65-79.
- Lombard, L. 2016. The top 10 countries where most of SA's tourists come from. <http://www.traveller24.com/Explore/BusinessTravel/the-top-10-countries-where-most-of-sas-tourists-come-from-20160408> Date of access: 7 September 2017.
- Lovecraft, H.P. 2009. The white ship. <http://www.hplovecraft.com/writings/texts/fiction/ws.aspx> Date of access: 8 November 2017.
- Lück, M. 2003. Education on marine mammal tours as agent for conservation – but do tourists want to be educated? *Ocean & coastal management*, 46(1): 943-956.
- Lück, M., 2007. Managing marine wildlife experiences: the role of visitor interpretation programmes. (In Higham, J.E.S. & Lück, M. Eds. Marine wildlife and tourism management: insights from the natural and social sciences. Wallingford: CAB International. p. 334-346).

- Lück, M. 2008a. The encyclopaedia of tourism and recreation in marine environments. London: CAB International.
- Lück, M. 2008b. Managing marine wildlife experiences: the role of visitor interpretation programmes. (In Higham, J. & Lück, M., eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CABI International. p. 334-346).
- Lück, M. 2013. Nautical tourism, development: opportunities and threats. https://www.researchgate.net/profile/Michael_Lueck2/publication/275100397_Nautical_Tourism_Development_Opportunities_and_Threats/links/55bca25c08ae9289a095d17c.pdf Date of access: 27 July 2017.
- Lück, M. 2015. Education on marine mammal tours – but what do tourists want to learn? *Ocean & coastal management*, 103(1):25-33.
- Lucrezi, S., Saayman, M. & Van der Merwe, P. 2013. Perceived diving impacts and management implications at a popular South African reef. *Coastal management*, 41(5):381-400.
- Lukovic, T. 2013. Nautical tourism. Oxfordshire: CABI International.
- Luksenburg, J.A. & Parsons, E.C.M. 2014. Attitudes towards marine mammal conservation issues before the introduction of whale watching: a case study in Aruba (Southern Caribbean). *Aquatic conservation: marine and freshwater ecosystems*, 24(1):135-146.
- Lundie, S., Dwyer, L. & Forsyth, P. 2007. Environmental-economic measures of tourism yield. *Journal of sustainable tourism*, 15(5):1-18.
- Malhotra, N. K. 2007. Marketing Research: an applied orientation. 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Malhotra, N., Mavondo, F., Mukherjee, A. & Hooley, G. 2013. Service quality of frontline employees: A profile deviation analysis. *Journal of Business Research*, 66(9):1338-1344.
- Manning, M. 2011. When we do what we see: the moderating role of social motivation on the relation between subjective norms and behaviour in the theory of planned behaviour. *Basic and applied social psychology*, 33(4):351-364.
- Manwa, H. 2013. Planning for sustainability: the Okavango Delta management plan. (In Beckendorf, P. & Lund-Durlacher, D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p. 25-40).

Map of Hermanus, Western Cape. 2015. Retrieved from <https://www.google.co.za/maps/@-34.3857592,19.1998116,10.75z> Date of access: 17 September 2015.

Map of geographical location of shark cage diving in South Africa. 2017. Retrieved from <https://www.google.co.za/maps/place/Western+Cape/@-33.7906283,19.1248413,8z/data=!4m5!3m4!1s0x1dcc5d887a698df3:0xe98e798f2136a28b!8m2!3d-33.2277918!4d21.8568586> Date of access: 17 September 2015.

Map of Southern Right whales congregation sites, Western Cape South Africa. 2015. Retrieved from https://www.google.co.za/search?q=south+africa&espv=2&biw=1366&bih=623&site=webhp&source=lnms&tbm=isch&sa=X&ved=0CAcQ_AUoAmoVChMI_qOS4dT9xwIVx2sUCh26EQrC&dpr=1#tbm=isch&q=western+cape+map+&imgsrc=8EIUz1-mu4NBoM%3A [Date of access: 16 September 2015.](#)

Marafa, L.M. & Chau, K.C. 2014. Framework for sustainable tourism development on coastal and marine zone environment. *Tourism, leisure and global change*, 1(1):1-11.

Maree, K. & Pietersen, J. 2008. Sampling. (In K. Maree, ed. First steps in research. Pretoria: Van Schaik. P. 172-180.)

Marine Dynamics. 2015. Our conservation efforts. <http://www.sharkwatchsa.com/en/saving-the-ocean/our-conservation-efforts/> Date of access: 16 September 2015.

Marine Dynamics. 2017a Rates and special information. <http://www.sharkwatchsa.com/en/the-trip/pricing/> Date of access: 8 March 2017.

Marine Dynamics. 2017b. Shark Alley and Dyer Island. <http://www.sharkwatchsa.com/en/the-area/dive-area/> Date of access: 11 August 2017.

Martin, P. & Priest, S. 1986. Understanding the adventure experience. *Journal of adventure education*, 3(1):18-21.

Maslow, A. 1943. A theory of human motivation. *Psychological review*, 50(3):370-396.

Mason, E. 2010. Adventure and its relationship to outdoor learning. http://www.outdoor-learning.org/Portals/0/IOL%20Documents/Horizons%20Documents/Horizons%20pdf%20archive/pd_h50.advent.inol.pdf Date of access: 11 September 2014.

Mason, P. 2000. Zoo tourism: the need for more research. *Journal of sustainable tourism*, 8(4):333-339.

- McIntosh, R.W. 1977. *Tourism: principles, practices philosophies*. New York: Wiley.
- McKay, T. 2012. Adventure tourism: opportunities and management challenges for SADC destinations. *Acta academica*, 45(3):30-62.
- Mehmetoglu, M. & Normann, O. 2013. The link between travel motives and activities in nature-based tourism. *Tourism review*, 68(2):3-13.
- Merriam-Webster Dictionary. 2017a. Framework. <https://www.merriam-webster.com/dictionary/framework> Date of access: 6 October 2017.
- Merriam-Webster Dictionary. 2017b. Nautical. <https://www.merriam-webster.com/dictionary/nautical> Date of access: 4 February 2017.
- Meyer, L.A., Thapa, B. & Pennington-Grey, L. 2002. An exploration of motivations among scuba divers in north central Florida. (In Schuster, R., ed. *Proceedings of the 2002 Northeastern Recreation Research Symposium*. Gen. Tech. Rep. NE-302. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. p. 292-295).
- Millington, K., Locke, T. & Locke, A. 2001. Adventure travel. *Travel & tourism analyst*, 4(1):65-98.
- Mohd, S. & Ramlli, L. 2014. Factors influencing tourist visitation in marine tourism: lessons learned from FRI Aquarium Penang, Malaysia. *International journal of culture, tourism and hospitality research*, 8(1):103-117.
- Molero, L. & Albaladejo, I.P. 2007. Profiling segments if tourists in rural areas of South-Eastern Spain. *Tourism management*, 28(3):757-767.
- Morgan, D.J. 2001. Risk, competence and adventure tourists: applying the adventure experience paradigm to white-water rafters. *Leisure/loisir*, 26(1-2):107-127.
- Mortlock, C. 1984. *The adventure alternative*. Milnthorpe, UK: Cicerone Press.
- Moscardo, G. 2001. *Understanding visitor-wildlife interactions: factors influencing satisfaction*. Australia: CRC Reef Research Centre.
- Moscardo, G. 2003. Interpretation and sustainable tourism: functions, examples and principles. *Journal of tourism studies*, 14(1):112-123.
- Moscardo, G. & Ballantyne, R. 2008. Interpretation and attractions. (In Fyall, A.I., Garrod, B., Leask, A. & Wanhill, S., eds. *Managing visitor attractions: new directions*. Oxford: Butterworth-Heinemann. p. 237-252).

- Moscardo, G. & Saltzer, R. 2004. Understanding wildlife tourism markets. (In K. Higginbottom., ed. *Wildlife tourism impacts, management and planning*. Common Ground/Sustainable Tourism CRC, Altona, Victoria, Australia. p. 167-185).
- Mostert, P.G. & Du Plessis, P.J. 2007. *Introduction to marketing management: a South African perspective*. Faerie Glen: Mustard House Marketing.
- Murphy, P.E. & Murphy, A.E. 2004. *Strategic management for tourism communities: bridging the gaps*. Bristol: Channel View.
- National Ocean Service. 2017. How much of the ocean have we explored? <https://oceanservice.noaa.gov/facts/exploration.html> Date of access: 2 August 2017.
- Nel, D.C. & Peschak, T.P. 2006. Finding a balance: white shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. Proceedings of a specialist workshop held on 29 and 30 May 2006. Date of access: 24 October 2017.
- Neumann, S.B. 2006. The knowledge gap: implication for early education. (In D. Dickinson & Neumann, S.B., eds. *Handbook of early literacy research*. New York: Guilford. p. 29-40).
- Oberholzer, S., Saayman, M., Saayman, A. & Slabbert, E. 2010. The socio-economic impact of South Africa's oldest marine park. *Koedoe*, 52(1):1-9.
- Opaschowski, H.W. 2001. *Tourismus im 21. Jahrhundert, das gekaufte paradies*. Hamburg: B.A.T. Freizeit-Forschungsinstitut GmbH.
- Orams, M. 1999. *Marine tourism: development, impacts and management*. London: Routledge.
- Orams, M.B. 2000. Tourists getting close to whales, is it what whale-watching is all about? *Tourism management*, 21(1):561-569.
- Orams, M.B. 2002. Feeding wildlife as an attraction: a review of issues and impacts. *Tourism management*, 23(1):281-293.
- Orams, M. 2013. Economic activity derived from whale-based tourism in Vava'u, Tonga. *Coastal management*, 41(1):481-500.
- O'Riordan, T. & Stoll-Kleeman, S. 2002. *Biodiversity, sustainability and human communities: protecting beyond the protected*. Cambridge: Cambridge University Press.
- Overstrand Municipality. 2010. The impact of tourism on the Overstrand economy. <https://www.overstrand.gov.za/en/documents/strategic-documents/impact-of-tourism-on-the-overstrand-economy/1325-impact-of-tourism-2010/file> Date of access: 30 October 2017.

Overstrand Municipality. 2015. Integrated development plan: review for 2015/16. 3rd review of 2012/2017 cycle in terms of section 34 of the Municipal Systems Act, 2000. Draft 25 March 2015. <https://www.overstrand.gov.za/en/documents/strategic-documents/integrated-development-plan/3014-draft-idp-review-for-2016-17/file> Date of access: 24 October 2017.

Oxford Dictionaries. 2017. Framework. <https://en.oxforddictionaries.com/definition/framework> Date of access: 6 October 2017.

Padin, C. 2016. A sustainable tourism planning model: components and relationships. *European business review*, 24(6):510-518.

Page, S.J., Bentley, T.A. & Walker, L. 2005. Scoping the nature and extent of adventure tourism operations in Scotland: how safe are they? *Tourism management*, 26(1):381-397.

Page, S.J. & Connell, J. 2009. Tourism: a modern synthesis. 3rd ed. London: South Western Cengage Learning.

Page, S.J., Bentley, T & Walker, L. 2005. Scoping the nature and extent of adventure tourism operations in Scotland: how safe are they? *Tourism management*, 6(4):314-327.

Palys, T. 2008. Purposive sampling. (In Given, L.M., ed. The sage encyclopedia of qualitative research methods. 2nd ed. Los Angeles: Sage. p. 697-8).

Papageorgiuo, M. 2016. Coastal and marine tourism: a challenging factor in marine spatial planning. *Ocean & coastal management*, 129(1):44-48.

Parsons, E.C.M. 2012. The negative impacts of whale watching. *Journal of marine biology*, 1(807294):1-9.

Pearce, P.L. 2006. The value of a benchmarking approach for assessing service quality satisfaction in environmental tourism. (In Prodeaux, B., Moscardo, G. & Laws, E., eds. Managing tourism and hospitality services: theory and international applications. Wallingford: CAB International. p. 282-299).

Pearce, J., Strickland-Munro, J. and Moore, S.A. 2017. What fosters awe-inspiring experiences in nature-based tourism destinations? *Journal of sustainable tourism*, 25(3):362-378.

Penny, G.S., Cockcroft, V.G. & Hammond, P.S. 2011. Seasonal fluctuations in occurrence of inshore Bryde's whales in Plettenberg Bay, South Africa, with notes on feeding and multispecies associations. *African journal of marine science*, 33(3):1403-414.

- Petrick, J.F. & Durko, A.M. 2015. Segmenting luxury cruise tourists based on their motivations. *Tourism in marine environments*, 10(3):149-157.
- Pike, S. 2008. Destination marketing: an integral marketing communication approach. Amsterdam: Butterworth-Heinemann.
- Platt, S. 1995. Encountering wildlife without feeding. Land for Wildlife Note No. 35. November 1995. Land for Wildlife. Melbourne.
- Polyxeni, M. & Ourania, K. 2008. Ethics in tourism. http://polyxenimoira.weebly.com/uploads/3/0/4/6/30464652/ethics_in_tourismmoira-katsoula.pdf
Date of access: 8 December 2015.
- Pomfret, G. & Bramwell, B. 2014. The characteristics and motivational decisions of outdoor adventure tourists: a review and analysis. <http://shura.shu.ac.uk/9779/> Date of access: 28 July 2017.
- Pratt, S. & Suntikul, W. 2016. Can marine wildlife tourism provide an edutaining experience? *Journal of travel and tourism marketing*, 33(6):867-884.
- Priest, S. & Gass, M.A. 2005. Effective leadership in adventure programming. 2nd ed. New Hampshire: Human Kinetics.
- Pulido-Fernandez, J.I., Andrades-Caldito, L. & Sanchez-Rivero, M. 2015. Is sustainable tourism an obstacle to the economic performance of the tourism industry? Evidence from an international empirical study. *Journal of sustainable tourism*, 23(1):47-64.
- Raj, A. 2007. The new age of tourism and the new tourist. http://www.indianmba.com/Faculty_Column/FC565/fc565.html Date of access: 7 August 2017.
- Ratepayers Association Hermanus. 2014. Quarterly Newsletter: September 2014. http://www.ratepayers.co.za/uploads/1/3/7/4/13749469/hra_quarterly_newsletter_-_september_2014.pdf Date of access: 11 August 2017.
- Rawles, C.J.G. & Pearson, E.C.M. 2005. Environmental motivation of whale-watching tourists in Scotland. *Tourism in marine environments*, 1(2):129-132.
- Reisinger, Y., & Turner, L. 1998. Cultural marketing for Asian tourism into Australia. (In Chebat, J.C. & Oumlil, A., eds. Proceedings of the 1998 Multicultural Marketing Conference. Developments in Marketing Science: Proceedings of the Academy of Marketing Science. Cham: Springer. p. 535-535).

- Reynolds, P.C. & Braithwaite, D. 2001. Towards a conceptual framework for wildlife tourism. *Tourism management*, 22(1):31-42.
- Rhormens, M.S., Pedrini, A. & Ghilardi-Lopes, A.P. 2017. Implementation feasibility of a marine ecotourism product on the reef environments of the marine protected areas of Tinhare and Boipeba islands (Cairu, Bahia, Brazil). *Ocean & coastal management*, 139(1):1-11.
- Richards, K., O'Leary, B.C., Roberts, C., Ormond, R., Gore, M. & Hawkins, J.P. 2015. Sharks and people: insight into the global practice of tourism operators and their attitudes to shark behaviour. *Marine pollution bulletin*, 91(1):200-210.
- Rodriguez, J.R.O., Parra-Lopez, E. & Yanes-Estevez, V. 2007. The sustainability of island destinations; tourism area life cycle and teleological perspectives. *Tourism management*, 29(1):53-65.
- Rogerson, C.M. 2007. The challenges of developing adventure tourism in South Africa. *Africa insight*, 37(2):228-244.
- Rotherham, S. 2017. Gansbaai struggles as great white sharks disappear. <http://www.2oceansvibe.com/2016/01/15/gansbaai-struggles-as-great-white-sharks-disappear/> Date of access: 16 October 2017.
- Rousseau, J.J. 2003. A discourse on inequality. London: Penguin.
- Rutzen, M. 2015. Marine conservation: Shark Diving Unlimited. <http://www.sharkdivingunlimited.com/conservation/marine-conservation/> Date of access: 17 September 2015.
- Ryan, R. 2012. Effects of ecotourism and adventure tourism in the Santa Cruz Province, Argentina. Kenosha: Carthage College. (Undergraduate thesis).
- Saayman, M. 1999. What is cultural tourism and how can we benefit from it? Paper presented at Tourism, Environment and Conservation North-West, Pilanesberg, 8 September.
- Saayman, M. 2006. Marketing tourism products and destination: getting back to basics. Potchefstroom: Leisure Consultants.
- Saayman, M. 2008. En route with tourism: an introductory text. 2nd ed. Potchefstroom: Institute for Tourism and Leisure Studies.
- Saayman, M. 2009. Hospitality, leisure and tourism management. Potchefstroom: The Platinum Press.

- Saayman, M. 2012. An introduction to sports tourism and event management. Cape Town: Sun Media Metro.
- Saayman, M. 2013. En route with tourism. 4th ed. Cape Town: Juta & Company (Pty) Ltd.
- Saayman, M. 2014. A missed opportunity. (*In* Ramawela, M, van Wyk, S. & Mosue, K., eds. Marine Tourism: Special Overview. SA: Tourism Business Africa. p.18-19).
- Saayman, M. 2017a. Blue economy: tourism challenges. Paper presented at IATE 2017 Round table: Blue growth and tourism, Rimini, Italy, 23 June 2014 https://events.unibo.it/conference-iate-rimini-2017/download-area/blue-growth_melville-saayman.pdf/@@download/file/BLUE%20GROWTH_Melville%20Saayman.pdf Date of access: 25 October 2017.
- Saayman, M. 2017b. The potential economic impact of marine tourism to the Blue Economy. Paper presented at the South African Marine Institute (SAMI) conference. 6 April 2017, Port Elizabeth.
- Saayman, M., Saayman, A. & Joubert, E.M. 2013. The contribution of the Wacky Wine Festival to the local economy. *Journal of contemporary management*, 10(1):427-447.
- Saayman, M. & Slabbert, E. 2004. A profile of tourists visiting the Kruger National Park. *Koedoe*, 47(1):1-8.
- Saayman, M., Slabbert, E. & Van der Merwe, P. 2009. Travel motivation: a tale of two marine destinations in South Africa. *South African journal for research in sport, physical education and recreation*, 31(1):81-94.
- SACarrental.com. 2015. Map of Western Cape, South Africa. https://www.google.co.za/search?q=south+africa&espv=2&biw=1366&bih=623&site=webhp&source=lnms&tbm=isch&sa=X&ved=0CAcQ_AUoAmoVChMI_gOS4dT9xwIVx2sUCh26EQrC&dpr=1#tbm=isch&q=western+cape+map+&imgsrc=8EIUz1-mu4NBoM%3A Accessed: 16 September 2015.
- SAMSA **see** South African Maritime Safety Authority
- Saunders, M., Lewis, P. & Thornhill, A. 2016. Research methods for business studies. 7th ed. Edinburgh: Pearson Education Ltd.
- Schiffman, L.G., Kanuk, L.L. & Wisenblit, J. 2010. Consumer behaviour. 10th ed. Upper Saddle River, New Jersey: Pearson-Prentice Hall.
- Schoeman, K.D. 2015. Developing a perceived value model for the cruise experience. Potchefstroom: North-West University (Thesis - PhD).

- Scholtz, M. 2014. A critical assessment of the social impacts of tourism in selected South African communities. Potchefstroom: North-West University (Thesis - PhD).
- Scholtz, M., Kruger, M. & Saayman, M. 2015. Determinants of visitor length of stay at three coastal parks in South Africa. *Journal of ecotourism*, 14(1):21-47.
- Schott, C. 2007. Selling adventure tourism: a distribution channels perspective. *International journal of tourism research*, 9(4):257-274.
- Scott, D. 2011. Why sustainable tourism must address climate change. *Journal of sustainable tourism*, 19(1):17-34.
- Semeniuk, C.A.D., Haider, W., Beardmore, B. & Rothley, K. 2009. A multi-attribute trade-off approach for advancing the management of marine wildlife tourism: a quantitative assessment of heterogeneous visitor preferences. *Aquatic conservation: marine and freshwater ecosystems*, 19(1):194-208.
- Senge, P.M. 2014. The dance of change: the challenges of sustaining momentum in learning organisations. New York: Doubleday.
- Seymour, K.D. 2012. The perceived value of scuba diving tourists at a marine destination. Potchefstroom: North-West University (Dissertation - MA).
- Sharkcagediving.net. 2015. About us. <http://www.sharkcagediving.net/about-us/> Date of access: 30 October 2015.
- Sharkcagediving.net. 2017. Great White Shark Ecology and Conservation. <http://www.sharkcagediving.net/images/PDF/GWSTsample-certificate.pdf> Date of access: 7 February 2017.
- Sierra, V. 2002. Desarrollo sostenible: acotaciones conceptuales y revisiones estrategicas. *Sustainable development: conceptual assessments and strategic reviews*, 2749(1):13-23.
- Singh, L.K. 2008. Ecology, environment and tourism. Delhi: Isha Books.
- Single, L. 2002. Representative sampling. Paper presented at the AWDS Task Force's Marketing Workshop, Big Sky, Montana, 20 September 2002.
- Sirakaya, E., Sasidharan, V. & Sonmez, S. 1999. Redefining ecotourism: the need for a supply-side view. *Journal of travel research*, 38(2):168-172.

- Slabbert, E. 2004. An integrated tourism model for cultural events. Potchefstroom: North-west University. (Thesis – PhD).
- South Africa. 1973. The Seabirds and Seals Protection Act no. 46 of 1973. Pretoria.
- South Africa 1986. The International Convention for the Preservation of Pollution from Ships Act no. 2 of 1986. Pretoria.
- South Africa. 1997. Basic Conditions of Employment Act of 1997. Pretoria.
- South Africa. 1998a. Marine Living Resources Act no. 18 of 1998. Cape Town.
- South Africa. 1998b. National Environmental Act no. 107 of 1998. Pretoria.
- South Africa. 2003. National Protected Areas Act no. 57 of 2003. Cape Town.
- South Africa. 2004. National Biodiversity Act no. 10 of 2004. Cape Town.
- South Africa. 2013. Prevention and Combatting of Trafficking in Persons Act no. 7 of 2013. Cape Town.
- South African Maritime Safety Authority. 2015. Marine Tourism along South Africa's coastline. Accessed on: <http://www.samsa.org.za/> Date of access: 23 September 2015.
- SPSS Inc. 2017. SPSS® 24.0 for Windows, Release 24.0., Copyright© by SPSS Inc. Chicago, Ill. www.spss.com Date of access: 25 October 2017.
- Steyn, L. 2010. Consumer perceptions regarding labels on clothing and household textile products: a study in Gauteng. 3rd ed. Pretoria: Van Schaik.
- Stambouis, Y., & Skayannis, P. 2003. Innovation strategies and technology for experience-based tourism. *Tourism management*, 24(1):35-43.
- Stole, J., Fine, G. & Cook, K. 2001. Sociological miniaturism: seeing the big through the small in social psychology. *Annual review of sociology*, 26(1):387-413.
- Stout, G.W. & Green, N.P.O. 1986. *Work out biology*. London: McMillan Education Ltd.
- Strydom, H. 2007. Sampling and sampling methods. (*In De Vos, A.S., ed. Money generation model – version 2. <http://mgm2impact.com/> Date of access: 24 Oktober 2017*).
- Sung, H. 2004. Classification of adventure travellers: behaviour, decision making, and target markets. *Journal of travel research*, 42(4):343-356.

Sung, H.Y., Morrison, A.M. & O'Leary, J.T. 2000. Segmenting the adventure travel market by activities: from the North American industry providers' perspective. *Journal of travel and tourism marketing*, 9(4):1-20.

Swanepoel, J.W.H., Swanepoel, C.J., Van Graan, F.C., Allison, J.S., Weideman, H.M. & Santana, L. 2015. Elementary statistical methods. 3rd ed. Potchefstroom: AndCork.

Swanson, K.K. & Horridge, P.E. 2006. Travel motivations as souvenir purchase indicators. *Tourism management*, 27(1):671-683.

Swarbrooke, J. 1991. Sustainable tourism management. London: CAB International.

Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G. 2003. Adventure tourism: the new frontier. London: Butterworth-Heinemann.

Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G. 2006. Adventure tourism: the new frontier. Oxford: Butterworth-Heinemann.

Tandwa, L. 2016. Unabridged birth certificate travel rule scrapped.
<http://www.news24.com/SouthAfrica/News/unabridged-birth-certificate-travel-rule-scrapped-20160205> Date of access: 31 October 2017.

Techera, E.J. & Klein, N. 2013. The role of law in shark-based eco-tourism: lessons from Australia. *Marine policy*, 29(1): 21-28.

Terblanche, H. 2011. Travel motives of adventure tourists: a case study of Magoebaskloof adventures. Potchefstroom: North-West University. (Dissertation - MA.)

Theerapappisit, P. 2012. The bottom-up approach of community-based ethnic tourism: a case study in Chiang Rai. (*In* Kasimoglu, M. & Aydin, H., eds. Strategies for tourism industry: micro and macro perspectives. <http://www.intechopen.com/books/strategies-for-tourism-industry-micro-and-macro-perspectives> Date of access: 25 October 2017).

Thomas, L. 1998. Economic values of protected areas: guidelines for protected area managers. Gland: IUCN.

Thomas, S. & Crompton, J. 2003. A conceptualisation of the relationships between service quality and visitor satisfaction and their links to destination selection. *Leisure studies*, 22(1):65-80.

Tiedt, L. 2011. Travel motivations of tourists to selected marine national parks. Potchefstroom: North-West University. (Dissertation - MA).

Tilden, F. 1977. Interpreting our heritage. 3rd Edn. Chapel Hill: North Carolina Press.

- Todd, S.L., Graefe, A.R. & Mann, W. 2002. Differences in scuba diver motivations based on level of development. http://nrs.fed.us/pubs/gtr/gtr_ne289/gtr.ne289_107.pdf Date of access: 14 February 2012.
- Topelka, K.N. & Dearden, P. 2005. The shark watching industry and its potential contribution to shark conservation. *Journal of ecotourism*, 4(2):108-128.
- Tovar, C. & Lockwood, M. 2008. Social impacts of tourism: an Australian regional case study. *International Journal of Tourism Research*, 10(4):365-378.
- Trave, C., Brunnschweiler, J., Shaeves, M., Diedrich, A. & Barnett, A. 2017. Are we killing them with kindness? Evaluation of sustainable marine wildlife tourism. *Biological conservation*, 209(1):211-222.
- Traveller24. 2017. SA a 'world leader in responsible whale watching' but more regulation needed. <http://www.traveller24.com/Explore/Green/sa-a-world-leader-in-responsible-whale-watching-but-more-regulation-needed-20170630> Date of access 15 February 2018.
- Triantafillidou, A. & Petala, Z. 2016. The role of sea-based adventure experiences in tourists' satisfaction and behavioural intentions. *Journal of travel and tourism marketing*, 33(1):67-87.
- Tubb, K. 2010. An evaluation of effectiveness of interpretation within Dartommor National Park in reaching the goals of sustainable tourism development. *Journal of sustainable tourism*, 11(6):476-498.
- Turpie, J., Savy, C., Clark, B. & Atkinson, L. 2005. Boat-based whale watching in South Africa: an economic perspective. Rhodes: DEAT: Marine and Coastal Management.
- Valentine, P. & Birtles, A. 2004. Wildlife watching. (In Higginsbottom, K., ed. *Wildlife tourism: impacts, management and planning*. Australia: Common Ground Publishing. p. 16-34).
- Van der Merwe, P. 2009. Adventure tourism. (In Saayman, M., ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 219-250).
- Van der Merwe, P. & Saayman, M. 2008. Travel motivations of tourists visiting the Kruger National Park. *Koedoe*, 50(1):154-159.
- Van der Merwe, P. & Saayman, M. 2014. Factors influencing a memorable game viewing experience. *Africa journal of hospitality, tourism and leisure*, 3(2):1-17.
- Van der Merwe, P., Slabbert, M. & Saayman, M. 2011. Travel motivations of tourists on selected marine destinations. *International journal of tourism research*, 13(5):457-467.

- Van der Riet-Neethling, J. 2015. R30 million was spent during the Whale Festival. <http://www.netwerk24.com/ZA/Hermanus-Times/Nuus/R30-million-was-spent-during-the-Whale-Festival-20151021?mobile=true> Date of access: 21 September 2017.
- Venkatesh, U. 2006. Leisure: meaning and impact on leisure travel behaviour. *Journal of services research*, 6(1):87-108.
- Venter, J.A. & Mann, Q.A. 2012. Preliminary assessment of surf-zone and estuarine linefish species of the Dwesa-Cwebe Marine Protected Area, Eastern Cape, South Africa. *Koedoe*, 54(1): 1-10.
- Vianna, G.M.S., Meekan, M.G., Pannell, D.J., Marsh, S.P. & Meeuwig, J.J. 2012. Socio-economic value and community benefits from shark-diving tourism in Palau: a sustainable use of reef shark populations. *Biological conservation*, 145(1):267-277.
- Vogelgat Private Nature Reserve. 2017. Social and cultural significance of the reserve. <http://vogelgat.co.za/social-and-cultural-significance-of-the-reserve/> Date of access: 14 August 2017.
- Waligo, V.M., Clarke, J. & Hawkins, R. 2013. Implementing sustainable tourism: a multi-stakeholder involvement management framework. *Tourism management*, 36(1):342-353.
- Ward, C. & Berno, T. 2011. Beyond social exchange theory. *Annals of tourism research*, 38(4):1556-1569.
- WCED **see** World Commission in Environment and Development
- Wearing, S.L., Cunningham, P.A., Scweinsberg, S. & Jobberns, C. 2014. Whale watching as ecotourism: how sustainable is it? *Cosmopolitan civil societies journal*, 6(1):38-55.
- Weber, K. 2001. Outdoor adventure tourism: a review of research approaches. *Annals of tourism research*, 28(2):360-377.
- Wiid, J. & Diggines, C. 2015. Marketing research. 3rd ed. Cape Town: Juta & Company (Pty) Ltd.
- Williams, P. & Soutar, G.N. 2005. Close to the 'edge': critical issues of adventure tourism operators. *Asia pacific journal of tourism research*, 10(3):247-61.
- Williams, P. & Soutar, G.N. 2009. Value, satisfaction and behavioural intentions in an adventure tourism context. *Annals of tourism research*, 36(3):418-488.

- Williams, P.W., Hainsworth, D. & Dossa, K.B. 1995. Community development and special event tourism: the men's world cup of skiing at Whistler, British Columbia. *Journal of tourism studies*, 6(2):11-20.
- Wilson, C. & Tisdell, C. 2003. Conservation and economic benefits of wildlife-based marine tourism: sea turtles and whales as case studies. *Human dimensions of wildlife: an international journal*, 8(1):49-58.
- Windle, J. & Rolfe, J. 2014. Estimating the nonmarket economic benefits of beach resource management in southeast Queensland, Australia. *Australian journal of environmental management*, 21(1). <http://dx.doi.org/10.1080/14486563.2013.875953> Date of access: 25 October 2017.
- Wischniewski, J., Windmann, S., Juckel, G. & Brune, M. 2009. Rules of social exchange: game theory, individual differences and psychopathology. *Neuroscienc & behavioural reviews*, 33(3):305-313.
- World Commission in Environment and Development (WCED). 1987. The Brundtland Report – Our common future. London: Oxford University Press.
- World Tourism Organisation (WTO). 2001. Tourism 2020: vision global forecasts and profiles of market segments. <http://www.unohrlls.org/UserFiles/MTR/worldtoursiminput.pdf> Date of access: 30 October 2017.
- Wongthong, P. & Harvey, N. 2014. Integrated coastal management and sustainable tourism: a case study of the reef-based SCUBA dive industry from Thailand. *Ocean & coastal management*, 95(1):138-146.
- WTO **see** World Tourism Organisation
- Xu, J., Lue, Y., Chen, L. & Liu, Y. 2009. Contribution of tourism development to protected area management: local stakeholder perspectives. *International journal of sustainable development world ecology*, 16(1):30-36.
- Yolal, M., Gursoy, D., Uysal, M., Kim, H.L. & Karacaoglu, S. 2016. Impacts of festivals and events on residents' well-being. *Annals of tourism research*, 61(1):1-18.
- Yoon, Y. & Uysal, M. 2005. An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26(1):45-56.
- Zaltzman, D. 2010. Adventure travel put at \$89 billion global market. <http://www.travelmarketreport.com/leisure?articleID=4075&LP=1> Date of access: 13 January 2017.

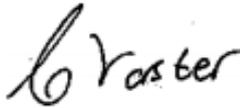
Zeppel, H. & Muloin, S. 2008. Marine wildlife tours: benefits for participants. (In Higham, J. & Lück, M., eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CABI International. p. 19-47).

Zhou, Y. & Ap, J. 2009. Residents' perceptions towards impacts of the Beijing 2008 Olympic Games. *Journal of travel research*, 48(1):78-91.

DECLARATION

I, C Vorster (ID: 710924 0034 084), Language editor and Translator and member of the South African Translators' Institute (SATI member number 1003172), herewith declare that I did the language editing of a thesis written by Ms L Geldenhuys from the North-West University (student number 21800995).

Title of the thesis: A sustainable management framework for marine adventure tourism products



18 November 2017

C Vorster

Date

Declaration of personal work

I, Linda-Louise Geldenhuys, identity number 9003200123086 and student number 21800995, hereby declare that this thesis registered as '*A sustainable management framework for marine adventure tourism products*' as part of the completion of my *Philosophiae Doctor* in tourism at the Potchefstroom Campus of the North-West University, is being submitted as my own work, and complies with the Code of Academic Integrity, as well as other relevant policies, procedure, rules and regulations of the North-West University, and has not been submitted before to any institution by myself or any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.

I understand and accept that this thesis which I am submitting, forms part of the university's property.

Ms L Geldenhuys

Prof Dr P van der Merwe

Date

Financial assistance

Financial assistance from the North West University and the National Research Foundation (NRF) is gratefully acknowledged. Statements and suggestions made in this study are those of the author and should not be regarded as those of the NRF.

Acknowledgements

Undertaking this PhD has been a life changing journey, and one which ended in the fulfilment of a dream. While I have challenged myself, learnt more about myself and my field of study, and ultimately completed this journey, it would not have been possible without the guidance, inspiration, motivation and encouragement of people along the way. I would like to thank the following people from the bottom of my heart.

- My Heavenly Father who has blessed me with the strength, knowledge and abilities to undertake and complete this journey.
- My promotor, Professor Peet van der Merwe, thank you for the belief you put in me and for guiding me throughout my studies. Thank you for never losing faith in me, for all the time and effort you dedicated to my studies and for every word of inspiration. I am truly honoured to have had you as a promoter throughout my studies.
- My co-promoter, Professor Melville Saayman, thank you for assisting, lending guidance and answering every question. Having been able to learn from you has been an honour and a privilege.
- My parents, Leone and Wehan Geldenhuys, without your love and support I would not have been able to undertake this journey. Your constant support and encouragement have been the driving force behind this thesis. Thank you for always believing in me, building me up and offering help where ever possible.
- Every single friend that felt neglected or forgotten, thank you for understanding every time I used this thesis as an excuse. I promise to make it up to you. A special thanks to Liza-Marie Weppenaar, who has dedicated much of her time as motivator and transcriber. You have been a great source of encouragement.
- Thank you to the field workers who helped with the surveys: Bianca van Rensburg, Chiree Jacobs, Marna Herbst, Karin Hagen, Lara Boonzaaier and Janine Lubbe. You have been a great blessing.
- Thank you to Professor Suria Ellis for her time, patience and guidance with the statistical analyses.
- Thank you to Clarina Vorster for assisting with language editing.

Abstract

A sustainable management framework for marine adventure tourism products

We know that when we protect our oceans we're protecting our future

~Bill Clinton

Marine adventure tourism is a relatively new topic of research, and one which has not received much attention over the past years. Recently, this industry has experienced a significant increase in interest amongst tourists, which urges the need for research in various areas of this topic. Sustainability of the marine adventure industry is the central focus of this research. Sustainability is described as the long-term survival of any tourism offering where the focus is placed on specific resources. In order for any tourism product to be sustainable, three types of resources need to be taken into account, namely economic efficiency, social equity and environmental conservation. These three resources form the basis of sustainability and share a particular interrelationship. This relationship explains sustainability as not being viable if one of these areas are not accounted for.

Sustainability is a universal concept and does not take into account the level of development of a country. It does, however, have the ability to ensure economic, environmental and social development of a destination if implemented correctly. Underlying aspects which can ensure the correct implementation of sustainability in any tourism industry includes tourist satisfaction, participation of the local community in planning and development and conservation and promotion of the natural environment. The literature has placed much focus on sustainability of wildlife- and land-based adventure tourism. However, a lack of a framework for sustainability of marine adventure tourism products have been identified.

Therefore, the primary goal of this thesis was to develop a sustainable management framework for marine adventure tourism products. Specific focus is placed on two marine adventure activities, namely boat-based whale watching and shark cage diving. In order to achieve this goal, five objectives were set and reached during various stages of this thesis. Firstly, a critical analysis of marine tourism was conducted, which forms Chapter 2 of this thesis. The second objective was to conduct a critical analysis on adventure tourism (Chapter 3). The third objective involved a review about the sustainability of tourism products (Chapter 4). The fourth objective was to analyse the empirical results obtained from the data collection by means of statistical analyses (Chapter 5). And lastly, the sixth objective was to draw conclusions and make recommendations and to establish the framework for sustainable management of marine adventure products (Chapter 6).

The data was collected by means of both qualitative and quantitative methods in order to encapsulate all necessary information. The qualitative data collection focussed on the opinion and attitudes of operators in marine adventure tourism, while quantitative methods were implemented for the collection of information regarding the social community of Hermanus and participants of shark cage diving and whale watching. Two separate questionnaires were therefore used.

Non-probability sampling, with convenience sampling methods were implemented for the quantitative surveys. The surveys took place in Hermanus and Gansbaai, Western Cape. The sample included the community of Hermanus (n=250), participants of shark cage diving and whale watching (n=350) and whale and shark cage operators (n=4). The first phase of the research was qualitative in nature and involved conducting personal interviews with available and willing operators of marine adventure products. The second phase was exploratory in nature, which included the use of descriptive statistics, and two-way frequency tables to determine the socio-demographic profiles of both the residents of Hermanus and participants of marine adventure tourism. Three separate exploratory factor analyses were conducted to identify the community impacts of whale watching and shark cage diving operations, motives to participate and experiences of marine adventure participants. A frequency table was also used to identify the aspects influencing the satisfaction of participants. Other statistical analyses conducted include a cluster analysis and cross-tabulations. These analyses were used to develop a comprehensive profile of the market segments for marine adventure tourism.

The most important aspects identified from the qualitative interviews with operators include the fact that online marketing is seen as a more efficient means of marketing, operators are aware of the concept of sustainability, and there is a need for contributions to conservation of both whales and sharks. In terms of the quantitative surveys, three impacts (awareness, negative aspects and community benefits) of shark cage diving and whale watching on the Hermanus community were identified, of which *negative aspects* was identified as the most important factor and *community benefits* as the least important factor. The most important motive for participation for marine adventure participants was identified to be *marine species*, while *personal achievement* was identified as the least important factor. *Proximity to marine nature* was identified as the factor with the most influence on participants' experiences, while *sea conditions* was identified as the least important influencing factor. A six-cluster taxonomy for the market for marine adventure tourism was identified, namely T²RACE (thalassophiles, thrill seekers, risk takers, adrenaline junkies, consorts and experience seekers).

The contributions of this research was highlighted, and it was found that this research contributes to multiple areas of marine tourism, within both a literature and practical contribution. Firstly, this research contributes to the literature of marine tourism management because a model was established which highlights the important marine tourism management concepts, a model for describing sustainability as part of ecotourism was established, the community impacts of shark cage

diving and whale watching was identified and the market for marine adventure tourism was established by identifying the profile, the motives to participate, the market taxonomy and aspects influencing participants' satisfaction and experience. Secondly, the practical contribution of the research is the development of the framework which could be implemented by operators for sustainable management of the sector.

Key words: *marine tourism, adventure tourism, shark cage diving, whale watching, sustainability, tourism management, sustainable management*

Table of contents

CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION	1
1.2 BACKGROUND TO THE STUDY	3
1.2.1 Sustainability of tourism products	3
1.2.2 Adventure tourism	5
1.2.3 Marine wildlife tourism	6
1.2.4 Key findings from the literature	11
1.3 PROBLEM STATEMENT	12
1.4 GOALS AND OBJECTIVES	13
1.4.1 Goal.....	13
1.4.2 Objectives.....	13
1.5 METHOD OF RESEARCH	14
1.5.1 Literature study.....	14
1.5.2 Empirical survey	15
1.6 DEFINING THE CONCEPTS	28
1.6.1 Marine adventure tourism	28
1.6.2 Marine wildlife tourism	28
1.6.3 Tourist experiences	28
1.6.4 Sustainable management.....	29
1.6.5 Framework	29
1.7 CHAPTER CLASSIFICATION	29

CHAPTER 2: AN ANALYSIS OF MARINE TOURISM

2.1 INTRODUCTION	31
2.2 MARINE TOURISM.....	32
2.2.1 History and development of marine tourism.....	33
2.2.2 Defining marine tourism.....	33
2.2.3 Marine tourism sub-sectors	35
2.2.4 Marine tourism recreational opportunities	40
2.3 MARINE WILDLIFE TOURISM.....	43
2.3.1 Marine ecotourism	45
2.4 MARINE TOURISM MANAGEMENT	48
2.4.1 Key aspects pertaining to tourism and marine tourism management	48
2.5 CONCLUSION:	68

CHAPTER 3: ADVENTURE TOURISM

3.1 INTRODUCTION 69

3.2 DEFINING ADVENTURE TOURISM AND ADVENTURE TOURIST..... 70

3.2.1 Different types of adventure tourism 71

3.2.2 The adventure tourists 74

3.3 TRAVEL MOTIVES OF ADVENTURE TOURISTS 78

3.4 ADVENTURE TOURISM EXPERIENCE 85

3.4.1 Stages of adventure 86

3.4.2 The adventure experience paradigm 87

3.4.3 Adventure activity scale 88

3.4.4 Marine adventure tourists’ benefits and experiences 89

3.5 MANAGEMENT OF ADVENTURE TOURISM..... 96

3.6 CONCLUSION 97

CHAPTER 4: SUSTAINABLE TOURISM MANAGEMENT

4.1 INTRODUCTION 99

4.2 DEFINING SUSTAINABLE TOURISM..... 100

4.2.1 Advantages and disadvantages of sustainability 105

4.2.2 Interpretations, perspectives and limitations of sustainable tourism 107

4.3 ECONOMIC EFFICIENCY..... 108

4.3.1 Economic Benefits..... 109

4.3.2 Economic impact studies on marine tourism 110

4.4 ENVIRONMENTAL CONSERVATION 111

4.4.1 Positive impacts of tourism on environments 116

4.4.2 Negative impacts of tourism on environments 117

4.5 SOCIAL EQUITY 120

4.5.1 Analysis of the concept “culture” 121

4.5.2 The host community 121

4.5.3 Impacts of tourism on the host community..... 123

4.6 SOCIAL IMPACT MODELS..... 126

4.6.1 Doxey’s Irridex Model 127

4.6.2 Butler’s Lifecycle Model 128

4.6.3 Dogan’s Framework 130

4.6.4 The Social Exchange Theory..... 130

4.7 LITERATURE ON SUSTAINABLE MANAGEMENT FRAMEWORKS..... 132

4.8 CONCLUSION 136

CHAPTER 5: EMPIRICAL RESULTS

5.1 INTRODUCTION.....	138
5.2 SECTION A: QUALITATIVE RESULTS.....	139
5.2.1 Number of years in operation.....	139
5.2.2 Number of boats owned and in operation	139
5.2.3 Number of permanent staff and temporary workers	140
5.2.4 Role in the operation	141
5.2.5 Average price per person for a trip.....	141
5.2.6 Number of moths per year in operation.....	141
5.2.7 Training provided for staff members	142
5.2.8 Does the company have a website and is it in operation.....	143
5.2.9 Attendance to marketing shows.....	144
5.2.10 Marketing tools, such as direct marketing, that are used	144
5.2.11 Target market	145
5.2.12 Relationship to the Hermanus Whale Festival	146
5.2.13 Attitude towards conservation fees	147
5.2.14 Management advantage of the company	148
5.2.15 What do you think is sustainability?	149
5.2.16 What should be done to keep the industry sustainable?	150
5.2.17 What is being done to educate people about the sharks and whales?	151
5.2.18 Measures in place to look after the environment while on a trip	152
5.3 SECTION B: QUANTITATIVE RESULTS OF HERMANUS RESIDENTS AND ADVENTURE MARINE TOURISM PARTICIPANTS	154
5.3.1 Hermanus community results	154
5.3.2 RESULTS ON MARINE ADVENTURE TOURISM (WHALE WATCHING AND SHARK CAGE DIVING).....	165
5.4 SECTION C: RESULTS PERTAINING TO THE FACTOR ANALYSES	175
5.4.1 Factor analysis on the impact of shark cage diving and whale watching on the community	176
5.4.2 Factor analysis on the motives of adventure participants in marine adventure activities .	179
5.4.3 Factor analysis on the experiences of marine adventure participants	182
5.4.4 Aspects contributing to the satisfaction of marine adventure participants	185
5.5 SECTION D: RESULTS OBTAINED FROM THE CLUSTER ANALYSIS AND CROSS-TABULATIONS	187
5.5.1 Results of the cluster analysis	187
5.5.2 Identification of clusters	187
5.6 CONCLUSION	195

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION.....	197
6.1.1 Personal journey as a phd student	198
6.2 CONCLUSIONS REGARDING THE RESEARCH	200
6.2.1 Conclusions regarding the literature analysis on marine tourism	200
6.2.2 Conclusions regarding the literature analysis on adventure tourism.....	203
6.2.3 Conclusions regarding the literature analysis on sustainable tourism management.....	204
6.2.4 Conclusions regarding the empirical results of this research.....	207
6.3 CONTRIBUTIONS AND LIMITATIONS OF THE STUDY	212
6.4 A SUSTAINABLE MANAGEMENT FRAMEWORK FOR MARINE ADVENTURE PRODUCTS	214
6.4.1 External environment.....	216
6.4.2 Inputs	219
6.4.3 Demand side factors.....	227
6.4.4 Supply side factors	231
6.4.5 Guidelines to sustainability	234
6.4.6 Outputs.....	235
6.4.7 Feedback.....	236
6.5 RECOMMENDATIONS AND FUTURE RESEARCH OPPORTUNITIES	236
6.5.1 Managerial recommendations.....	236
6.5.2 Recommendations for future research.....	237
APPENDICES	237
BIBLIOGRAPHY	248

List of figures

Fig 1.1: Outline of chapter	2
Fig 1.2: Analysis of sustainability of tourism as part of ecotourism	4
Fig 1.3: Framework for sustainable management of marine adventure tourism products based on the key findings from the literature	12
Fig 2.1: Outline of chapter	32
Fig 2.2: Sub-sectors of marine tourism	36
Fig 2.3: Marine-based activities in comparison with the marine tourism categories	39
Fig 2.4: Core components of non-consumptive wildlife use	44
Fig 2.5: Elements of the definition of marine ecotourism	45
Fig 2.6: Management aspects of marine tourism management	48
Fig 2.7: A model of marine tourism management	56
Fig 2.8: Framework for sustainable coastal tourism management	63
Fig 3.1: Outline of chapter	70
Fig 3.2: Adventure quadrants	74
Fig 3.3: Characteristics of the “new” adventure tourist	75
Fig 3.4: Features of the “new” tourist	76
Fig 3.5: Stages of adventure	86
Fig 3.6: The adventure experience paradigm	87
Fig 3.7: The adventure activity scale	89
Fig 3.8: Conceptual model for adventure tourism management	97
Fig 4.1: Outline of chapter	100
Fig 4.2: Sustainable tourism	100
Fig 4.3: Sustainability of tourism offerings as part of ecotourism	103
Fig 4.4: Renewable and non-renewable resources	112
Fig 4.5: Butler’s lifecycle model	128
Fig 4.6: Social exchange theory	131
Fig 4.7: Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals	133
Fig 4.8: The multi-stakeholder involvement management framework	134
Fig 4.9: A sustainable management framework for Mapungubwe National Park	135
Fig 5.1: Outline fo chapter	139
Fig 5.2: Gender of residents of Hermanus	155
Fig 5.3: Occupation of residents of Hermanus	156

Fig 5.4: Impact of the festival on personal quality of life	158
Fig 5.5: Impact of the Hermanus Whale Festival on the community of Hermanus	159
Fig 5.6: Gender of marine adventure participants	166
Fig 5.7: Home language of marine adventure participants	167
Fig 5.8: Highest level of education of marine adventure participants	168
Fig 5.9: Type of marine adventure participant visitors	169
Fig 5.10: Future activities in marine adventure activities	172
Fig 5.11: Six-cluster solution: Ward's method with euclidian distance measures	187
Fig 6.1: Outline of chapter	199
Fig 6.2: A sustainable management framework for marine adventure tourism products	215

List of tables

Table 1.1: Comparison between qualitative and quantitative research methods	16
Table 2.1: The spectrum of marine recreation opportunities	40
Table 2.2: Shark cage diving and whale watching classification	42
Table 2.3: Code of conduct for shark cage diving activities at the Azores	65
Table 3.1: Soft versus hard adventure tourism	72
Table 3.2: Push and pull motives of marine tourists	81
Table 3.3: Summary of travel motives in various tourism industries	82
Table 3.4: Description of aspects influencing marine wildlife tourists' experiences	93
Table 4.1: Sustainable versus non-sustainable tourism development	105
Table 4.2: Doxey's Irridex	127
Table 5.1: Age of residents of Hermanus	155
Table 5.2: Highest level of education of residents of Hermanus	157
Table 5.3: Number of years living in Hermanus	157
Table 5.4: Working at the Hermanus Whale Festival	159
Table 5.5: Level of interest in the Hermanus Whale Festival	160
Table 5.6: Residents' evaluation of the Hermanus Whale Festival	161
Table 5.7: Importance of the events at the Hermanus Whale Festival for participation	162
Table 5.8: The impact of shark cage diving and whale watching on the community	163
Table 5.9: Age of marine adventure participants	166
Table 5.10: Province of residence of marine adventure participants	168
Table 5.11: Annual gross income of marine adventure participants	169
Table 5.12: Where marine adventure participants heard about the operator	170
Table 5.13: Participation in other marine activities	171
Table 5.14: Previous participation in marine adventure activities	172
Table 5.15: Motives of shark cage divers and whale watchers to participate in the activity	173
Table 5.16: Aspects influencing the experience of shark cage divers and whale watchers	174
Table 5.17: Community impacts of shark cage diving and whale watching	178
Table 5.18: Motives to participate of marine adventure participants	181
Table 5.19: Experiences of marine adventure participants	183
Table 5.20: Aspects influencing the level of satisfaction of marine adventure participants	186
Table 5.21: ANOVA and Tukey's post hoc multiple comparison results for marine adventure participants	188

Table 5.22: Cross-tabulation with Ward's Method results for marine adventure participants	192
Table 5.23: One-way ANOVA with Tukey's post hoc test results for marine adventure participants	193

List of maps

Map 1.1: Southern Right Whale congregation sites, Western Cape	8
Map 1.2: Hermanus, Western Cape	9
Map 1.3: Geographical location of shark cage diving in South Africa	10

Chapter 1

Introduction and Problem Statement

Ocean is more ancient than the mountains, and freighted with the memories and dreams of Time

~H.P. Lovecraft

1.1 INTRODUCTION

Douglas, Douglas and Derret (2001) suggest that tourism consumption patterns reflect the ongoing and always increasing diversity of interests of the late-modern leisure tourist. These days the tourism industry is increasingly conforming to an “experience industry” where tourists are willing to pay travel agents and operators in order to take part in leisure activities which deliver optimal experiences in a limited time space (Opaschowski, 2001:1). One such industry in tourism which has experienced an immense growth is marine tourism (Rogerson, 2007:228). Marine tourism can be defined as all recreational activities involving a person to travel away from his place of residence, to a destination where the host or focus is the marine environment (Orams, 1999:9). Orams (1999:9) further defines the marine environment to include saline waters which are affected by tides. Sectors of marine tourism include adventure tourism, wildlife-based tourism, leisure or recreational tourism and cruise ship holidays (Halpenny, 2002:9). The focus of this research was on marine adventure tourism.

Adventure tourism can be defined as guided commercial tours, where the principal attraction is an outdoor activity that relies on features of the natural terrain, generally requires specialised equipment and is exciting for the tour clients (Bentley & Page, 2001; Buckley, 2000; Hudson, 2002; Page, Bentley & Walker, 2005; Swarbrooke, Beard, Leckie, & Pomfret, 2003). Adventure tourism has broadened in scope and appeal and as a result interest in this industry has soared (Sung, Morrison & O’Leary, 2000:2). Within the scope of adventure tourism, marine tourism offers adventure activities to tourists that promise a unique experience (Orams, 2013:481). According to Buckley (2007:1428) marine adventure activities include sea kayaking, rafting, scuba diving, snorkelling, surfing, whale watching, shark cage diving and sailboarding, to name a few. Orams (2013:481) adds another component of marine adventure tourism, namely marine wildlife tourism. Marine wildlife tourism depicts a wide range of activities that focus on marine animals as the primary attraction such as whale watching, shark diving and turtle tours (Orams, 2013:482).

Two marine animals which have been gaining more and more interest over the past years for those in search of experiencing a close encounter, are whales and sharks (Wilson & Tisdell, 2003:50; Dicken & Hosking, 2009:227). Shark cage diving is seen as a controversial activity due to its reliance on attracting sharks to a viewing site by using bait, an activity referred to as chumming (Bruce & Bradford, 2013:889). Whale watching, on the other hand is more complex than providing the whale

with food. Whale watching is based on an annual migration of whales from the colder southern pole to the warmer waters of the South African coast (Wilson & Tisdell, 2003:50).

Although these topics have enjoyed much interest in international research pertaining to the behaviour of the animals (Cater, 2010; Cunningham, Huijbens & Wearing, 2012; Orams, 2013; Lück, 2003), little effort has been put into identifying the impact of experiencing an interaction with these animals on viewers themselves or the sustainability of these industries (Orams, 2000:562; Wearing, Cunningham, Scweinsberg & Jobberns, 2014:39), especially in a South African context (Dicken & Hosking, 2009:227). Much of the literature regarding sharks and whales focus on the behaviour of the animal and the impact of tourism on these animals (Orams, 2000:562).

The aim of this chapter is to give a background of the study, the problem statement, the goal and objectives are identified, a discussion on the methodology of the study is conducted, important concepts pertaining to the study are defined and the chapter outline for the thesis is provided. Figure 1.1 provides a summary of the outline of this chapter.

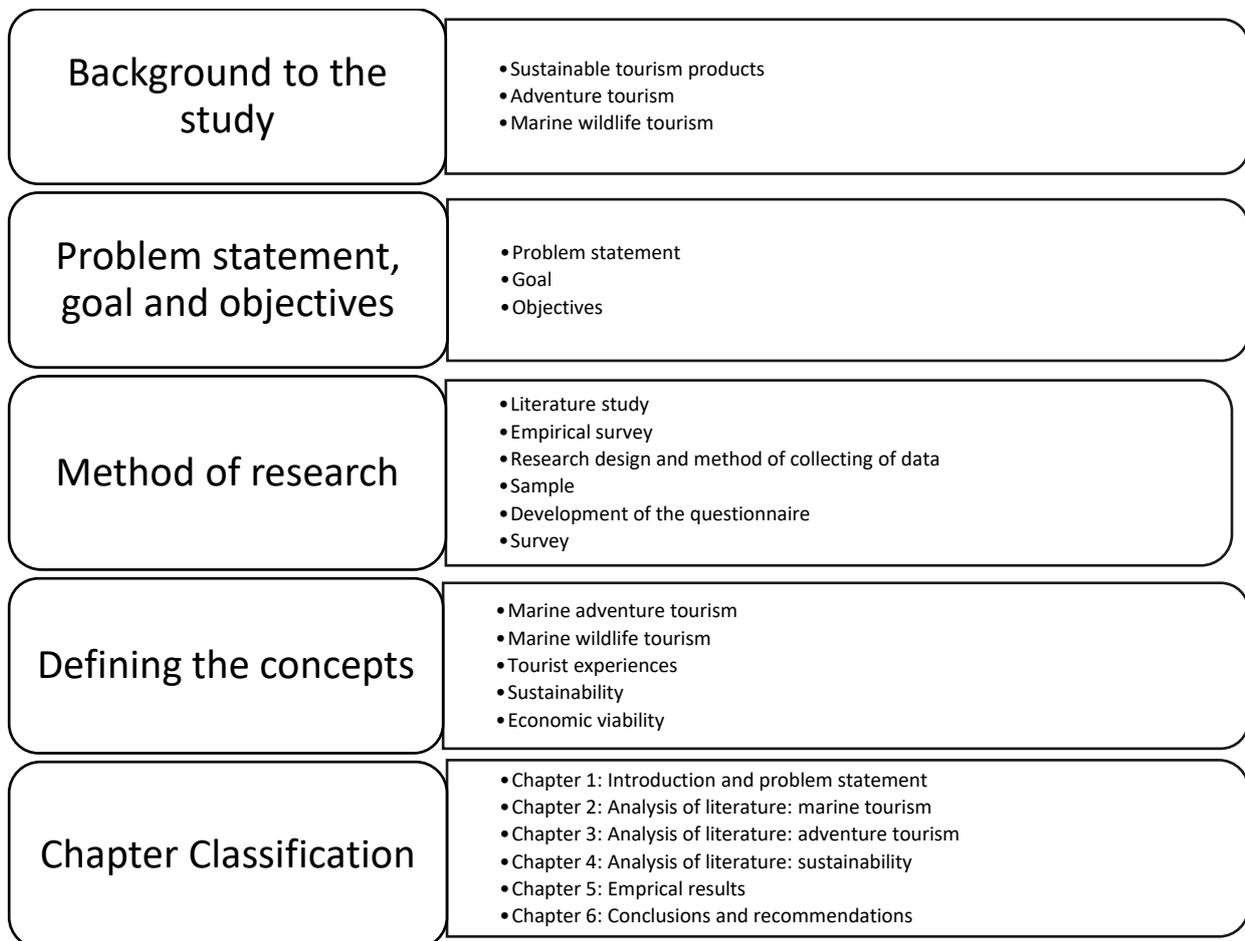


Figure 2.1: Outline of chapter

1.2 BACKGROUND TO THE STUDY

This following section provides a background literature to the study by discussing applicable concepts such as sustainability of tourism products, adventure tourism, marine wildlife tourism, the shark cage diving industry of South Africa and the whale watching industry of South Africa.

1.2.1 Sustainability of tourism products

The term sustainability can be defined as development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs (WCED, 1987:7). Coetzee and Saayman (2009:125) further state that sustainability highlights three arguments. Firstly, sustainable development of tourism products should be a long-term strategy for the preservation and conservation of the environment. Secondly, it should encompass an inter- and intra-generational balance of welfare. Thirdly, sustainable tourism development is proposed to be universally valid which does not consider the level of development of a country, socio-cultural and political conditions (Coetzee & Saayman, 2009a:125).

Sustainable tourism is a term used to describe the long-term survival of an offering in a specific destination. According to Ioannides (2001:59), tourism can be seen as sustainable at a destination where tourism numbers and tourism spending indicate a steady increase over a specific period of time. According to Guitierrez, Lamoureux, Matus and Sebunya (2005:4) it is important to consider the environmental resources, socio-cultural authenticity (or social equity) and economic efficiency in order for a tourism destination or offering to be called sustainable. Sustainable tourism is therefore based on environmentally sustainable economic development, where sustainability is dependent on the entire environmental system, including humanity (Coetzee & Saayman, 2009a:131).

According to Kent, Sinclair and Diduck (2012:89) certain issues in tourism and sustainability, such as the environmental system, carrying capacity, impact assessment and stakeholder management, can be shifted to ecotourism as well. Accurately so, the terms ecotourism and sustainability both have features which relate to the other, such as minimisation of negative impacts, conservation and promotion of the natural and cultural environments, tourist satisfaction as well as participation of the local community in tourism development (Sirakaya, Sasidharan & Sonmez, 1999; Kent *et al.*, 2012:89). Sustainable tourism can thus be summarised by means of Figure 1.2.

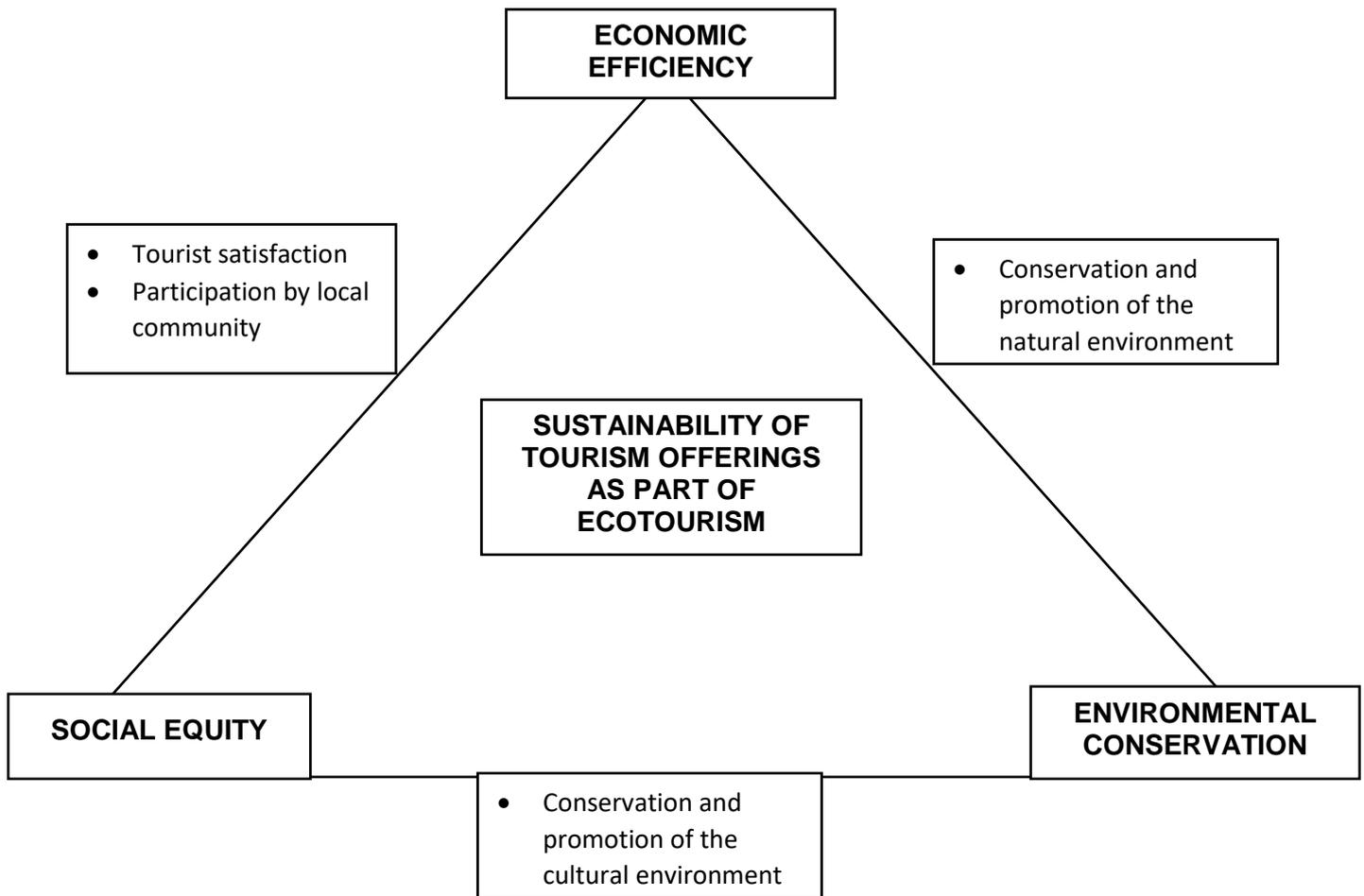


Figure 1.2: Analysis of sustainability of tourism offerings as part of ecotourism

(Source: Author's own compilation)

The term sustainability is made up of three pillars, namely environmental conservation, economic efficiency and social equity (Bostrom, 2012:3). These pillars are also known as the three “P’s” (People, Profit and Planet) or the three “E’s” (Economic, Environment and Equity) (Bostrom, 2012:3). The relationship between these three areas are compatible across all areas of tourism development (Coetzee & Saayman, 2009a:131) and play a major role in building a humane, equitable and socially responsible tourism environment without the overexploitation of resources. These three pillars work together to form a positive integration which ensures that sustainable goals are achieved (Littig & Grießler, 2005:6) (see Chapter 4 for full discussion).

Sustainability goals, often viewed as ambitious and therefore an idealistic approach, are complex and problematic on a global scale (Ioannides, 2001:57). The reason being the unavoidable clash between environmental conservation and social equity. According to Littig and Grießler (2005:6) trade-offs between the natural and social environment involve accessibility and mobility as well as policy formulation. An asymmetrical impact can become a problem where social goals and environmental conservation goals clash. For example, environmental conservation often involves

restricting access to an area which means that the social community is deprived of enjoying the benefits of this area in the short term, resulting in a disregard for sustainable tourism development from the local community and a decrease in economic benefits (Coccosis, Edwards & Priestly, 1996:200). Therefore, it is important to ensure that the local community is allowed participation in the process of sustainable tourism development. This, in turn, will ensure tourism satisfaction as the local community will be acceptable towards sustainable tourism in the long term (Kent *et al.*, 2012:90). Many researchers agree that the local community should be offered the chance to participate in decision-making and development processes (Kent *et al.*, 2012:89; Erkus-Ozturk & Eraydin, 2010:2; Xu, Lue, Chen & Liu, 2009:30). By incorporating the local community as a major stakeholder in tourism development, local economic benefits will be maximised and support for conservation efforts will be obtained (Kent *et al.*, 2012:90).

1.2.2 Adventure tourism

One sector of the ever-growing tourism industry which is enjoying increased awareness amongst researchers in the field as well as the general market is adventure tourism (McKay, 2012; Williams & Soutar, 2009; Cater, 2006). Adventure tourism operates on a close relationship with the local community as well as the environment (McKay, 2012:46). Potentially, the impacts caused by adventure tourism has negative outcomes for both the community and the environment (McKay, 2012:46). Therefore, as the growth in adventure tourism increases amongst the general public, so does the need for implementation of sustainability in this sector (See Figure 1.2) (McKay, 2012:46). The focus of adventure tourism is on smaller groups of tourists, therefore adventure tourism forms part of a niche market within the scope of alternative tourism.

Adventure tourism is best described as a term spanning a variety of definitions where the concept differs from person to person (Van der Merwe, 2009:220). An activity which might seem as part of one person's daily life might be something extreme and far from ordinary for another person (Van der Merwe, 2009:220). Broadly speaking, adventure tourism can be defined as guided commercial tours, where the primary activity takes place outdoors, it relies on general features of the natural environment, requires specialised equipment or guides and is exciting for the participant (Buckley, 2007:1428). Not only is adventure tourism a concept which might differ from person to person, but it also involves a diverse range of skills and expertise (Buckley, 2007:1428). Activities which fall under the adventure tourism umbrella include mountain climbing, caving, sea kayaking, snorkelling, scuba diving, shark cage diving, whale watching, snowboarding, skydiving, abseiling, white-water rafting, skiing, horse riding and off-road driving to name but a few (Buckley, 2007:1428). Different people taking part in the same activity may have different skills, demographics, experiences and expectations but they share the similarity of taking part in the same activity (Buckley, 2007:1428).

Aside from the highly involved activities, adventure tourism also includes more passive activities. Therefore, adventure tourism can be categorised as either hard adventure or soft adventure. Hard adventure tourism products refer to activities with high levels of risk and which requires intense

commitment from the participant and advanced skills (Van der Merwe, 2009:230). Hard adventure activities include white-water rafting, abseiling, scuba diving, bungee jumping, mountain climbing and astrotourism (George, 2014:216) (see chapter three for full discussion).

On the other hand, soft adventure tourism can be defined as all those activities with a perceived risk but contains low levels of actual risk, it requires minimal commitment or skills from the participant and most of the activities are led by an experienced guide (Van der Merwe, 2009:230). Activities included in soft adventure tourism is wildlife-based tourism (marine and land based), whale watching, shark cage diving, bushveld dinners, trekking, nature photography, cycling, bush walking and ballooning (George, 2014:216). Both shark diving and whale watching are part of marine wildlife tourism.

1.2.3 Marine wildlife tourism

Wildlife-based tourism does not only take place on dry land. In recent years wildlife-based tours in marine and coastal environments have become a popular activity (Zeppel & Muloin, 2008:19). Marine wildlife tourism is defined as any form of tourist activity where the primary purpose of the activity involves watching, studying or enjoying marine wildlife (Zeppel & Muloin, 2008:20). The activities included in marine wildlife tourism is wildlife-watching holidays, wildlife boat trips, guided island or coastal walks, observation of marine life from land, visiting marine or coastal nature reserves and visiting marine wildlife visitor centres (Zeppel & Muloin, 2008:20). In addition to this, there has been a rise in interest amongst the market in targeting a specific animal, such as Great White Sharks or Southern Right Whales (Orams, 2013:482). This interest in the targeted animal has created a demand for learning amongst those interested in the animal and as a result, operators offer educational services as part their service package (Orams, 2013:482).

Marine wildlife tourism offers tourists such a wide variety of tourism activities and opportunities that there is a need to categorise these activities. Reynolds and Braithwaite (2001:33) proposed seven categories into which wildlife tourism in general can be categorised, which is applicable to the marine wildlife industry, namely:

- Nature-based tourism with a wildlife component: coming across wildlife while on tour is purely incidental and the main purpose of the trip is on nature, for example a cruise on a yacht
- Locations with good wildlife opportunities: Some accommodation establishments are located within close proximity to a wildlife-rich area, such as a house overlooking the bay
- Artificial attractions based on wildlife: some species are amenable to forming the basis of a man-made attraction where the species are kept in captivity, for example and aquarium
- Specialist animal watching: these tours cater specifically for special interests in a specie or a group of species, for example shark cage diving or whale and dolphin watching
- Habitat specific tours: these tours are based on a habitat which is rich in wildlife and accessed by a specialised vehicle or vessel, such as snorkelling and scuba diving

- Thrill-offering tours: these tours are based on the exhibition of a dangerous or large species which is enticed to exhibit a certain behavioural trait by the operator, such as shark cage diving
- Hunting or fishing tours: this category involves the consumptive use of wildlife, which may be in their natural habitat, semi-captive or in farmed conditions and may involve killing the animal, such as deep-sea fishing.

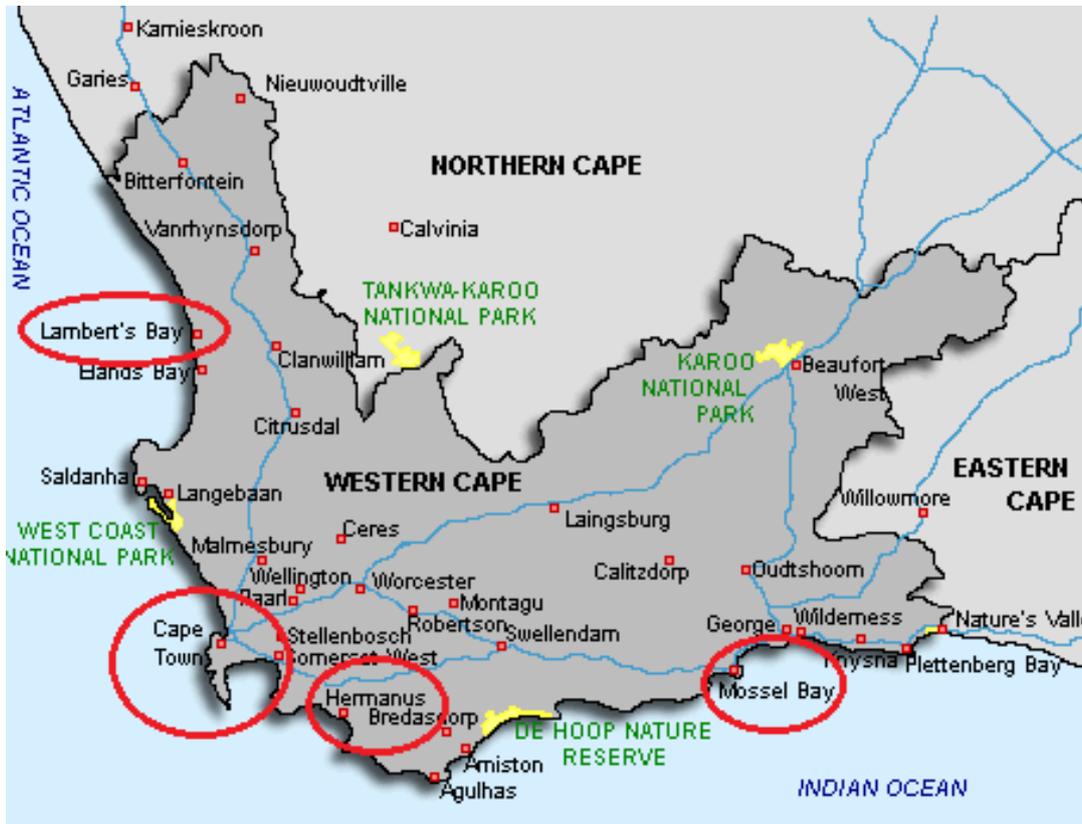
The list illustrates the wide and diverse range of marine wildlife activities and also represents a wide spectrum of tourism markets that is encapsulated by marine wildlife tourism. An analysis of the components of this dynamic industry should take tourists' motivations and attitudes into account in order to ensure that a full comprehension of the industry is reached (Reynolds & Braithwaite, 2001:34). As with any other tourism activity, tourists are motivated by certain forces, whether extrinsic or intrinsic, to take part in such activities (Reynolds & Braithwaite, 2001:34). Reynolds and Braithwaite (2001:34) have identified nine different groups of wildlife tourists according to their exhibition of certain motivational factors. These groups include naturalists, ecologists, humanistic, moralistic, scientists, aesthetic, utilitarian, dominionistic and negativistic (Reynolds & Braithwaite, 2001:34). Aside from the motives driving tourists to participate in these types of activities, the experiences gained from such activities are also important drive-forces behind tourist participation (Orams: 2000:561). According to Orams (2000:561) experiences derived from partaking in adventure tourism activities can include social experiences (meeting new people with shared interests), psychological experiences (adrenaline rush from a dangerous situation and/or an emotional experience) as well as educational experiences (the tourist learns something new about the environment, the animals or himself) (Orams 2000:561). Two marine wildlife sectors which have enjoyed much attention in a South African setting amongst the general market is shark cage diving and whale watching. These sectors have grown in popularity over the past five years and therefore determining the motives and experiences of these sectors are important for the sustainable management thereof.

1.2.3.1 The whale watching sector of South Africa

South Africa has a vibrant whale watching sector. The Southern Right Whales' annual migration forms the Southern Hemisphere to the coastal waters of South Africa has ensured that the sector has grown over the past decade (Barendse & Best, 2014:1358). Whale watching in South Africa is not a new phenomenon since it started in the early 1990's (Turpie, Savy, Clark & Atkinson, 2005:10).

The most popular whale watching attraction in South Africa is the Southern Right Whale, supporting a valuable land-based viewing experience as well as a boat-based whale watching experience in the Western Cape (Turpie *et al.*, 2005:12). These whales migrate to the coastal waters of South Africa annually for mating and calving purposes (Turpie *et al.*, 2005:12). Over 90% of the females born on the coast of South Africa return later to have their first calf (Best, 2000: 43). According to Turpie *et al.* (2005:12) Southern Right Whales tend to concentrate within one nautical mile (1.85 kilometres)

off the coast in sheltered bays such as Lambert's Bay, Mossel Bay, The Cape Town Peninsula including Struis Baai, Pearly Beach, Walker Bay, Kleinmond, False Bay and Hermanus. The Southern Right Whale provides for a valuable whale watching experience due to these whales being easily attracted by boats and their exhibition of a high level of activity on the surface of the water, such as spy hopping between the propellers of the boat (Turpie *et al.*, 2005:12). Map 1.1 shows the congregation sites of the Southern Right Whales along the South African coastline.

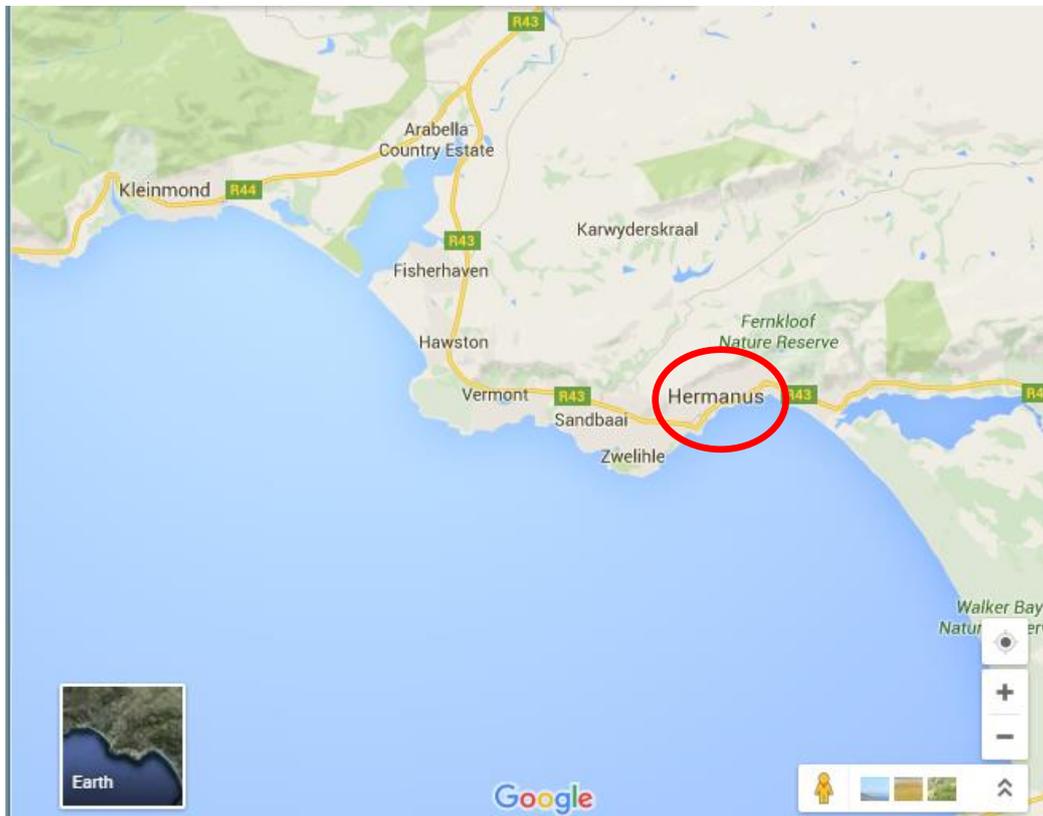


Map 1.1: Southern Right Whales congregation sites, Western Cape

(Source: SACarrental.com, 2015)

In celebration of the whales returning to the coast of South Africa annually, the Hermanus Whale Festival was established in 1991 and is the only eco-marine festival in South Africa (Hermanus Whale Festival, 2015). Hermanus is a small coastal town in the Western Cape province of South Africa, situated between the Botrivier and Kleinrivier lagoons with the small Onrus lagoon in the middle (Map 1.2 shows the geographical location of Hermanus) (Hermanustourism, 2015). The festival is currently in its 24th year of existence and boasts with a visitor number of 100 000 (Hermanus Whale Festival, 2015). Stretching over a three-day period the festival is held in October every year and the focus point of the festival is the Southern Right Whales (Hermanus Whale Festival, 2015). Visitors can enjoy watching the whales play from land as well as go on a trip with one of the three operators in the town (Hermanus Whale Festival, 2015, Department of Environmental Affairs, 2017). According to the Department of Environmental Affairs and the Phakisa operation (Department of Environmental Affairs, 2017) several measures have been put in place in

support of sustainability of the industry. These measures include the development of policies which guides the process of decision making for permit allocation, the promotion of growth of these sectors, education and methods of instilling conservation ethics. These measures also include enforcement from the government to ensure compliance amongst operators in the industry. Operators need to reapply for the permit every five years to ensure that all areas have been complied with (Department of Environmental Affairs, 2017).



Map 1.2: Hermanus, Western Cape

(Source: Google maps, 2015)

1.2.3.2 The shark cage diving sector of South Africa

Sharks are one of the important marine tourism attractions at dive sites around the world, including South Africa, with a contribution of millions of rands towards the local economy (Topelka & Dearden, 2005:109).

Shortly after South Africa passed the national legislation regarding the protection of Great White sharks from all types of fishing exploitation in 1991, shark cage diving was developed (Johnson & Kock, 2006:42). Three methods of ensuring a Great White sighting on a dive trip is identified, namely chumming (baiting), non-chumming and decoy activities (Johnson & Kock, 2006:42). The first method, chumming, involves a mixture of fish-based products that is tethered to a cage diving boat by a rope, which drags behind the boat in the water, emanating a chum slick in the water (Johnson & Kock, 2006:42). Sharks are then enticed to approach the cage, which is immersed in the water just below the surface (Johnson & Kock, 2006:42).

The second method, non-chumming activities, involves less invasive methods, such as observing the natural predatory activity at a particular site (Johnson & Kock, 2006:42). Vessels patrol the area, in search of natural predations and upon detection the vessel will move closer to the shark to provide photographic, videography and viewing opportunities (Johnson & Kock, 2006:42). South Africa has multiple sites where sharks are located through non-chumming activities, including Seal Island and False Bay (Johnson & Kock, 2006:42). The third method involves a decoy, usually a seal-like shape, being dragged behind the boat to induce a simulated breaching attack by the Great White shark (Johnson & Kock, 2006:43).

South Africa's legislation only permits five locations to actively participate in shark cage diving activities, including Seal Island in False Bay, Dyer Island in Gansbaai, Seal Island in Mossel Bay, Quoin Rock in Quoin Point and Algoa Bay in Port Elizabeth (Johnson & Kock, 2006:43; Department of Environmental Affairs, 2017). Map 1.3 shows the geographical locations of the five shark cage diving areas in South Africa.



Map 1.3: Geographical locations of shark cage diving in South Africa
(Source: Wikimedia Commons, 2017)

Gansbaai, being a popular shark cage diving destination has a total of ten operators, each launching a boat in the early morning for the purposes of shark cage diving (Gansbaai.com, 2015), one in Mossel Bay and one in False Bay, resulting in a total of nine licensed operators (Rutzen, 2015; Department of Environmental Affairs, 2017). Many of whom run a research facility on the Great White sharks, its behavioural patterns and aspects of interest (Gansbaai.com, 2015).

1.2.4 Key findings from the literature

For the purpose of this thesis three separate literature analyses were conducted, namely marine tourism management, adventure tourism and sustainability. From the preliminary studies that were conducted, the following aspects can be highlighted as important aspects of discussion.

Firstly, marine tourism management (Chapter 2) is a concept which necessitates research in a South African perspective. Authors such as Orams (2013), Higham and Lück (2008) and Bentz, Dearden and Calado (2013) have conducted research in places such as Australia, New Zealand and Spain on marine tourism and applicable management strategies, however no research could be found from South Africa on this specific topic. Marine tourism management comprises of various elements, including general management and functional management. These management areas are important for the successful management of any operation, but should be adapted for management of the marine tourism sector specifically.

Secondly, adventure tourism (Chapter 3) is a growing sector in South Africa (Giddy & Webb, 2017) and one which is enjoying attention in South Africa especially (Giddy & Webb, 2017; Giddy, 2017; Giddy & Webb, 2015). Adventure tourism can be divided into either hard or soft activities, which can be applied to marine adventure tourism as well. Activities such as whale watching, shark cage diving and snorkelling are classified as soft marine adventure activities, while activities such as surfing, scuba diving and stand-up paddle boarding are classified as hard adventure activities (Van der Merwe, 2009:237; Swarbrooke, Beard, Leckie & Pomfret, 2006:63). Therefore, the adventure activities chosen for this study are both classified as soft adventure activities, because participants are not in need of specific skills and equipment and the perceived risk is higher than the actual risk (Swarbrooke *et al.*, 2006:63).

Thirdly, sustainability comprises of three pillars, namely social equity, environmental conservation and economic efficiency, which have all been discussed in detail (Chapter 4). Each of these pillars should be managed and maintained in order for an operation to be deemed sustainable. Therefore, for the purpose of this research, the viewpoint of the adventure participants, the impacts on the community and the viewpoints of the operators were researched. Furthermore, sustainability is a concept which can be applied to all sectors of the economy, but should be adapted to suit the type of sector in which it is implemented (Coetzee & Saayman, 2009b:131). For this thesis, sustainability is discussed in terms of the marine tourism sector.

From the key findings discussed above, the following diagram can be created. This diagram serves as an indication of what the actual sustainable management framework for marine adventure products comprise.

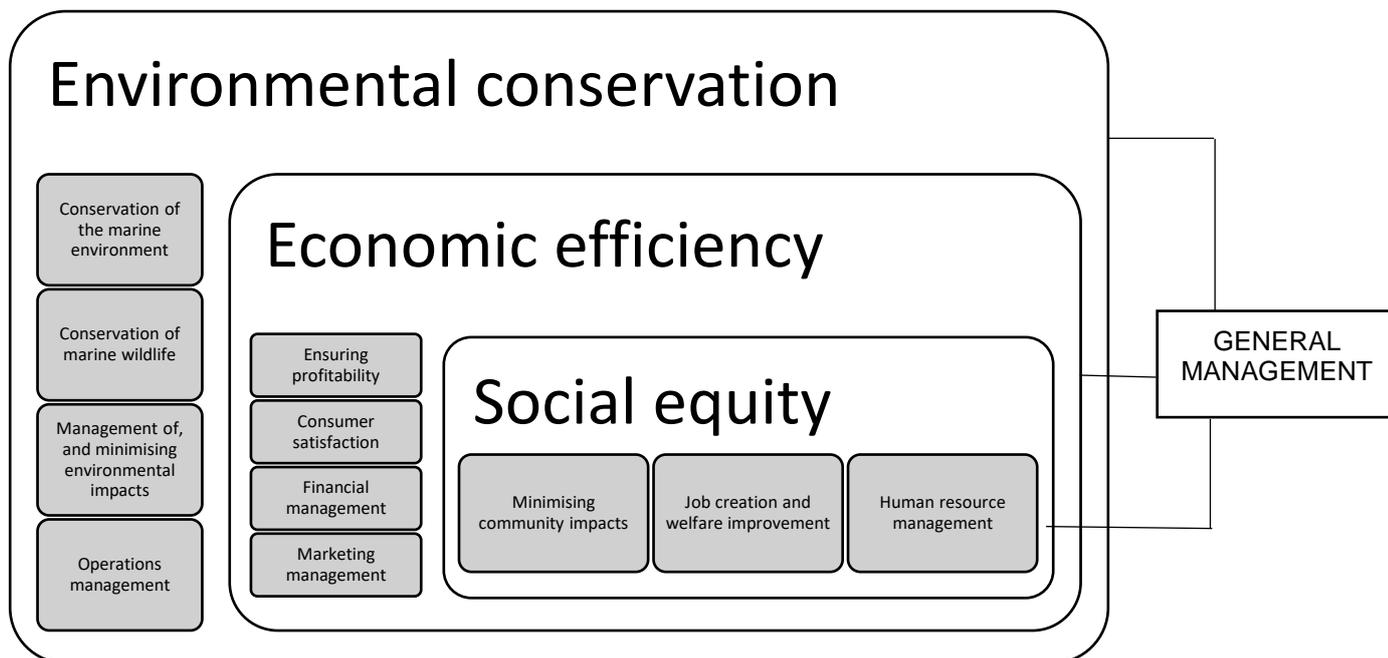


Figure 1.3: Framework for sustainable management of marine adventure tourism products based on the key findings from the literature

(Source: Author's own creation)

1.3 PROBLEM STATEMENT

Viewing and interacting with wildlife in their natural habitat has become an increasingly popular component of the tourism industry (Orams, 2013:481). Not only does it involve land-based wildlife viewing, but also marine-based species such as whales and sharks which form part of marine adventure tourism (Orams, 2013:481; Giddy, 2017:351). One of the most important reasons to the rapid growth in marine wildlife adventure tourism is that humans are fascinated by marine animals (whales and sharks) and want to have a close-up experience with the creatures that trigger their interest (Orams, 2000:562; Cater, 2010:133). The consequences of this is a growth in demand for marine wildlife and adventure tourism operators that provide marine tourism products to the ever-growing demand (Cater 2010). However, the extent to which such marine adventure tourism activities are economically sustainable, their impact on local communities and the marine environment is not clear (Reynolds & Braithwaite, 2001:40). If either one of the following are ignored, namely the marine tourist's experience, the marine tourism operator, the local community and the environment, sustainability of such industry becomes questionable (Reynolds & Braithwaite, 2001:31).

Although whale watching and shark cage diving have been researched in South Africa regarding movements and group behaviour of whales, socio-economic aspects of shark diving, whether or not shark cage diving activities are contributing to shark conditioning, seasonal fluctuations in

occurrence of whales, issues surrounding the introduction of state regulation of the shark diving industry and environmental factors contributing to temporal distributions of whales (Levy, 2017; Barendse & Best, 2014; Penny, Cockroft & Hammond, 2011; Dicken & Hosking, 2009; Johnson & Kock, 2006; Dobson, 2006), it is still lacking extensive information regarding the sustainability of these two marine activities (Techera & Klein, 2013:25; Rhormens, Pedrini & Ghilardi-Lopes, 2017:2). Poor management of the sector is clear, as indicated by reports of illegal activities in whale watchign and shark cage diving (Inadequate information pertaining to frameworks and guidelines for sustainable management of marine adventure tourism, along with the lack of enforcement, are identified as being responsible for various negative tourism impacts in the sector, such as underestimating the distance between the animal and the vessel, unsupervised tourist behaviour, and illegal activities (Trave, Brunnschweiler, Shaeves, Diedrich & Barnett, 2017;216). Furthermore, the lack of a clear and specified framework and guidelines is liekly to result in a decreased efficacy of management tools (Traveller24, 2017).

By establishing a sustainable management framework, it can aid operators in their mission to manage the long-term sustainability of these activities (shark cage diving and whale watching). Therefore, the problem this research would like to address is to develop a sustainable management framework for marine adventure tourism products, specifically for shark cage diving and whale watching.

The following section highlights the goals and objectives which would enable the researcher to answer the research question as stated above.

1.4 GOALS AND OBJECTIVES

The following section states the goal and objectives set for this study.

1.4.1 Goal

To develop a sustainable management framework for marine adventure tourism products in South Africa specific for shark cage diving and whale watching.

1.4.2 Objectives

The following objectives are set to reach the goal of the study.

6. To critically analyse existing literature reporting on marine tourism. This aids in understanding the marine tourism sector and contributes towards the establishment of a sustainable management framework for marine tourism products.
7. To analyse existing literature pertaining to adventure tourism and to offer insight into this sector. The analysis aims to define the term adventure tourism, discuss concepts and theories pertaining to this sector, discuss the types of adventure tourism, identify the characteristics of adventure tourists and the motives of these tourists.

8. To analyse literature regarding sustainability management of marine tourism. This analysis further contributes towards the establishment of a sustainable management framework for marine adventure tourists through analysing the three E's: environmental conservation, social equity and economic efficiency.
9. To discuss the empirical results, as obtained from the data collected, in order to establish a sustainable management framework for the marine adventure tourism sector of South Africa. This framework aids operators in ensuring economic efficiency, social equity and environmental conservation.
10. To draw conclusions and make recommendations regarding the marine adventure tourism sector. Conclusions were drawn from the literature reviews (chapters two, three and four) and the empirical results (chapter five). Comparisons were also drawn between previous literature and the empirical results in order to identify any areas of significance. The sustainable management framework for marine adventure tourism products was developed based on the literature and empirical results. The model was discussed and the significance was analysed. The contributions of this thesis, the limitations of the research as well as future research opportunities were addressed.

Meeting these objectives ensured that all aspects of sustainability within marine adventure tourism was analysed in order to produce an effective framework.

1.5 METHOD OF RESEARCH

Seeing as this study reports on both the literature review pertaining to marine wildlife tourism as well as an empirical study, the following section discusses the method of research to be followed in order to reach the set goal.

1.5.1 Literature study

For the literature review, the focus was placed on secondary data sources that reported on concepts such as travel motives, willingness to pay and experiences. The literature review was performed by means of an Internet search of various academic sources, such as academic journal articles, Google Scholar as well as the Ferdinand Postma Library at the North-West University's Potchefstroom Campus. Furthermore, the World Wide Web, full-text databases (such as EBSCOhost Publishing, Emerald, Academic Search Premier and ScienceDirect) and theses and dissertations from various universities were consulted to have the full impact of literature available surrounding the concepts of importance for this study. Through these resources a clear analysis of the key aspects relating to marine tourism was conducted.

The concepts that were reported on include management of marine tourism, adventure tourism and sustainability. An in-depth analysis regarding management of marine tourism was conducted concerning relevant literature in the field. An in-depth analysis was conducted regarding adventure tourism to analyse all existing sources within this field of research which have been produced across

the world. The concept of sustainability was critically analysed with specific reference to the three E's: environmental conservation, social equity and economic effectiveness.

Since both an intensive literature study as well as an empirical study was conducted for this research both primary and secondary sources were incorporated. The primary data was collected by means of a structured, self-administered questionnaire facilitated to tourists taking part in whale watching trips and shark cage dive adventures and residents of Hermanus. Qualitative research was also conducted by interviewing owners and managers of whale watching and shark cage diving operators.

1.5.2 Empirical survey

The following section discusses the method of research which was followed in order to effectively conduct the empirical analysis of this study.

1.5.2.1 Research design and method of collecting data

For this study both quantitative and qualitative methods were used. A quantitative approach is in the form of distributing two self-administered questionnaires to tourists partaking in whale watching or shark cage diving trips and the residents of Hermanus to determine the social impact of marine tourism activities. Qualitative is used through personal interviews that were conducted with marine adventure operators (shark cage diving and whale watching) in order to collect data regarding their management of operations. The data collected from the surveys and interviews were problem-specific to the research topic and were structured around the key concepts, namely demographic questions, determination of experiences, willingness to pay of tourists to contribute to conservation of sharks and whales, as well as the sustainability and ethical viability of the sector.

Quantitative research methods can be defined as the collection of data involving larger, more representative samples and the numerical calculation of results (Wiid & Diggines, 2015:95). This method holds many advantages for the researcher, as was identified by Slabbert (2004:36) and Maree and Pietersen (2008:155):

- Data accuracy is ensured through large enough samples
- Demographic information such as age, gender, home language and income is collected by means of a structured questionnaire
- Quantitative research is less expensive than other research methods
- Tabulation and analyses of the data is relatively easy to do using statistical software programmes.

Qualitative, on the other hand, is less structured and consist of smaller sample sizes due to the detail of the data collected (Bryman, Bell, Hirschohn, Dos Santos, Du Toit, Masenge, Van Aardt & Wagner, 2014:37). Qualitative data makes use of detailed descriptions by respondents on a specific topic which helps the researcher gain deeper insight into the problem (Bryman *et al.*, 2014:37). Wiid and Diggines (2015:96) drew a comparison between qualitative and quantitative techniques which helps

to identify the differences between the two research methods. The following table shows this comparison (Wiid & Diggines, 2015:96):

Table 1.1: Comparison between qualitative and quantitative research methods

Comparison dimension	Qualitative	Quantitative
Types of research questions	Probing	Non-probing, more straight forward
Sample size	Small	Large
Amount of information extracted from the respondent	Much information is extracted	The amount of information extracted varies
Administration	Interviewers with special skills are needed	Fewer special skills are required of interviewers
Type of analysis	Subjective, interpretive	Statistical, summarisation
Hardware required	Tape recorders, projection devices, video, pictures, discussion guides	Questionnaires, computers, printouts
Ease of application	Difficult	Easy
Researcher training necessary	Psychological, sociological, social psychology, consumer behaviour, research	Statistics, decision models, decision support systems, computer programming, research
Type of research	Explorative	Descriptive or causal
Validity	High	Low
Data presentation	Words	Numbers
Researcher involvement	Researcher learns more by participating and/or being immersed in the research situation	Researcher is ideally an objective observer who neither participates in nor influences what is being studied

(Source: Wiid & Diggines, 2015:96)

The comparison clearly highlights the fact that qualitative and quantitative research methods differ greatly from each other. In order to gain insight on all levels of the research problem for this thesis, which is the necessity of a sustainable management framework for marine adventure tourism products in South Africa, both methods have been employed. By employing both research methods, the researcher was able to gain deeper insight into the management operations of shark cage diving and whale watching through the qualitative method, while the quantitative method ensured the participants' and community members' viewpoints are considered as well.

Furthermore, as the table indicates, research designs can be either causal, descriptive or exploratory. The purpose of a casual study is to indicate causality between variables or occurrences, therefore the aim of casual research is to indicate cause and effect between the dependent and independent variables (Bryman *et al.*, 2014:37). Descriptive research is defined as a statistical method that is used to identify patterns or trends in a particular situation, but does not rely on the causal links between the elements (Maree, 2007:183; Gravetter, Wallnau & Forzano, 2016:6). Exploratory research is employed as a means of exploring an unknown area and is necessary when more information and insight is needed about the research problem (Gravetter *et al.*, 2016:6).

For the purpose of this study, descriptive and exploratory research designs were utilised. A descriptive design was employed to describe the marine adventure tourism sector accurately and thoroughly. This involved both the community members and participants. In order to establish an effective sustainable framework for the sector, it is necessary to know and understand the impacts that whale watching and shark cage diving have on the community (Fennell, 2007:47). It is also necessary to understand the market and what they want (Page & Connell, 2009).

The exploratory research design was employed as a means to conduct qualitative research. An effective sustainable management framework should also address the viewpoints of the operators, what management structures are in place, what sustainable practices are in place and what should be done to improve these structures. Therefore, exploratory research was implemented to gain deeper insight into the sector and to determine the priorities of the sector (Wiid & Diggins, 2015:66; Saunders, Lewis & Thornhill, 2016:174).

For the quantitative survey two questionnaires were distributed. Questionnaire A (Marine adventure participants) was distributed to both shark cage divers and whale watchers. Both groups answered the same questions to ensure that an accurate depiction of the homogeneity of the groups are identified. These questions related to the profiles of the sectors, the experiences of tourists, the economic spending, willingness to pay and their perceptions of the sustainability of the sector. Questionnaire B (Social impact of the Hermanus Whale Festival) was facilitated to the residents of Hermanus in order to gain insight into the perception of the community regarding marine adventure tourism products.

The qualitative survey was conducted by utilisation of a discussion guide. Personal interviews were conducted with marine adventure tourism operators of whale watching and shark cage diving operations in both Hermanus and Gansbaai. The operators who were interviewed were selected based on their willingness to participate.

1.5.2.2 Sample

Two separate quantitative surveys were conducted for the purpose of this study, namely the survey on adventure participants and community impact survey. Qualitative research was also conducted

in the form of personal interviews. The sampling method employed for each survey is discussed below.

1.5.2.2.1 Adventure participants (whale watching and shark cage divers)

A non-probability sampling method with convenience sampling was implemented to target the most appropriate sample of shark cage divers and whale watchers and to ensure the accuracy of data. Non-probability sampling can be defined as any given situation where the probability of a member of the targeted population being included in the sample is not guaranteed but is purely based on personal judgement of the researcher or convenience (Mostert & Du Plessis, 2007:68). Furthermore, Mostert and Du Plessis (2007:68) state that convenience sampling is based on the premise that members of the population are accessible and readily available at the specific time when the survey is conducted. Therefore, convenience sampling was identified as the most appropriate sampling method because participants in both activities are readily available and accessible to the researcher at the location where the activities are offered, during the given time of the survey.

Fieldworkers were trained and informed about the nature of the questionnaires and how they should approach the respondents in order to get optimal results. Each fieldworker received a specific number of questionnaires which he or she had to hand out and collect after the respondent has completed it.

Approximately 300 questionnaires were needed for this research to be viable, allowing for a 5% margin of error. Krejcie and Morgan (1970:607) and Singel (2002) state that where a population of 1 000 000 is concerned, a total of 380 questionnaires are sufficient. Based on these guidelines and the assumed population of 250 000 whale watchers and shark cage divers per season, a total of 300 questionnaires is seen as sufficient (Evans, 2013). Therefore, a total of 350 questionnaires were distributed amongst shark cage dive- and whale watching participants. In the end a total of 303 usable questionnaires were obtained. A total number of 18 marine adventure tourism operators were approached (14 shark cage operators and 4 whale watching operators). Out of all the operators available, only four operators were willing to participate in the survey, therefore four operators were identified for this survey, namely Great White Shark Tours and Marine Dynamics in Gansbaai and Hermanus Whale Cruises and Southern Right Charters in Hermanus.

1.5.2.2.2 Community of Hermanus

Regarding the community survey, the same sampling method was followed as with the survey on marine adventure participants. Therefore, a non-probability sampling method with convenience sampling was utilised. This method was employed in order to attract as large a sample as possible as all members of the community included in the survey were available to the researcher at the given time. Members of the community were approached by fieldworkers to complete the questionnaires.

Hermanus hosts a total population of 49 000 residents (Hermanus.co.za, 2017). Based on the guidelines established by Krejcie and Morgan (1970:607) a total of 250 questionnaires were sufficient for this research, allowing for a 5% margin of error (Krejcie & Morgan, 1970:607; Singel, 2002). In contrast to this, Barnett (1974:35) established an equation that can be used to calculate the sample size, where n is the sample size, N is the population and d^2 is the percentage within which probability is estimated. If probability for this study is calculated at 0.95, N is 49 000 and d^2 is 25. Therefore, the total number of questionnaires necessary for this survey is 397. This number has not been achieved due to unwillingness from community members to participate in the survey. The number of questionnaires collected (250) were, however, all usable.

Fieldworkers were trained and informed about the nature of the questionnaires and how they should approach the respondents in order to get optimal results. Each fieldworker received a specific number of questionnaires which he or she had to hand out and collect after the respondent has completed it.

If any questions were asked which the fieldworker was not able to answer, the researcher was on site to answer any questions. The following factors were taken into account for both surveys (community and marine adventure participants) when potential respondents were approached (Steyn, 2010:89; Neumann, 2006:29; Rosseau, 2003:31; Schiffman, Kanuk & Wisenbelt, 2010:58; Strydom, 2007:192):

- Participation in the survey was voluntary and respondents dedicated their time to the completion of the questionnaire willingly
- The questionnaire was kept anonymous and respondents could withdraw from the survey at any given time
- The purpose of the research was stated clearly before the questionnaire was completed
- The apprehension of failure was removed by informing respondents that there are no wrong answers to the questions
- The fieldworkers were respectful towards respondents at all times and a relationship based on trust, cooperation and mutual trust was built.

1.5.2.2.3 Personal interviews with the operators

In terms of the qualitative collection of data, qualitative research was employed, with non-probability sampling and more specifically, by implementing purposive sampling techniques. According to Palys (2008:1) purposive sampling is synonymous with qualitative research and is characterised by the researcher being able to use judgement to attain a representative sample (Jennings, 2001:139). Purposive sampling is effective in terms of convenience. Purposive sampling, furthermore suggests that the researcher has chosen respondents in a strategic manner to ensure that only those relevant to the study is included (Brymann, Bell, Hirschon, Dos Santos, Du Toit, Masenge, Van Aardt &

Wagner, 2014:186). For the purpose of this study only respondents who are managing a whale watching or shark cage diving operation or who own one have been contacted.

The population consisted of all shark cage dive and whale watching operators in Gansbaai, Mossel Bay, False Bay and Hermanus. As mentioned previously merely four operators out of a total of 18 in Hermanus, Mossel Bay, False Bay and Gansbaai were willing to participate in the survey, therefore four personal interviews were conducted. Interviewees included the owners of Great White Shark Tours, Marine Dynamics, Southern Right Charters and Hermanus Whale Cruises. The interviews were conducted by the researcher by means of recording, at the operators' respective properties.

1.5.2.3 Development of measuring instruments

Two separate questionnaires were designed for the quantitative research, while 18 questions were established for the qualitative interviews. Two different groups of stakeholders were targeted, namely participants in whale watching and shark cage diving and local community members, allowing for the two different questionnaires. The questionnaires were developed based on previous research from Yolal, Gursoy, Uysal, Kim and Karacaoglu (2016), Geldenhuys, Van der Merwe and Slabbert (2014), Daldeniz and Hampton (2013), Saayman and Slabbert (2004), Oberholzer, Saayman, Saayman & Slabbert (2010) and Reynolds and Braithwaite (2001).

Quantitative

Questionnaire A: adventure participants (whale and shark cage diving)

Section A contained demographic details such as age, gender, home language and marital status. The data from this section of the questionnaire was used to determine the market profile for marine adventure tourists (Geldenhuys *et al.*, 2014).

Section B contained socio-economic details such as spending on certain aspects (accommodation, food and beverages) during their trip as well as the size of the travel group and number of nights spent in the area. This section also included aspects regarding willingness to pay for the protection and conservation of the animal. A Likert-scale type question regarding motives to participate (where one represents "I do not agree at all" and five represents "I agree completely") was asked, containing concepts such as to get away from a routine, to spend time with friends and family, to photograph marine life and to experience thrill and excitement (Saayman & Slabbert, 2004).

Section C reported on the experiences and satisfaction levels of tourists, including tourists' feelings and memories and a Likert-scale type question (where one represents "I do not agree at all" and five represents "I agree completely") containing aspects such as the uniqueness of the experience, duration, intensity and control and management aspects of the activity (Reynolds & Braithwaite, 2001). Respondents had an opportunity to make any other recommendations or comments.

According to Cooper (2010:8) it is very important for the researcher to conduct a pilot study to make sure that all objectives of the research is met and to identify and eliminate any errors with the instrument. This was achieved by distributing ten questionnaires amongst tourists participating in whale watching and shark cage diving. This aided the researcher in identifying any errors with the questionnaire, such as language errors, numbering errors, errors with questions and sampling errors. The responses of these ten tourists are captured and reported on in Chapter 5. For ethical purposes all questionnaires were kept anonymous.

Questionnaire B: community impact (residents of Hermanus)

Section A: Demographic details such as age, income bracket, gender, home language and marital status were asked. Other questions such as amount of years respondents was part of the local community and job occupation were also asked. Respondents had to indicate their answers from a list provided with each question that was based on various Likert scales (Oberholzer *et al.*, 2010).

Section B: This section included attitudinal questions (for example, participation in whale watching and shark cage diving activities); and opinion questions, concerning physical, biological, environmental, personal, social, cultural, economic and values factors related to marine adventure tourism products. The social impact of both the Hermanus Whale festival and the marine adventure activities were measured. Respondents were also offered the chance to make recommendations regarding the sector for marine adventure tourism products (Yolal *et al.*, 2016).

The pilot study was conducted before the community impacts survey was conducted by asking the organisers of the Hermanus Whale Festival to complete the questionnaire. The reason for asking the organisers was due to the fact that the survey aimed at identifying the impacts that whale watching activities have on the community. The festival organisers were also interested in the results from the survey. The organisers were therefore given an opportunity to make recommendations and give their inputs on the questionnaire, as well as to comment on the length of the questionnaire and user-friendliness.

Qualitative

Personal interviews: marine adventure tourism operators

These interview questions were developed for operators and owners in the sectors for shark cage diving and whale watching. Operators and owners were asked questions pertaining to the three principles of sustainable management, namely economic efficiency, social equity and environmental conservation, as indicated below:

- Economic efficiency: the length of time they have been established in the sector, how many boats they have in operation as well as the number of staff members they have employed, social equity, the average price per person per trip (Daldeniz & Hampton, 2013).

- Social equity: training provided for staff, relationship with the Hermanus Whale Festival and what the operation is doing to educate people on whales, sharks and the marine environment (Daldeniz & Hampton, 2013).
- Environmental conservation: sustainable practices their company implements and which practices, in their opinion, might be improved, or which practices should be implemented (Daldeniz & Hampton, 2013).
- Marketing: they were asked about marketing activities and methods used, website operations, the target market they serve and whether any marketing shows are being attended (Daldeniz & Hampton, 2013).

The reason for the personal interviews were to establish the viewpoint of operators in terms of sustainability of the sector by incorporating all three elements of sustainability (economic efficiency, social equity and environmental education). The discussion guidelines for the interviews were previously used by Daldeniz and Hampton (2013) and Lucrezi, Saayman and Van der Merwe (2013). It was therefore not necessary to test the questions again.

1.5.2.4 Survey

The survey was divided into three sections, namely the survey on whale watching and shark cage diving, the social community of Hermanus and the personal interviews with the operators and owners of shark cage diving and whale watching operations.

1.5.2.4.1 Adventure participants (whale and shark cage divers)

The first survey, which was quantitative in nature and took place at various locations, specifically four operators that gave permission for the survey to be conducted at their premises. Four operators in Gansbaai and Hermanus were identified and approached with the request of accessing their clientele. Potential respondents who participate in these trips were approached by fieldworkers. All fieldworkers were trained beforehand on the goals and objectives of the research and how to approach potential respondents.

Gansbaai is famous for the numerous Great White sharks that reside in the waters just off Danger Point Peninsula (Gansbaaiinfo, 2015). Gansbaai was founded as a small fishing village on the Cape Whale Coast in the Western Cape Province and is still seen as that by local residents (Gansbaaiinfo, 2015). The fishing sector is the economical drive force in this little town, despite of the rapidly developing tourism industry (Gansbaaiinfo, 2015). The major tourism activity taking place in Gansbaai is shark cage diving and tourists flock from all over the world to experience the thrill of an up-close encounter with a Great White shark (Gansbaaiinfo, 2015).

Participants of shark cage diving could be accessed on any given time during the year because this is not a seasonal activity, as is the case of whale watching. Whale watching operators are only operational during spring months (August to November) when the whales are on the South African

coastline (Johnson and Kock, 2006:40). Therefore, this survey was conducted over the period of the Hermanus Whale Festival, during the first weekend in October 2016. This allowed for large numbers of whale watching participants to be approached for survey purposes.

1.5.2.4.2 Community impacts

Secondly, a social community survey was conducted which targeted the local community of Hermanus. The survey was quantitative in nature. This ensures that research was conducted on all three legs of sustainability, namely economic efficiency, environmental conservation and social equity (Bostrom, 2012:3). The survey was conducted through the distribution of self-administered questionnaires, employing a descriptive research design. These questionnaires were distributed by fieldworkers, whom received training beforehand regarding the goals and objectives of the research.

Hermanus was chosen as the location for the community impact survey because this is where the Hermanus Whale Festival is held annually, as well as the fact that this town is where the majority of whale watching activities take place along with shark cage diving activities. The festival is in celebration of the Southern Right Whales along the South African coastline, and focus is placed on whale watching activities (Hermanusonline, 2015). The specific time of the festival was chosen as the time frame for the survey because the social impacts of both the festival and marine adventure activities are measured by the questionnaire. The coastal town near Cape Town, is situated along the Cape Whale Route 120 kilometres from Cape Town International Airport (see map 1.2 under section 2.2) (Hermanusonline, 2015). Known as the land-based whale watching capital of the world, Hermanus is famous for the Southern Right Whales who inhabit the coastal waters of the town from June to November each year (Hermanusonline, 2015). Tourists are exposed to a mild climate, long stretches of sandy beach and an abundance of bird and marine animal life (Hermanusonline, 2015). Marine life in the area, other than the Southern Right Whale, include Great White sharks, African Penguins, Cape Fur Seals and Dolphins, the complete Marine Big Five (Hermanusonline, 2015).

1.5.2.4.3 Personal interviews (qualitative)

The qualitative survey, which aimed at collecting qualitative data from the marine adventure tourism operators was conducted through personal interviews. The researcher asked each operator to give his opinion on a series of questions (as stipulated in questionnaire B) by the researcher. A total of four interviews were conducted with shark cage diving operators and whale watching operators (as stated in section 1.6.2.2), as these operators were the only operators willing to participate in the survey. Operators were asked to respond to questions in relation to their expertise in the sector and sustainability issues. The interviews were conducted over the period of the Hermanus Whale Festival, during the first weekend in October 2016.

1.5.2.5 Empirical Results

The data on all three surveys were captured in Microsoft Excel®, after which the statistical services of the North-West University, Potchefstroom, was approached for processing the data. The data was analysed with the software Statistical Package for Social Sciences (SPSS, 2017). By processing the data, the researcher was able to interpret the information and report on the findings in chapter five of this thesis. The steps taken to analyse the data in Chapter 5 included 1) analysis of qualitative results, 2) analysis of community impacts, 3) analysis of marine adventure participants and 4) a cluster analysis and cross-tabulations.

1.5.2.5.2 Quantitative results

Descriptive statistics and frequency tables were utilised in order to determine the profile of the residents and marine adventure participants by analysing the demographic details captured. The environmental and social impacts of whale watching and shark cage diving were determined through an exploratory factor analysis (EFA) and three factors came to light, as discussed in Chapter 5.

EFA's were then used to determine the motives, experiences and satisfaction of participants of whale watching and shark cage diving. Three community impacts were identified, while four motives to participate and five factors contributing to participants' experience were identified.

Furthermore, a one-way analysis of variance (ANOVA) was conducted on the motives of marine adventure participants. A hierarchical cluster analysis, with Ward's methods of Euclidian distances and Tukey's honest significance test was therefore used to identify six clusters of participants in whale watching and shark cage diving. Cross-tabulations were drawn between the demographic details (dependent variable) and the six clusters (independent variable) in order to further define the six different clusters for these activities.

In the following section a description of each of the tests used in order to achieve the goal of this study is provided.

Descriptive statistics and frequency tables

According to Kleinbaum, Kupper, Nizam and Rosenberg (2014:17) a descriptive statistic can be defined as a single numerical measurement computed from a set of data, designed to describe a particular aspect, or characteristic, as is the case in this study, of the data set.

A frequency table, on the other hand, is used to indicate the count and percentage of the categories or variables (Bryman *et al.*, 2014:318). A frequency table would list the different categories, or variables, with an indication of the number of respondents and the percentage for each category. The percentage and number of respondents in each category therefore indicates the frequency with which respondents' answers are classified in each category (Bryman *et al.*, 2014:318).

Exploratory factor analysis (EFA)

According to Child (2006:1), a factor analysis is defined as an “orderly simplification” of measures which are interrelated through the use of mathematical procedures. In addition, Kim and Muller (1978:11) state that factor analyses are used for exploratory or confirmatory research, seeing as an EFA groups data together, in categories, which are specific to certain factors. In essence, an EFA is seen as a way to simplify the research process by lessening the data with which the researcher should work (Child, 2006:1). A factor analysis is used for three main reasons (Gerber & Finn, 2013:254; Malhotra, Mavondo & Hooley, 2013:622; Malhotra, 2007:610):

- To examine a set of variables that are grouped under specific factors and therefore determining the correlation between those variables
- To identify a smaller set of uncorrelated variables which can replace the original set
- To determine a manageable number of variables from a larger set of variables to use in following analyses.

For the purpose of this research, an exploratory approach was followed in determining the motives of participants, experiences and community impacts. Exploratory research is defined by Davies and Hughes (2014:12) and Bradley (2007:38) as a way in which research is conducted to discover the existence of patterns, factors, or components that is not based on previous knowledge. The findings are therefore new and ‘explored’ for the first time. The use of EFAs therefore aids this study as it contributes to achieving a greater understanding of what motivates marine adventure participants to participate in the activity, what determines their experiences and what drives the impacts of tourism on the local community.

Analysis of variance (ANOVA)

An analysis of variance (ANOVA) is described as a test used to analyse the variance between group means to determine whether or not the means differ (Swanepoel, Swanepoel, Van Graan, Allison, Weideman & Santana, 2015:353). Another definition offered for ANOVA is the use of the dependent variable to examine its mean value in comparison with the independent variable’s mean value, which is furthermore predicted from the levels of knowledge of the independent variable (Malhotra *et al.*, 2013:521; Cooper & Schindler, 2006:454).

An F-ratio is used to identify the variance between the groups of variables (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). The independent variable will influence the variability between the groups and the larger the F-ratio is, the greater the variability between the groups will be (Swanepoel *et al.*, 2016:359). A small variance between the independent variables will be indicated by the F-ratio being greater than one ($F > 1$). An F-ratio smaller than one, however, indicates that there is no significance between the variables. This is due to the error variance being larger than the variance as a result of the manipulation of the independent variable (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). A large F-ratio would therefore have a significant effect on the variables

compared to one another. The F-ratio being equal to or smaller than one ($F \leq 1$) would therefore indicate no significance between the variables (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521). A significant difference, however, is indicated by the F-ratio being equal to, or smaller than 0.05 ($F \leq 0.05$) (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

In terms of this research, a post hoc test was conducted to determine whether or not any significant differences can be identified between the groups of factors analysed, such as the impacts of marine adventure tourism, motives to participate and experiences. Tukey's Honestly Significant Different test (Tukey's HSD test) was used to determine the differences between the groups (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

Tukey's HSD test is based on the honestly significant difference test, where the q-distribution ensures the largest set of mean differences of the same population are evaluated by making use of similar sampling distribution (Swanepoel *et al.*, 2016:359; Malhotra *et al.*, 2013:521).

Statistical significance

Tests are conducted to determine whether or not results are statistically significant. This helps the researcher to determine whether or not results can be generalised to the population from which the sample was taken (Bryman *et al.*, 2014:325). Furthermore, statistical significance also determines how confident the researcher can be that the finding exists in the population and the risk taken in suggesting that the finding exists in the population (Bryman *et al.*, 2014:325). Confidence and risk is therefore the core components of statistical significance. The level of statistical significance is, therefore, the level of risk that a researcher is prepared to take when suggesting that a finding exists in the population. The conventional level of risk taken in suggesting the finding does exist in the population is five chances in one hundred (5:100) that the researcher might falsely make such a suggestion. This indicates that in the case of one hundred samples drawn, five of those samples might exhibit a relationship that does not exist in the population. The sample drawn from the population might be one of those five samples, but the risk is relatively small (Bryman *et al.*, 2014:325).

The level of significance is indicated by means of probability (p) being smaller than 5 in 100 samples ($P < 0.05$). If the researcher suggests that $P < 0.1$, it is therefore indicated that the researcher accepts the possibility that ten in one hundred samples might show a relationship where none exists in the population (Bryman *et al.*, 2014:325). For the purpose of this research the probability is accepted to be five in 100 samples ($P < 0.05$). An example of a test used to determine the statistical significance of a finding is the chi-square test, which is discussed below.

The chi-square test

The chi-square test is used to indicate the level of confidence in whether or not a relationship exists, or an association can be made, between two variables (Bryman *et al.*, 2014:327). The test is based on the cross-tabulations of two variables, for example the cross between gender and motives to

participate in marine adventure activities. The chi-square test would, therefore, indicate whether a relationship exists between gender and motives (Bryman *et al.*, 2014:327).

The chi-square can be determined by an easy calculation that involves adding up the differences between the actual and expected values for each cell in the table (Bryman *et al.*, 2014:327). The expected value of the cell is what would occur if no relationship exists between the variables used. A chi-square value can further be interpreted by its level of statistical significance. Whether or not a chi-square value is statistically significant is dependent on its magnitude and the number of categories of the two variables being measured (Bryman *et al.*, 2014:327).

Qualitative data analysis

The interviews with owners and operators of shark cage diving and whale watching operations were audio recorded at the operators' respective properties. The interviews lasted between 40 and 60 minutes and were transcribed verbatim by a third party in Microsoft Word ©. The four operators' responses were compared and the similarities or differences were identified.

Operators were asked 18 questions relating to demographic details of the operation, marketing related issues, sustainability issues and managerial issues. The results are discussed in Chapter 5. A thematic analysis technique was employed to identify, analyse and describe patterns or themes (Bryman *et al.*, 2014:350). Thematic analysis is similar to the concept of content analysis, but is focussed on identifying meaning in a particular context (Bryman *et al.*, 2014:350). With this technique it is important for the researcher to use informed judgement on what is important and what is not.

Braun and Clarke (2006:96) suggest five steps for implementing thematic analysis. These steps have been implemented for the purpose of this thesis and is set out as follows:

- Transcription: The interview is transcribed with an appropriate level of detail and checked against the recording for accuracy
- Coding: All data items have been studied carefully, themes have been identified and extracts have been collated
- Analysis: The data have been analysed so that it makes sense, rather than being paraphrased or described
- Overall: Enough time was spent analysing the data and each phase of the analysis was given equal attention
- Written report: The written report contains the themes identified as important and a discussion on the relevant results subtracted from the data. The written report for this study is conducted in Chapter 5, section 5.2

1.6 DEFINING THE CONCEPTS

The following section provides a description of key concepts that are discussed throughout this chapter and which is applicable to the remainder of this thesis.

1.6.1 Marine adventure tourism

Adventure tourism has seen an immense increase in interest amongst tourists in recent years (Swarbrooke *et al.*, 2003). It is necessary to first define the term 'adventure tourism' and to understand the concept it consists of before the term 'marine adventure tourism' can be fully understood. According to George (2014:216) and Williams and Soutar (2009:418) adventure tourism refers to any leisure activity taking place outdoors and it contains elements of personal risk, adrenaline rushes, challenges and excitement. Even though the market for adventure tourism may seem homogenous, it is a widespread sector which encompasses a variety of different sectors and characteristics (George, 2014:215). Activities included in the adventure tourism sector is wildlife-based tourism, shark cage diving, scuba diving, whale watching, snorkelling, horse-back riding, abseiling, white-water rafting, off-road driving, ballooning, mounting climbing, caving, cycling, bungee jumping and skydiving (George, 2014:216). It is clear that many marine activities fall under the category of adventure tourism. Therefore, marine adventure tourism activities are those activities where the participant is exposed to high levels of actual or perceived risk, is personally challenged and experiences a rush of adrenaline. In both cases of whale watching and shark cage diving these elements are evident.

1.6.2 Marine wildlife tourism

Wildlife tourism is defined as viewing and interacting with wildlife in a natural setting, where tourists rely on a tour operator to predictably find wildlife and to provide a way for tourists to clearly view these animals along with their behavioural aspects and biology (Higginbottom, 2004:3; Orams, 2013:481). The range of settings where this definition is applicable varies on a continuum ranging from zoos to wilderness parks, natural forests, the ocean and remote natural areas (Valentine & Birtles, 2004:15; Orams, 2013:482). It is within this definition and along this continuum where marine wildlife tourism is located. Marine wildlife tourism includes various activities where the viewer experiences one of the ocean's animals in its natural setting, such as shark cage diving, whale watching and dolphin viewing (Orams, 2013:482).

1.6.3 Tourist experiences

The experience which a tourist gains from taking part in a certain activity has an immense impact on the overall satisfaction drawn from the activity (Saayman, 2009:92). The tourism experience is made up of certain facets, namely the beginning of the journey, services experienced at the destination, tourism activities and the journey back home (Triantafillidou & Petala, 2016:68). Although the experience is a major influencer on the tourist's total satisfaction, certain factors has an impact on

the experience of the tourist, for example the tourist's attitude towards the activity or service beforehand, the tourist's perception of the service, expectations formed, the desired outcome as well as the quality of the performance by the operator (Saayman, 2009:93).

1.6.4 Sustainable management

Sustainability is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987:7). Development within the tourism sector impacts on three different areas, namely economic, social and environmental. Within this context, development should be sustainable in order to ensure that future generations have access to all the resources we enjoy today (Coetzee & Saayman, 2009a:124). According to Choi and Sirakaya (2005) sustainable tourism development should contribute towards the upliftment of community members' quality of life, it should benefit the economy, it should offer protection benefits for the environment as well as offer tourists a high-quality experience. Therefore, three arguments can be highlighted within the scope of sustainability:

- sustainability is a long-term strategy for the protection and conservation of the environment;
- it should hold both inter- and intra-generational welfare benefits; and
- it should be perceived as universally valid that sustainability does not take into account the country's level of development, socio-cultural or political conditions, but rather focus on conducting whichever development takes place as sustainable as possible.

When taking the above-mentioned into account, the importance of sustainable management becomes apparent. Sustainable management is based on three concepts, namely economic efficiency, environmental conservation and social equity (Coccosis, Edwards, & Prieslty, 1996). Once these concepts are addressed within a managerial scope sustainability can be ensured for the environment, economic impacts and the social community (Coccosis, *et al.*, 1996).

1.6.5 Framework

The Merriam-Webster Dictionary defines a framework as a "basic conceptual structure (as of ideas)" (Merriam-Webster Dictionary, 2017a). The Oxford Dictionaries define framework as "a basic structure underlying a system, concept, or text" (Oxford Dictionaries, 2017). A framework can thus be accepted as a basic structure which can be implemented in a specific field which provides guidelines on certain concepts. For the purposes of this thesis a framework is seen as a basic structure which provides guiding principles on the sustainable management of marine adventure tourism products.

1.7 CHAPTER CLASSIFICATION

The following section provides a brief outline of each chapter. The thesis is divided into a total of six chapters.

Chapter 1: Introduction, problem statement, objectives and method of research: The first chapter of this thesis discussed the background of the study towards developing a framework for sustainability of marine adventure tourism products, focussing on shark cage diving and whale watching. Furthermore, the problem statement along with the objectives and the method of research were highlighted.

Chapter 2: An analysis of marine tourism: This chapter aims to report on aspects of marine tourism, marine wildlife tourism and management concepts of marine tourism. Existing literature is discussed in detail by referring to the what, where, how and why of the literature. Furthermore, concepts and definitions pertaining to marine tourism, wildlife tourism and marine wildlife tourism is discussed. Emphasis is placed on already-existing management frameworks in sectors such as ecotourism, marine tourism and wildlife tourism.

Chapter 3: Adventure tourism: The aim of this chapter is to analyse the definitions, concepts and theories of adventure tourism. This analysis involves a discussion on relevant literature pertaining to the sector as well as identifying the different types of adventure tourism and the characteristics and motives of adventure tourists.

Chapter 4: Sustainable tourism management: The third chapter highlights the literature pertaining to the concept of sustainability. A critical analysis is conducted in order to gain insight into the term 'sustainability', what it means for tourism in general and how it is to be implemented successfully. Concepts that are reported on include social equity, economic effectiveness and environmental conservation.

Chapter 5: Empirical results: In this chapter the empirical results and findings as obtained through the various analyses performed on the data is discussed. The profile of marine adventure tourists is determined, as well as the experiences gained by the sector and aspects contributing to the satisfaction of marine adventure tourists. The results are visually portrayed by means of relevant diagrams, graphs and tables.

Chapter 6: Conclusions and recommendations. This chapter reports on the conclusions drawn from Chapters 2, 3, 4 and 5. Conclusions are drawn based on the literature reviews (Chapter 2, 3 and 4) as well as the empirical results (Chapter 5). The sustainable management framework is drawn up and discussed in this chapter. Furthermore, recommendations are made regarding the enhancement of sustainability for these two sectors, as well as future ventures in the field of marine wildlife and marine adventure tourism. The limitations of the research are also highlighted in this chapter.

Chapter 2

An Analysis Of Marine Tourism

But more wonderful than the lore of old men and the lore of books is the secret lore of the ocean

~H.P. Lovecraft

2.1 INTRODUCTION

Humanity has, since the dawn of time, harboured an interest in the oceans, whether for fishing purposes or leisure (Orams, 1999:3). The ocean makes up a total of 71% of Earth's surface and 97% of the total water mass is contained in the ocean (Hawai'i Pacific University, 2016). According to the Hawai'i Pacific University (2016), merely 1% of Earth's water is fresh water and 99% of the living space on Earth is ocean.

In the case of South Africa, its coastal shoreline is approximately 3 000 kilometres in length, stretching from the mouth of the Orange River bordering Namibia, to the border of Mozambique in Kosi Bay (SAMSA, 2015:6) and therefore borders three provinces of the country (KwaZulu-Natal, Limpopo and Mpumalanga). Marine tourism has been one of the greatest contributors to tourism in South Africa (Hall, 2001:601) and this sector consists of multiple subsectors, such as marine wildlife tourism, marine adventure tourism, leisure and recreation tourism, marine ecotourism and cultural tourism accessed in coastal towns (Orams, 1999:2). These sub-sectors can be divided into two categories. The first category includes those operators or companies who are directly associated with the marine environment (scuba diving, whale watching, shark cage diving, sea kayaking, deep-sea fishing and snorkelling). Secondly, those indirectly associated with it include companies that are not solely dependent on the marine environment but whose livelihood is associated with it (such as boat maintenance companies, coastal resorts, suppliers of scuba equipment, windsurfer and surfboard rental agencies, fishing equipment suppliers and island ferry services) (Orams, 1999:2).

In South Africa, as in many other parts of the world, marine tourism includes aspects such as ocean and coastal water sports, hotels and restaurants, beach resorts, recreation, fishing boat operators, whale watching operators, shark cage diving operators, cruise ships and charter yacht companies (Van der Merwe, Slabbert & Saayman, 2011:457). These activities, amongst many others, provide economic benefits, job creation, infrastructure development, conservation of marine life, improvement of environmental management, as well as protection and preservation of marine environments (Van der Merwe *et al.*, 2011:458).

Shark cage diving and whale watching are two popular marine adventure activities found in South Africa (Cagua, Collins, Hancock & Rees, 2014:515). The country is fortunate to play host to the migrating humpback whale for almost six months of the year and sharks can be found throughout

the year roaming the coast line of South Africa. Sharks often found are the Great White Shark, Whale Shark, Tiger Shark and Bull Shark (Zambezi Shark), to name but a few.

Whales migrate to the South African coast for the purposes of mating and rearing their calves, offering tourists from all over the world wonderful opportunities to view these animals in the wild. Sharks congregate along the coast as well, offering tourist equal opportunities of spotting this marine predator or diving with them. This increase of these two species is due to the active participation of South Africa in Whale and White shark conservation.

The aim of this chapter is to conduct an analysis of marine tourism and the management of marine tourism activities with an emphasis on shark and whale adventure tourism. This analysis is divided into two sections, namely marine tourism and marine tourism management. Marine tourism discusses concepts pertaining to the history of marine tourism, marine tourists, motivations, sub-sectors and recreation opportunities and wildlife- and ecotourism management. The second part, marine tourism management, includes a discussion on the aspects of importance when managing marine tourism and marine wildlife tourism management, Orams's strategies (1999:11) to managing marine tourism and frameworks for marine tourism management. The outline of this chapter is presented in Figure 2.1.

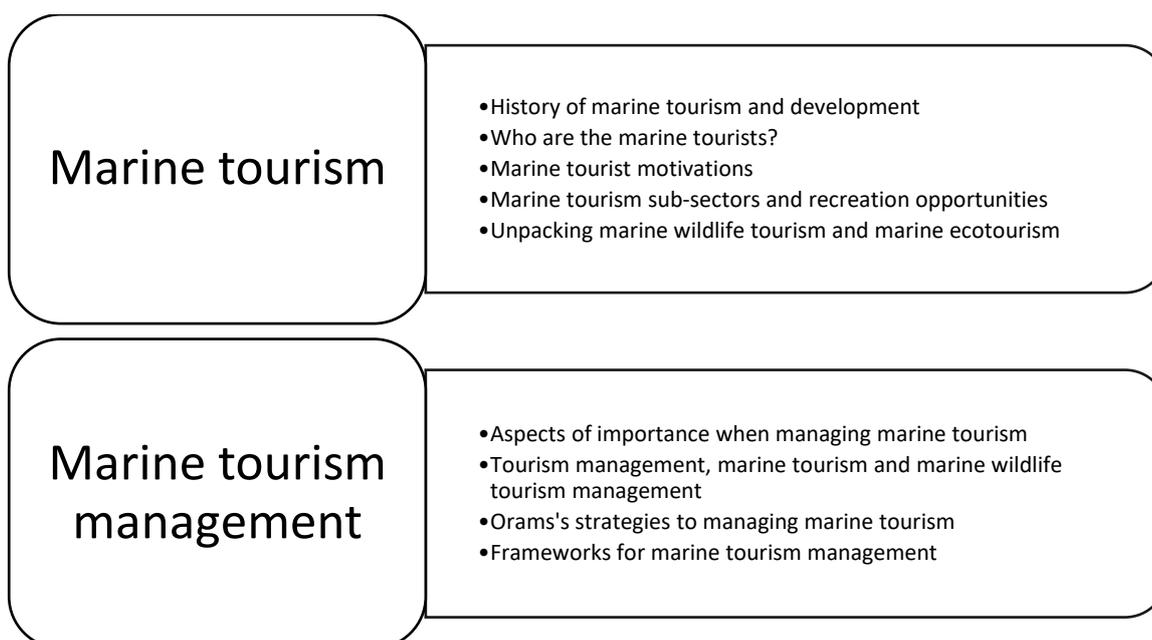


Figure 2.1: Outline of chapter

(Source: Author's compilation)

2.2 MARINE TOURISM

The first section of this chapter discusses marine tourism by analysing literature pertaining to the history, definitions, sub-sectors and recreational opportunities. Furthermore, marine wildlife tourism and marine ecotourism are discussed.

2.2.1 History and development of marine tourism

According to Wongthong and Harvey (2014:138) the world's coastline stretches the length of more than 1.6 million kilometers, with over a third of the world's population living within 100 kilometers of the coastline. This proves that populations along the coast is nearly three times more dense than that of inland populations (Wongthong & Harvey, 2014:138). According to Lück (2007) the marine environment encompasses two-thirds of the total surface of the planet, of which merely 5% have been explored (National Ocean Service, 2017). For more than 60 years though, the focus of tourism development was concentrated on the beach and coastal areas (Orams, 1999:11). This has been proven by the slogan of the four 'S' of tourism, namely Sun, Sea, Sand and Sex (Orams, 1999:11). More recently however, this slogan has evolved to include a fifth 'S', namely Surf. The inclusion of the fifth 's' is indicative of a great development which has occurred in the tourism industry, namely the development and expansion of marine tourism. The industry has expanded from focussing on merely beaches, to the inclusion of deep sea fishing, shark cage diving, whale watching, surfing and scuba diving, amongst others, all for recreational purposes (Hall, 2001:601).

According to Orams (1999:8) marine tourism occurs in or around an extraordinary body of water. This has contributed greatly to the increase in popularity, because humans are fascinated with that which is unknown to them. For thousands of years, humans have been drawn to the coast for various reasons, such as swimming, relaxing, exploring new destinations, or socialisation (Orams, 1999:11). The early eighteenth century saw the start of this development when various resorts were established throughout Europe (Orams, 1999:12). The growth in interest amongst tourists in the use of coastal resources, such as resorts, have resulted in a growth and expansion of coastal and seaside resorts throughout the rest of the world since then (Orams, 1999:2).

Higham and Lück (2008:1) states that marine environments is not only a venue for exploration and relaxation, but humans are dependent on the ocean for various reasons, such as subsistence, transportation, communication and trade. It is therefore no wonder that tourists' attention have shifted to marine environments in pursuit of experiences. This shift has influenced the expansion of the industry to encompass various activities, including marine wildlife activities (whale watching, dolphin watching and marine ecotours), marine ecotourism activities (boat-based whale watching, swimming with dolphins and snorkelling) as well as marine adventure activities (scuba diving, shark cage diving, surfing, whale watching and stand-up paddle boarding) (Orams, 1999:12).

2.2.2 Defining marine tourism

Marine tourism is closely related to the concept of coastal tourism (Hall, 2001:602). Where coastal tourism involves the full spectrum of tourism, leisure and recreational activities taking place in the coastal zone and offshore waters, marine tourism incorporates all these concepts as well as ocean-based tourism (Hall, 2001:602). To gain a clearer understanding of the two concepts, one can think of coastal tourism as inclusive of coastal tourism development, infrastructure which supports coastal

development as well as recreational tourism activities (such as swimming, boating and fishing) (Hall, 2001:601). On the other hand, marine tourism includes deep-sea fishing, yacht cruising, diving and wildlife attractions in the marine environment (Hall, 2001:602).

The earliest definition of marine tourism to the knowledge of the researchers is that of Basiron (1997:3) who states that marine tourism is the temporary short-term movement of people to destinations, which is not their normal environment and the participation in activities (such as whale watching and shark cage diving) taking place in a marine setting. The most used definition, though, of marine tourism is that of Orams (1999:9) who states that marine tourism includes 'those recreational activities that involve travelling away from one's place of residence to a destination where tourists have as their host or focus the marine environment'. Orams (1999:9) further defines the marine environment as those waters that are saline and affected by tides. This definition is significant because it emphasises the fact that both shore-marine and coastal tourism should include shore-based activities (such as whale watching from land, yachting events and cruise ship supply) as well (Hall, 2001:603). Saayman (2017a) defines marine tourism as the international or domestic travel to participate and experience water-based areas and/or activities.

Foyle and Lough (2007:18) further adds that marine tourism should be classified as the tourism sector that is based on tourists participating in either active or passive leisure pursuits or undertaking a journey on or in coastal waters and shorelines. This definition can briefly be put as those activities that take place in the marine environment (Page & Connell, 2009:645). It can, therefore, be accepted that the following definition of marine tourism is appropriate, based on the work of Basiron (1997:3), Orams (1999:9), Foyle and Lough (2007:18) and Page and Connell (2009:645): "marine tourism involves people travelling to a destination other than their area of residence where the primary focus is placed on the marine environment and associated activities."

In addition to this, marine tourists are perceived as those tourists who participate in these activities. As stated by Orams (1999:42), marine tourists are diverse and their behaviour is largely dependent on the type of activity in which they participate. Marine tourists include those travelling to marine destinations for the purpose of scuba diving, shark cage diving, whale watching, deep-sea fishing and boating, amongst others. Marine tourists are often perceived as tourists with a higher than average income, owing to the fact that the equipment and activities often involve higher costs (Daly, Fraser & Snowball, 2015:33). Examples of this include equipment for scuba diving-, boating- and fishing gear. According to Seymour (2012:129) domestic marine tourists have an average age of 34 years and they have either a degree or a diploma from a tertiary institute. Geldenhuys (2012:81) concurs by stating the average age of domestic marine tourists is 39 years of age, they have a tertiary education qualification and they are married. Furthermore, Lück (2015:28) identified similar age categories amongst tourists attending marine mammal tours in New Zealand. The author states that the majority of tourists are below the age of 40 years and they are well educated.

Besides the profile of marine tourists, identifying the motives that drive these tourists can further enhance our understanding of the industry. Primarily, marine tourists have the following motivations to participate in marine activities (Jeong, 2014:298; Isa & Ramli, 2014:412; Duman & Matilla, 2005:313):

- They want to escape everyday life or a routine life
- They want to take a break at a new or different destination
- They are often introspective and the marine environment provides such opportunities
- They want to have a novelty experience, such as cage diving with sharks or being close to whales
- They want to learn something new
- They want to participate in marine activities, such as whale watching, diving and shark cage diving
- Relaxation is important to marine tourists
- They want to experience the ocean water.

Apps, Dimmock, Lloyd and Huveneers (2016:236) state that tourists participating in shark cage diving are particularly motivated by the fact that they want to be able to observe the shark in its natural habitat, because it is an adrenaline rush, or because it is a 'bucket list' activity. Rawles and Pearson (2005) also state that whale watching participants in Scotland are much more environmentally motivated as well as being motivated by being close to whales. Furthermore, authors such as Apps *et al.* (2016:236), Rawles and Pearson (2005), Luksenburg and Parsons (2014) and Bentz, Lopes and Calado (2016:78) agree that whale watching tourists are highly motivated by aspects such as experience on previous trips, the absence of crowds or the limited number of people who can go on the boat, environmental aspects, the animals themselves and being close to the animals.

To gain a full understanding of the diversity of marine tourism as well as the complexity of marine tourists, the following section discusses the sub-sectors of marine tourism.

2.2.3 Marine tourism sub-sectors

The marine tourism industry consists of different sub-sectors and activities (Lück, 2008a). Four sub-sectors, which dominate the marine tourism industry, have been identified by Papageorgiou (2016:45), Foyle and Lough (2007:18) and Gallagher and Pike (2011:159). These sub-sectors include cruising tourism (such as the MSC Cruises, the Princess Cruises and the Royal Caribbean International), nautical tourism (scuba diving, snorkelling, whale watching and shark cage diving), coastal tourism (sunbathing, swimming and coastal horse riding) and maritime events or festivals (this sector is characterised by the focus which is placed on events and festivals taking place in the marine environment). Each sector of the industry offers a unique experience with merely one similarity being the marine environment. Figure 2.2 summarises the four sub-sectors of marine tourism by providing a definition as well as examples of activities categorised under each sector.

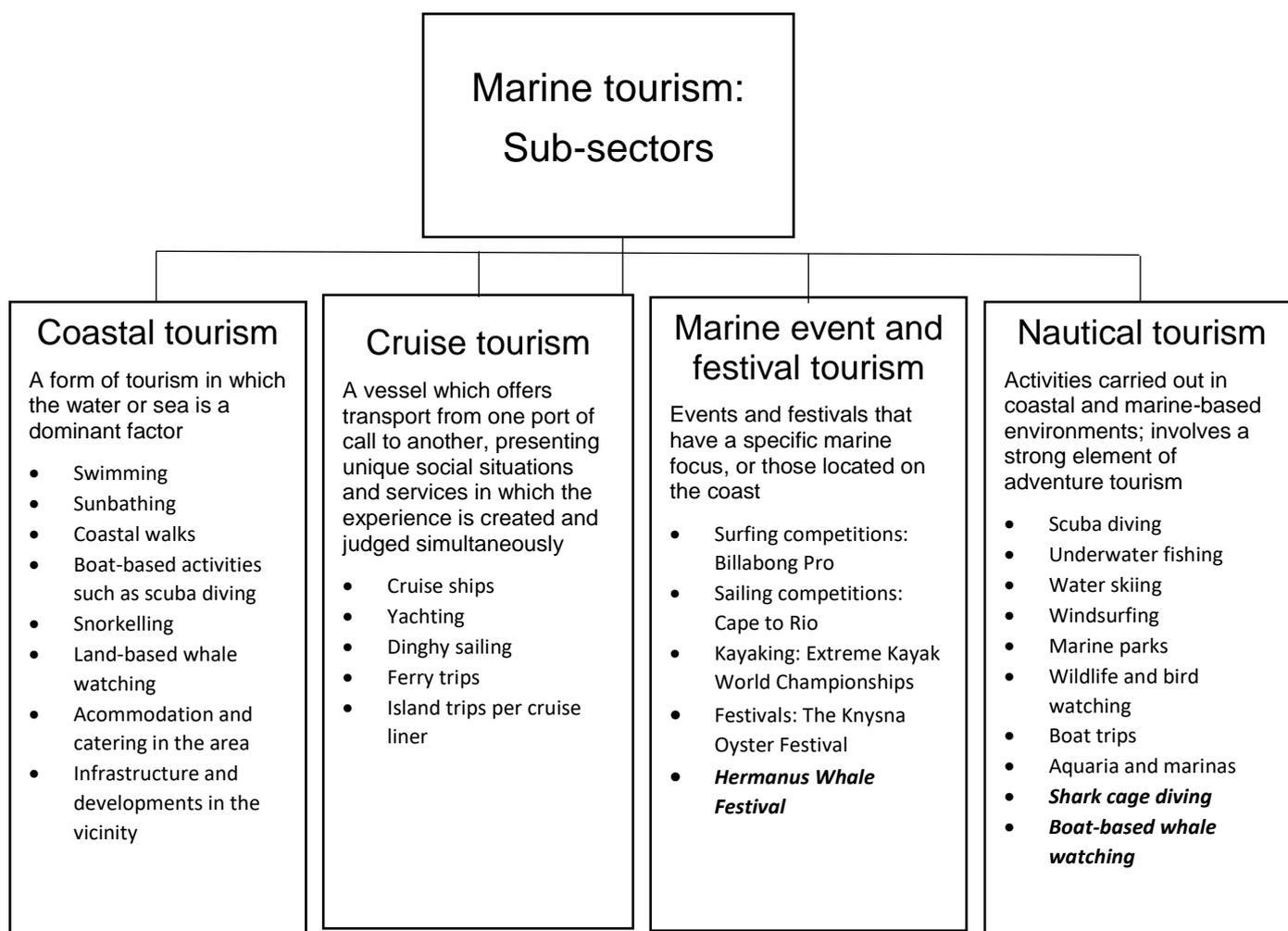


Figure 2.2: Sub-sectors of marine tourism

(Source: Schoeman, 2015:41; Papageorgiou, 2016:45; Brejla & Gilbert, 2014:157; Foyle & Lough, 2007:18; Diakomihalis, 2007:420; Orams, 1999:9).

Firstly, coastal tourism has been said to embrace the full range of tourism, leisure and recreational activities which take place in the coastal zone (Hall, 2001:602). According to Hall (2001:602) coastal tourism encompasses accommodation in the vicinity, restaurants, infrastructure, developments and all coastal activities, such as sunbathing, swimming, recreational boating fishing, whale watching, snorkelling, diving and marine-based ecotourism (Orams, 1999:2; Hall, 2001:603).

Secondly, a cruise can be defined as *making a trip by sea in a liner for pleasure, usually calling at a number of ports* (Dowling & Weerden, 2017:2). Between 2008 and 2014 the sector has outpaced the general leisure travel market in the USA by 22%, while the global market for cruising has evolved from 18 million passengers in 2009 to 24 million in 2016, resulting in a 33% growth (Dowling & Weerden, 2017:2). The destination which receives the highest number of cruise ships is the Caribbean and the Mediterranean, while destinations such as Asia, Australasia and the Pacific is enjoying an increase in attention from this industry (Dowling & Weerden, 2017:3). Cruise liners, such as MSC, Royal Caribbean Cruise Lines, Carnival Cruise Lines and Norwegian Cruise Lines

have increased in popularity, even though the sector includes other forms of cruising as well (Dowling & Weerden, 2017:3). Examples include yachting, sailing and ferry trips (Papageorgiou, 2016:45).

Thirdly, the sub-sector classified as marine event and festival tourism includes a variety of events that take place at a marine environment or in the coastal zone (Foyle & Lough, 2007:18). The focus of such events is the marine environment, or a specific aspect of the marine environment, such as the Hermanus Whale Festival (Foyle & Lough, 2007:18). This festival is an annual festival that celebrates the arrival of the Southern Right Whales along the coastline of South Africa. Other marine focussed events include the Billabong Surf Pro in Jeffrey's Bay, the Cape to Rio sailing competition and the Knysna Oyster Festival.

The Meriam-Webster Dictionary (2017b) defines the term *nautical* as an adjective relating to, or associated with, seamen, navigation, or ships. The term *nautical* is derived from the Ancient Greek word *naus*, which means *boat* (Lukovic, 2013:9). In the modern language though, nautical, or navigational, refers to a set of practical and theoretical skills needed by a skipper of any vessel to sail across the ocean successfully (Lukovic, 2013:9). The name *nautical tourism* therefore indicates a combination of tourism activities and sailing across any water body. The definition of tourism states that it is any activity undertaken by an individual involving that individual travelling from his/her permanent residence to a different destination for more than 24 hours but less than one year, for any reason other than the prospect of employment (George, 2015:7). When combining this definition with that of the term *nautical*, a definition which emphasises the element of travelling, a new definition can be established.

Nautical tourism as a sub-sector is dominated by activities which take place in the coastal and marine environments, stretching from coastal waters, where snorkelling takes place, to the deep blue sea, where shark cage diving, boat-based whale watching, scuba diving and boat trips take place (Brejla & Gilbert, 2014:157). This sector is where shark cage diving and boat-based whale watching mainly takes place or are classified under. One can also experience sharks and whales from the coastline and therefore forms part of coastal tourism. As evident, this sub-sector has a strong element of adventure tourism (adventure tourism is discussed in Chapter 3) because of certain activities, such as shark cage diving, scuba diving and boat-based whale watching which has strong elements of perceived risk, perceived danger and requires guides during participation (Saayman, 2009:230). Nautical tourism can therefore be defined as "travelling for the purpose of recreation or leisure activities on any water body, such as the ocean, using navigation".

The distinguishing characteristic of this sector is the fact that nautical tourism primarily involves boat-based activities or navigational tools operated on a water body (Lück, 2013:3). Both whale watching and shark cage diving activities mainly take place from a boat, which transports participants to a site where these marine animals can be observed. These activities are undertaken for recreational or leisure purposes and involve the participant to travel from the shore to deeper waters for three to four hours (Constantine & Bejder, 2008:49). In the case of whale watching, the captain and

crewmembers of the ship, along with the guide, will locate any whale activity and tourists will be transported to a safe distance from which these animals can be viewed in their natural habitat (Dyer Island Cruises, 2017). With shark cage diving the operators often have an approximation of where the sharks are most active, the captain will steer the boat towards that spot, from where the crew and tourists will wait until a shark is spotted.

Lukovic (2013:10) states that various factors can stimulate the establishment of nautical tourism at a specific location from where the sub-sector can grow and expand. These factors include the following (Lukovic, 2013:10):

- Location: nautical tourism takes place at a specific location that involves a specific set of stimuli and initiating factors, such as climate and development in the area
- Interest: there must be an interest in the form of tourism in the area for nautical tourism activities to succeed, such as an interest in shark cage diving. Demand from the market will stimulate the supply of the activity, such as demand for shark cage diving can stimulate the establishment of shark cage diving operators
- Economic development: the activity should be viewed as a highly profitable activity that can drive economic development in the area
- Tourism development: the activity should offer opportunities for the destination to develop the local tourism industry
- Social development: the social community in which the activity is offered should benefit equally from the activity regarding wealth accumulation, job creation and infrastructural development

In addition to the above sectors, Foyle and Lough (2007:19) state that marine-based activities, for example, those listed in Figure 2.2, can be classified into four groups, namely *non-specialist leisure pursuits*, *shore-based activities*, *motorised water-based activities* and *non-motorised water-based activities*. Figure 2.3 represents these categories in comparison with the marine-based activities. The category *non-activity* is added to this list to accommodate Hall's (2001:602) suggestion on accommodation, catering, infrastructure and developments as part of coastal tourism. The categories are discussed as follows (Foyle & Lough, 2007:19):

- Non-specialist leisure pursuits: these activities include amongst others, swimming, coastal drives, scenic boat trips and island visits, cruise ship visits, aquaria, museums and heritage and maritime events and festivals
- Shore-based activities: such as sea cliff climbing, coastal horse riding, kite boarding, shore-based angling, wildlife and bird watching
- Motorised water-based activities: these activities include boat trips for wildlife watching purposes, fast, adventure or speed boat trips, jet skiing, power boating, motor cruising, whale watching, shark cage diving, and deep-sea fishing

- Non-motorised water-based activities: these include windsurfing, sea kayaking, surfing, rafting, snorkelling and dinghy sailing.

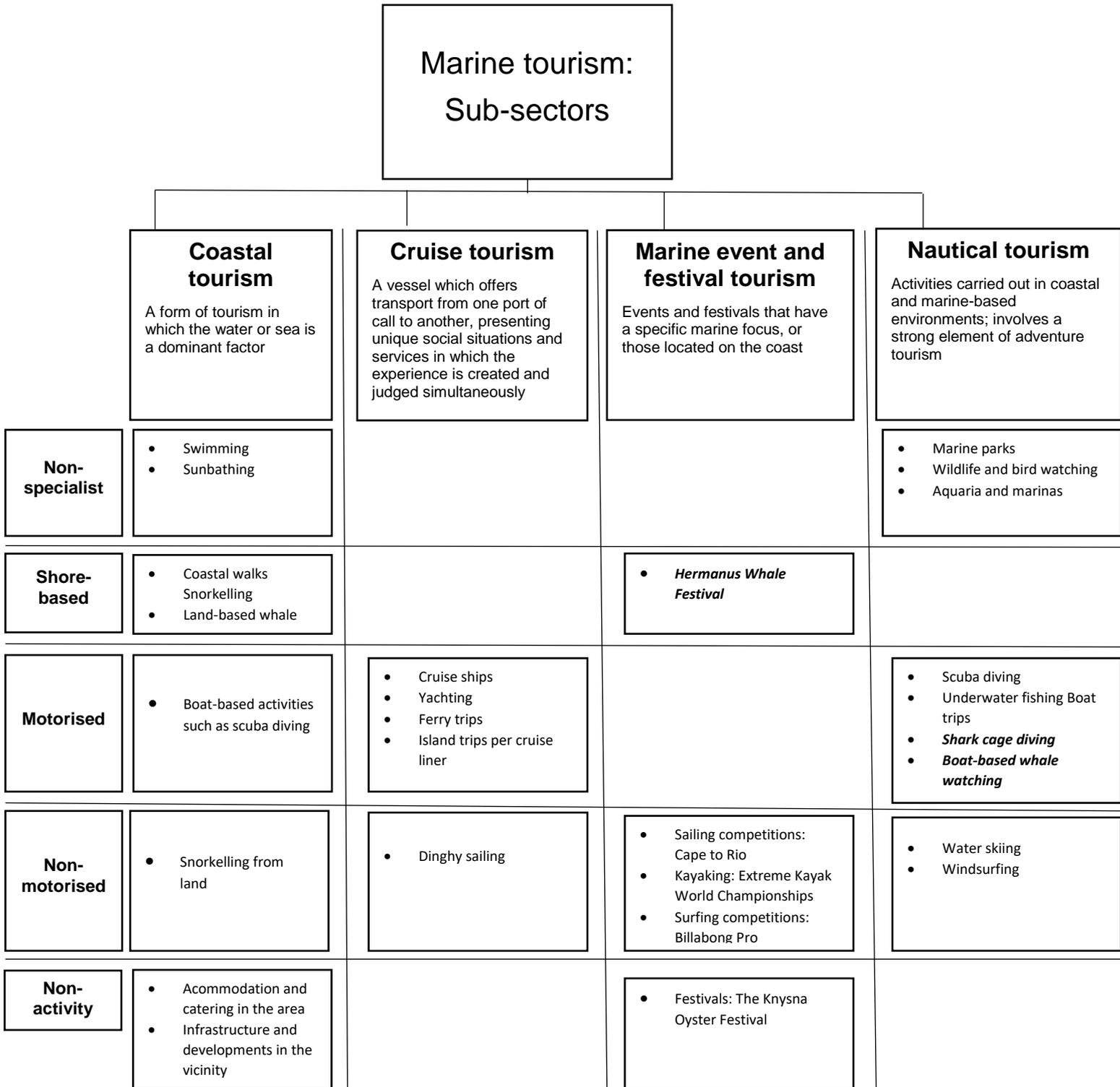


Figure 2.3: Marine-based activities in comparison with the marine tourism categories

(Source: Adpated from Schoeman, 2015:41; Papageorgiou, 2016:45; Brejla & Gilbert, 2014:157; Foyle & Lough, 2007:18; Diakomihalis, 2007:420; Orams, 1999:9) .

2.2.4 Marine tourism recreational opportunities

Regarding the recreational opportunities of marine tourism, Clark and Stankey (1979) developed a spectrum of marine recreation opportunities. This spectrum is used to define the diverse range of recreational opportunities, as evident by Table 2.1 offered by the marine environment (Orams, 1999:44). Originally, the model was developed to clarify the recreational opportunities of forests and natural areas. It is, however, made applicable to the marine environment. The spectrum is represented graphically in Table 2.1 (Orams, 1999:44).

Table 2.1: The spectrum of marine recreation opportunities

Characteristics	Class I: Easily accessible	Class II: Accessible	Class III: Less accessible	Class IV: Semi-remote	Class V: Remote
Experience	Much social interaction with a high degree of services and support; crowded	Often social opportunities	Some contact with others	Peace and quiet; close to nature; safety and rescue services available; occasional contact	Solitude, tranquility, self-sufficiency and close to nature
Environment	Many human influences and structural elements; low-quality natural environment	Human structures and influences are visible close by	Few human structures, only some are visible	Evidence of some human activity	Isolated, high-quality natural environment, few human influences
Locations	Close to- or in human areas	Intertidal to 100 meters offshore	100 meters to 1 km offshore	Isolated coasts and 1	Uninhabited coastal

	Beaches and intertidal areas			to 50 km offshore	areas to 50 km offshore
Examples	Sunbathing Swimming Beach games Eating Beach walks	Swimming Snorkelling Fishing Jet skiing Non-power boating Surfing Paragliding Windsurfing	Boat-based whale watching Shark cage diving Sailing Deep-sea fishing Snorkelling Scuba diving	Scuba diving Submarining Offshore equipped power boating Larger sailboats Whale watching Shark cage diving	Offshore sailboats Live-aboard boats Remote sea-kayaking

(Sources: Clark & Stankey, 1979; Kaltenborn & Emmelin, 1973; Orams, 1999:45)

According to Orams (1999:44), the spectrum of marine recreational opportunities is divided into five classes where the degree of remoteness increases as the degree of human impacts decrease. The strongest influencing factor on the categorisation of marine tourism activities is the distance of the activity from the shore. This will ultimately have an impact on the type of activity that tourists undertake, the experiences available and the type of environment in which the activity is undertaken (Kaltenborn & Emmelin, 1993). The five classes of the spectrum are divided according to the level of accessibility and remoteness.

- **Class I: Easily accessible.** Tourists can undertake a variety of activities on the shore or environments highly influenced by human presence. Examples include sunbathing, swimming, restaurants and beach walk
- **Class II: Accessible.** Human presence often influences this environment, but less so than class I environments. Activities in this class take place offshore in the intertidal section. Examples include swimming, snorkelling, fishing and jet skiing
- **Class III: Less accessible.** Some contact with other people can take place, but activities in this class involve the tourists travelling inshore between 100 meters and 1 km. Examples include deep-sea fishing, scuba diving, whale watching and shark cage diving
- **Class IV: Semi-remote.** Activities are taking place in isolated coastal waters, such as scuba diving, sailing and power boats, are classified as semi-remote. Tourists are still able to see lights

from the shore or some infrastructural elements, but the experience is one of being close to nature

- **Class V: Remote.** These experiences are characterised as feelings of solitude, tranquillity and being close to nature. Activities, such as liveaboard holidays, offshore sailing and remote sea kayaking, takes place in uninhabited coastal waters, usually 50 km or more from the shore.

As evident, the spectrum covers a wide array of activities, ranging between two extremes. Regarding marine tourism activities, it is useful due to the simplification offered, ensuring the range of activities and the sector can be easier understood (Orams, 1999:44). The role of each activity is therefore better understood regarding what is offered and the experience that can be gained from each.

Table 2.2 provides a classification of shark and whale watching as marine tourism products. The table explains the subsector in which these activities are categorised, the activity group and the position on the spectrum of marine recreational opportunities where each activity lies more comprehensively.

Table 2.2: Shark cage diving and whale watching classification

MARINE TOURISM		
	SHARK CAGE DIVING	WHALE WATCHING
SUB-SECTOR	Nautical tourism Adventure tourism	Boat-based whale watching: nautical tourism; adventure tourism Shore-based whale watching: coastal tourism
ACTIVITY GROUP	Motorised water-based activities	Boat-based whale watching: motorised water-based activities Shore-based whale watching: shore-based activities
POSITION ON SPECTRUM OF MARINE RECREATION OPPORTUNITIES	Less-accessible or semi-remote	Boat-based whale watching: Semi-remote and less-accessible Shore-based whale watching: Easily accessible

(Sources: Clark & Stankey, 1979; Orams, 1999; Foyle & Lough, 2007; Brejla & Gilbert, 2014:157; Papageorgiou, 2016:45)

This research specifically focusses mainly on boat-based whale watching and shark cage diving, therefore the classification will exclude land-based whale watching, but this is still indicated in Table 2.2 above. As evident in Table 2.2, both these activities (boat-based whale watching and shark cage

diving) take place in less-accessible or semi-remote coastal areas, between one and fifty kilometres from the shore. Furthermore, both are classified as motorised water-based activities because both make use of a motorised vessel to reach the location and both form part of the sub-sector nautical tourism and adventure tourism (see Figure 2.3).

2.3 MARINE WILDLIFE TOURISM

Higginbottom (2004:2) defines wildlife tourism as tourism that is based on people's encounters with non-domesticated animals, such as lions, giraffes and elephants, amongst others. The author (Higginbottom, 2006:4) states that such encounters can take place in the animals' natural environment, where the tourist might photograph or view the animal, or in captivity where activities such as feeding, handling and photographing animals can take place. Higginbottom (2004:2) proposes that wildlife tourism entails attractions at fixed sites, on tours, experiences related to tourist accommodation, or unguided tours by tourists themselves. Four main categories of wildlife tourism can be identified (Higginbottom, 2004:3):

- Wildlife-watching tourism: tourists can watch animals in their natural habitat or interact with free-ranging animals
- Captive-wildlife tourism: tourists can view animals in a fabricated confinement, such as a zoo, a wildlife park, sanctuaries, aquaria or wildlife exhibitions
- Consumptive wildlife tourism: such as hunting and fishing tourism, takes place when humans hunt, kill or utilise parts of an animal for personal gain
- Non-consumptive wildlife tourism: is defined as humans having an interest in the animal without removing, killing or utilising parts of the animal for personal gain

For the purposes of this study, the category of wildlife-watching tourism is important, for shark cage diving and whale watching is categorised in that category. According to Higginbottom (2004:4) South Africa is known as a destination which promotes wildlife-watching tourism due to a large variety of natural reserves. These reserves are fenced off, but animals can move around freely, make use of natural resources with virtually no human influence and is established for the purpose of conservation and protection of fauna and flora (Higginbottom, 2006:4).

Added to the above, marine wildlife tourism is defined as "any tourist activity where the primary focus is placed on watching, studying, or enjoying marine wildlife" (Zeppel & Mulion, 2008:20). Burgin and Hardiman (2015:210) also add that marine wildlife tourism do include consumptive and non-consumptive use of marine wildlife. Therefore, both whale watching and shark cage diving activities are classified as marine wildlife tourism.

Marine wildlife tourism is a relatively new concept, even though activities such as whale watching have been conducted since the early 1950's (Bentz *et al.*, 2013:874). Activities associated with marine wildlife tourism include attractions at fixed sites, such as aquaria, experiences that are

available in accordance with marine accommodation establishments such as scuba diving, shark cage diving and snorkelling, guided marine safaris such as whale watching, dolphin watching, or marine ecotours and tours embarked on by independent travellers, such as fishing and snorkelling (Higginbottom, 2004:2). In order to understand the complexity of marine wildlife tourism, Duffus and Dearden (1990) proposed a conceptual framework. Figure 2.4 portrays the framework of the core components of non-consumptive wildlife (as this study only deals with non-consumptive use, consumptive use was not included) use as established by Duffus and Dearden (1990).

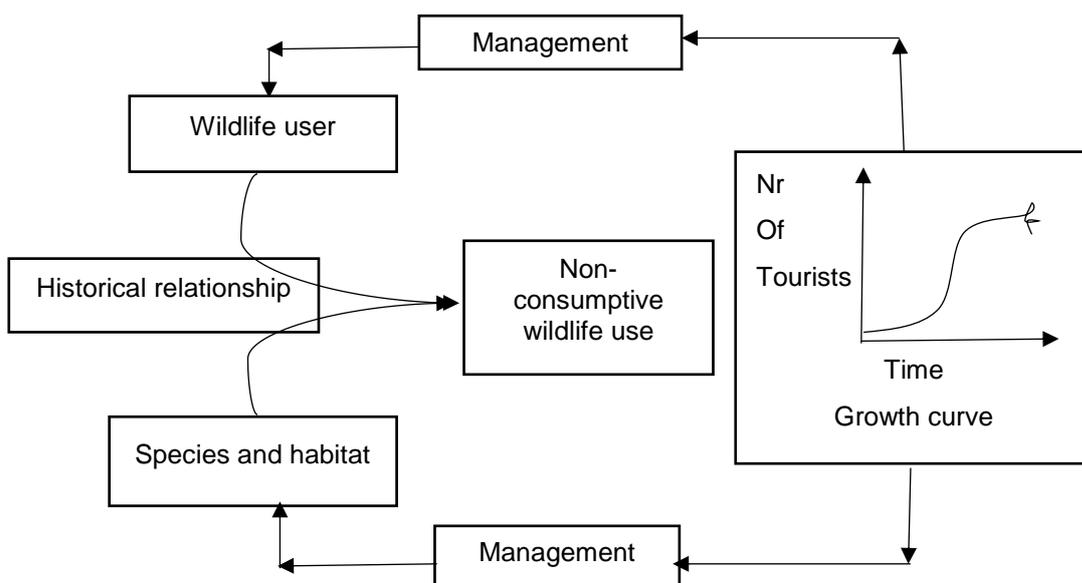


Figure 2.4: Core components of non-consumptive wildlife use

(Sources: Duffus & Dearden, 1990; Dearden, Topelka & Ziegler, 2008:67; Catlin & Jones, 2010:387).

This framework highlights three important aspects of marine wildlife tourism, namely the wildlife tourist, the species on which focus is placed and the historical relationship between the two aspects. Concepts important to the aspect of the wildlife tourist include benefits, motives and experiences. The species on which the focus is placed, for example whales or sharks, will determine the nature of the experience, largely. It will also affect the management of the activity. Poorly managed wildlife attractions can cause negative impacts on the environment and the animal, while well-managed attractions can be sustainable (Higginbottom, 2004:4). Lastly, the relationship between wildlife and the tourist will be greatly influenced by the manner in which the activity is conducted, the laws and regulations enforced, as well as the benefits that tourists derive from the activity (Catlin & Jones, 2010:387). From this conceptual framework in Figure 2.4, it is clear that marine wildlife tourism is complex in nature.

Higginbottom (2004:4) further defines the environment in which wildlife-watching tourism can take place according to where the encounter takes place. These environments include land (big five animal safaris or game drives), coastal (land-based whale watching), marine not in water (marine eco-tours and boat-based whale watching), marine underwater (scuba diving and shark cage diving),

freshwater not in water (fly-fishing) and freshwater in water (freshwater scuba diving) (Higginbottom, 2004:4). For the purpose of this study, however, focus was placed on marine not in water (due to boat-based whale watching taking place in this environment) and marine underwater (due to shark cage diving taking place in such an environment). Therefore, an analysis of marine wildlife tourism was conducted by attempting to define and explain the core components of the sector.

2.3.1 Marine ecotourism

Often used as an interrelated term, marine wildlife tourism envelopes a component of ecotourism in the sense that similar defining principles are identified (Bentz *et al.*, 2013:874). These principles include both taking place in a natural setting; both are managed and developed sustainably, both can benefit the local community and both provide resources for conservation (Bentz *et al.*, 2013:874).

Finding a comprehensive definition of ecotourism upon which all researchers agree is not an easy task. Many definitions exist which offer an explanation for ecotourism, activities involved therewith and the subsets included in this industry. It is well known that ecotourism should include an element of education, it should be nature-based and it should be managed in a sustainable manner (Geldenhuys, 2009:4). Marine ecotourism, therefore, includes all three elements, nature-based, a learning orientation (education) and sustainable management, with the difference being the environment in which it is conducted, which activities are included and how these activities are managed.

According to Garrod and Wilson (2003:1) marine ecotourism can be classified as a subset of both marine nature-based tourism and marine sustainable tourism. In order to formulate a clear definition of marine ecotourism, this section discusses the three characteristics of the term *ecotourism*, namely nature-based, learning orientation and sustainable management. These three elements contribute to the final definition created for marine ecotourism. The elements for creating the definition of marine ecotourism are represented in Figure 2.5. A short analysis would aid understanding of where and how these elements fit in with the term, as discussed below.

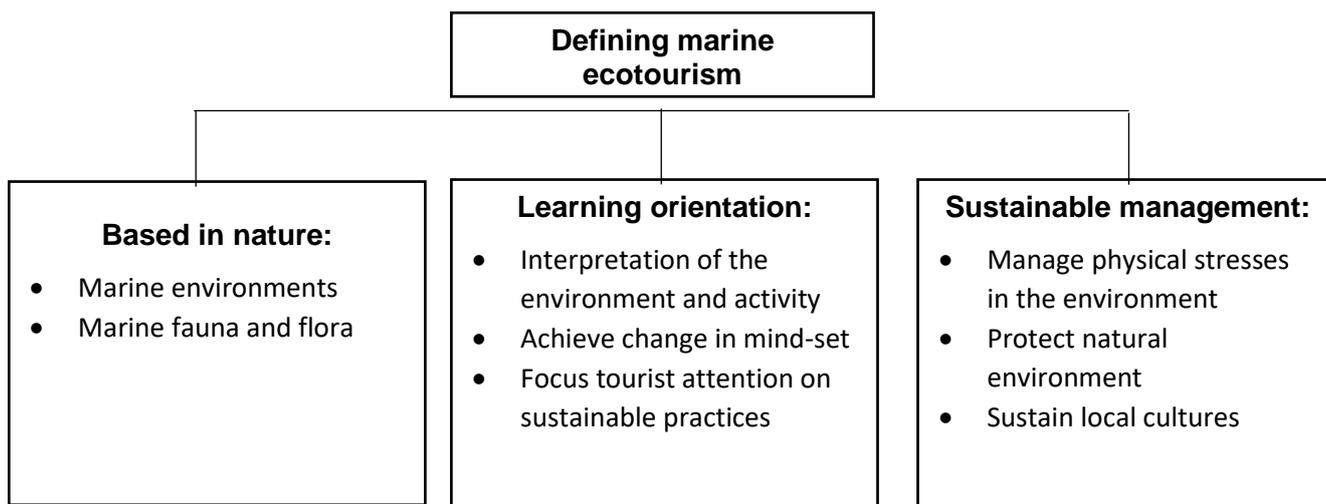


Figure 2.5: Elements of the definition of marine ecotourism

(Source: Author's own compilation)

Nature-based as an element of marine ecotourism

It is clear from this term that any activity deemed an *ecotourism activity* should be based on the natural environment (Garrod & Wilson, 2003:1). This element refers to the fauna or flora of an environment and the relationship that is established with nature. In some cases, both fauna and flora can form part of the activity, as is the case of a game drive. During a game drive, tourists are exposed to both the fauna (animals, such as the Big Five) and the flora (such as a rare plant) in an area. In terms of marine tourism, scuba diving is a suitable example seeing as divers are exposed to both underwater marine animals and plants, such as coral.

Learning orientation as an element of marine ecotourism

The second element that should be included in the definition is that of a learning element. Tourists, or participants, can be exposed to an element of learning by means of the process of interpretation. Through this process, certain concepts will be explained to tourists, characteristics of the activity, or on which it is based, can be highlighted and attention can be drawn to certain aspects of the activity, such as an animal or a plant (Tilden, 1977:4). The aim with an interpretational programme is to achieve a change in the minds of tourists and the way they perceive the natural and cultural environment of an area. Ultimately, the tourist's' attention should be focussed on achieving a more sustainable perception of the environment (Moscardo, 2003:114; Tubb, 2010:477), .

Sustainability as an element of marine ecotourism

Sustainable principles and practices should be implemented and applied by both the operator and the tourist (Garrod & Wilson, 2003:3). It is the operator's responsibility to ensure that physical stresses of the environment are managed, such as waste and energy minimisation, as well as other environmental impacts. This can include minimising the amount of carbon monoxide from the whale-watching vessel and ensuring that all passengers are aware of where the dustbins are on-board and

that litter is not thrown into the ocean. Operators of marine ecotourism should not only aim to protect the natural environment though, they should also aim to sustain local cultures and ways of living (Garrod & Wilson, 2003:3). See Chapter four of this thesis for a discussion on the concept of sustainability.

From the brief analysis of the elements important to the term *ecotourism* it is clear that marine ecotourism should be based on similar concepts as land based ecotourism. Therefore, the following definition can be developed:

Marine ecotourism can be defined as “activities taking place in a natural marine environment, where the focus is placed on the fauna and/or flora of the environment, where an educational experience is offered and where principles of sustainability is implemented in order to ensure the long-term survival of the marine environment”. From this definition, both whale watching and shark cage diving is further classified as marine ecotourism tourism. This is because whale watching takes place in a marine environment not in water (participants view whales from the boat) and shark cage diving takes place in a marine underwater environment (participants submerge themselves underwater in a cage in order to view sharks in their natural environment). The focus of these activities is to educate tourists while conserving the animals and the environment and ensuring the sustainable use of marine resources (Saayman, 2008:8). These two activities also form part of marine adventure activities, which are discussed in chapter three of this thesis.

Marine ecotourism activities are operated differently from others, depending on the type and nature of the activity. That being said, various operators can be identified, such as specialist operators and opportunists (Garrod & Wilson, 2003:4). A specialist operator places focus on a specific species, such as whales in the case of a whale watching operator. Specialist providers may, in some cases, choose to focus on more than one species, such as whales, dolphins and sea birds, depending the abundance of species found in the area (Garrod & Wilson, 2003:4).

On the other hand, operators may also incorporate marine species into their sightings purely based on opportunity, where certain species become an incidental part of the experience offered. For example, a whale-watching trip can incorporate a sighting of a flock of penguins. This will give tourists a chance to learn something new about these endangered seabirds and focus their attention on something else for a while which will expand the offer and positively impact the experience (Ballantyne, Packer & Falke, 2011a:1243). Opportunistic sightings will mainly occur in areas where species are found on a migratory basis, such as the case of Hermanus’ Southern Right Whales along the western coastline. In practice though, it is a common phenomenon amongst operators to incorporate multiple species into their offerings to ensure that a quality experience is offered and to utilise marine resources to its fullest (Garrod & Wilson, 2003:4).

2.4 MARINE TOURISM MANAGEMENT

The second section of this chapter focus on the management aspects regarding marine tourism. The aspects that are discussed include tourism management in general, important aspects of marine tourism management and different marine tourism management frameworks. The goal is to identify important aspects for sustainable management of these sub-sectors that can be implemented by whale watching and shark cage diving operators.

2.4.1 Key aspects pertaining to tourism and marine tourism management

The following diagram (Figure 2.6) is an illustration of the most important aspects for the successful management of marine tourism. These are planning, organising, control, leading, financial management, marketing management, operation management, human resource management and marine environmental management. These activities incorporate various elements which is unique to the sector.

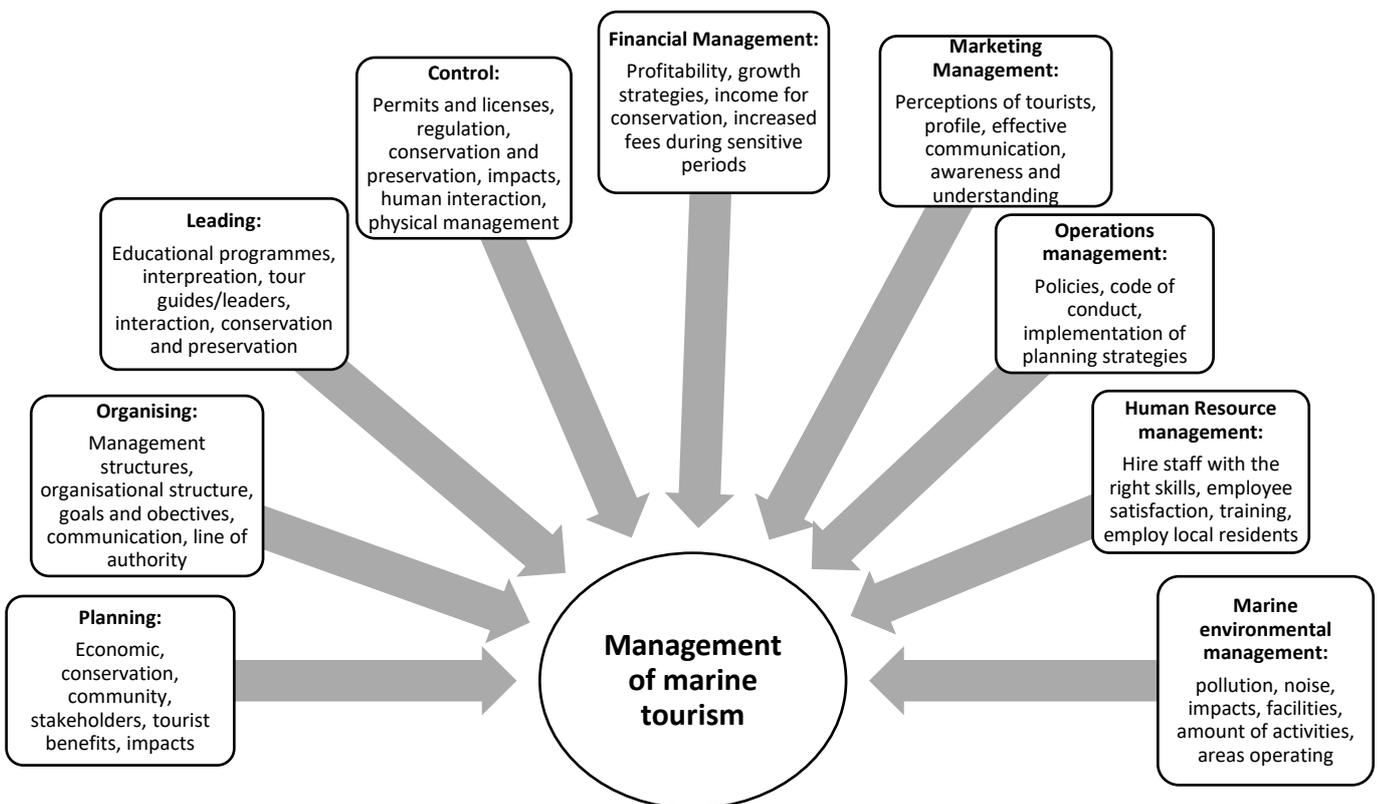


Figure 2.6: Management aspects of marine tourism management

(Sources: Platt, 1995; Orams, 1999; James, 2001; Reynolds & Braithwaite, 2001; Orams, 2002; Garrod & Wilson, 2003; Higham & Lück, 2008; Curtin, 2010; Ballantyne, Packer & Sutherland, 2011b; Bentz *et al.*, 2013; Daly, *et al.*, 2015; Papageorgiou, 2016; Gallagher & Pike, 2011; Luksenburg & Parsons, 2014)

Before one can start to identify the management aspects of marine tourism though, it is necessary to define the management aspects of tourism in general. Tourism management can be defined as the “process which allows people to work together in order to achieve organisational objectives in an environment conducive to constant change (Kreitner, 1989:9). From this definition, management of tourism can be divided into two stages, namely general and functional management (Saayman, 2009:21). General management is made up of the four functions of management, namely planning, organising, leading and control, while functional management includes financial management, human resource management, marketing and facility management (Saayman, 2009:21). One very important aspect in terms of tourism management is the effective and efficient management of limited resources (Saayman, 2009:21)

2.4.1.1 General management

The following aspects of general management are discussed.

Planning: Planning involves the management of concepts such as increasing economic impacts, planning for conservation and preservation of the environment and the local community, planning for stakeholder management, planning tourist benefits and planning for minimisation of environmental and social impacts (Platt, 1995; Orams, 1999; James, 2000; Reynolds & Braithwaite, 2001; Bentz *et al.*, 2013).

Planning is facilitated at the starting point of the management process and will determine the “what” and “how” of planning. This process will help to determine the plan of action needed to achieve the objectives of the company (whale or shark cage tourism) (Du Toit, Biggs & Pollard, 2011:22). According to Du Toit *et al.* (2011:29) the following benefits associated with proper planning can be identified:

- Planning provides direction for successful management of a company. Shark cage diving and whale watching product managers will be able to determine the exact direction in which they wish the business to move.
- Planning can reduce the negative impacts which changing environments or systems might have on the company seeing as a future-oriented view is implemented through planning. Managers should continuously scan the internal and external environment for changes and to take on an approach of action instead of reaction
- The promotion of coordination is facilitated effectively because planning provides the opportunity for all members of the company to be aware of the goals and objectives as well as their role in the company
- Cohesion is ensured because management can view the company as an entirety, not as separate departments. For example, a shark cage diving operator can have a holistic view of the

company by incorporating marketing activities, financial activities, operational activities and human resource activities into the company's planning efforts

- Control is facilitated through planning seeing as the operator can measure the performance of the company against the goals and objectives set during the planning phase

Planning can furthermore be separated into three levels, namely top, middle and lower level management (Saayman, 2009:117). For each level a different type of planning approach is followed. On the operational level (lower level management) planning activities are concerned with day-to-day activities of the company and will include planning conducted by departmental managers or supervisors. Example of such activities include managing functional problems, monitoring levels of supervision and creating opportunities for feedback from and to the workers (Saayman, 2009:118). In terms of whale watching or shark cage diving, lower level management will have to make decisions pertaining to the number of trips undertaken per day and the time when these trips will commence. Decisions pertaining to this should not be made lightly though, but should rely on sources such as the weather report to determine when the best time will be to conduct a trip on the ocean.

Next, middle management, or tactical tourism management will deal with decision being made on the medium and short term (Saayman, 2009:117). By taking it a step further, the tactical manager is concerned with identifying the strengths and weaknesses of the company pertaining to the service that is being provided (Saayman, 2009:117). A shark cage diving operator might, for example, identify attention to detail as a strength of the company seeing as little things such as supplying water and towels on the boat, are being considered.

At the highest level of management, strategic decisions will be made pertaining to all aspects of the business (Coetzee, 2009:117). The top-level manager will be tasked with planning for the company as a whole on the long-term (Coetzee, 2009:117). Strategic management for whale watching operators will include planning for the off-season, or the season during which the whales are not on the South African coastline.

Organising: Organisation refers to the ability of the company to establish goals and objectives, the organisational structure of the company, lines of authority and lines of communications (Saayman, 2009:144). These areas of management are not seen or experienced by the participants, but adds to the successful management of the sector. It also serves as guidelines and offer directions to daily operations and management of the company.

Mechanisms are developed to implement the plans developed in the first stage of the management process. The point of departure of this stage is to develop vision, mission goals and strategies of the organisation. The organisational structure of the company will aid the division of tasks and responsibilities in the companies (Du Toit *et al.*, 2011:171). Amongst others, the following benefits can be identified (Saayman, 2009:144):

- Roles are clearly divided in the company and staff members know who is responsible for which tasks
- The line of authority is clearly identified
- Channels for communication is identified
- The company's resources can be focussed on the objectives set during the planning phase

A company's organisational structure can be defined as a formal system of work relationships which aims to divide and coordinate tasks amongst members of the workforce in order to achieve the common goal of the company (Saayman, 2009:145). A company's organisational structure is that part of the company which is unknown to the public and will consist of the hierarchy of management, stretching from the directors of the company, to middle and lower level management, to the employees working in the company. The organisational structure of the company has a big influence on the employees of the company and will in return have an influence on the level of service offered by the company. The reason for this is the fact that employees come into direct contact with tourists, or marine activity participants and will have an influence on the overall experiences of the participant (Saayman, 2009:145).

Leading: Leading incorporates concepts such as establishing educational and interpretation programmes, making use of tour leaders/guides, leading the interaction between the tourist and the environment/animal and conservation and preservation programmes (Orams, 1999; Reynolds & Braithwaite, 2001; Curtin, 2010; Garrod & Wilson, 2003:244).

This is defined as a process of influencing employees to work together in order to reach predetermined objectives of the company. Terms used to describe leadership include traits, behaviour, influence, relationships, roles and interaction patterns (Du Toit *et al.*, 2011:171). The main tasks of a leader are to establish the direction of the company, to develop a vision and mission strategy and to align people by offering motivation and ensuring the team follows the established direction of the company (Saayman, 2009:164). Leaders should be able to manage the complexities of policies, processes and procedures implemented and to deal with any changes in the company (Saayman, 2009:165).

Furthermore, the role of a leader in the company can be outlined as follows (Saayman, 2009:170):

- A leader should co-ordinate group activities and ensure that policies are adhered to
- The leader should decide in which way activities should be carried out
- Goals, objectives and policies are established by the leader, such as environmental-friendly policies in the day-to-day running of the operation and while out at sea
- The leader should provide readily available information for employees and customers if and when needed

- The leader should represent the group and act as a spokesperson for the group and the channel of communications
- The leader should determine the specific aspects of the group and the structure of the operation
- Implementing and using reward power and coercive power to control the group. For example, implementing an employee of the month system where employees are rewarded for good work and service delivery
- Interpersonal conflict amongst employees and customers should be resolved by the leader
- Setting an example for employees according to which the service should be delivered
- Decisions are made by the leader, which relieves employees of the responsibility of making an accurate decision for the group or the operation
- Providing a positive environment and creating a platform for beliefs, values and service standards according to which the operation is run.

Control: Control serves to ensure that permits and licenses are implemented and paid for within the sector, regulatory strategies should be implemented (such as regulation of litter, overcrowding and adherence to laws), conservation and preservation should be contributed towards, human participation should be controlled, environmental and social impacts should be minimised and resource management should be controlled (Platt, 1995; Orams, 1999; Reynolds & Braithwaite, 2001; Garrod & Wilson, 2003:244).

This is the final step in the management process and will provide feedback on activities conducted as well as influence the first step in the management process, in other words the planning step (Du Toit *et al.*, 2011:27). According to Du Toit *et al.* (2011:27) the process of control involves the manager following up on planned activities, ensuring that necessary activities are indeed carried out and that the goals and objectives of the company are indeed reached.

Control is implemented in an operation to ensure that the plans as established during the planning phase are indeed carried out and that they remain relevant (Du Toit *et al.*, 2011:28). For example, the manager of a shark cage diving operation will ensure that plans and policies for the sustainable operation of the business is adhered to by implementing a system according to which employees should work, such as not throwing litter onto the ocean and ensuring participants are seated while the boat is moving.

Du Toit *et al.* (2011:28) further highlights the importance of control as a way of limiting the accumulation of error. The more a business is being controlled in terms of the target market, business practices and the environment in which it operates, the less of a chance there will be of errors or hazards occurring. Control can also aid the operation in coping with an increased number of participants as well as increased costs. If control is implemented correctly and resources are allocated efficiently, costs can be minimised, such as the costs pertaining to maintenance of the boat and the cage for a shark cage diving company (Du Toit *et al.*, 2011:28).

Specific areas within a company can be highlighted where control should be implemented. These areas include physical resources, financial resources, information resources and human resources (Du Toit *et al.*, 2011:29). Physical resources should be controlled by means of regularly taking stock of the inventory of resources, such as the number of wetsuits that are in working condition and the number of masks to be used by participants of shark cage diving (Du Toit *et al.*, 2011:29). Human resources should be controlled by recruiting, selecting and placing the most appropriate candidates for a specific position in the company, such as selecting a skipper with prior experience and the necessary, up to date qualifications. In terms of controlling financial resources, returns on investment should be monitored closely to identify any shortcomings in income of the operation. Furthermore, working capital should be monitored constantly and payment of salaries and wages should also be monitored to ensure that employees are paid on time and that maximum benefit is reaped from productivity in the operation (Du Toit *et al.*, 2011:29).

2.4.1.2 Functional management

In addition to the above mentioned general management tasks, four functional areas of tourism management also exist. The functional areas of management include the following (Du Toit *et al.*, 2011; Saayman, 2009):

Operations management: This function of the management process includes facilitating and executing the transformation process. This function is directly concerned with providing a service aimed at realising the previously set objectives of the company (Du Toit *et al.*, 2011:29). Marine tourism operations will include aspects such as the introduction of a new service offered by a single operator. For example, a shark cage dive operator offering marine eco-tours or whale watching trips as an additional tour.

Human resource management: This function involves the process of finding, developing and keeping the correct members on the staff to form a qualified workforce that will ensure the provision of a quality service delivered to tourists. Human resources in marine tourism involves the management of crewmembers working on a boat, such as the skipper and tour guides on-board a whale-watching vessel. These staff members are in direct contact with the marine tourists and can contribute greatly towards providing a high quality and sustainable service.

Marketing management: The marketing function of the company consists of ensuring the transference of services from the supplier to the market. In terms of marine tourism, this involves the provision of leisure and recreation activities at a coastal destination to meet the needs of the market.

Financial management: This involves the acquisition of sufficient financial resources for the business to operate at the lowest possible cost, while investing in assets to return and manage the profits of the company. Marine tourism operators should consider the costs of operations, such as

fuel for the boat and the costs of equipment maintenance, while ensuring conservation and sustainability is complied with.

Functional areas of tourism management will be implemented in various ways, depending on the nature of the operation. Whale watching, for example, is seasonal by nature and operators will therefore focus marketing activities during the high-peak season, namely June to December. Finances should be managed in such a way that the operation can survive the remaining six months of the year, if other services are not offered during these months. Another service that can be offered is marine eco-tours, where tourists are taken out to sea to view marine animals such as dolphins, penguins, birds and seals. For a shark cage diving operation, operational management will include attracting the sharks in such a manner that humans are not feeding the sharks. Chumming should therefore be used only to attract sharks and not for the purposes of aggravating the shark.

2.4.1.3 Marine environmental management

Activities such as whale watching and shark cage diving involve direct contact with the physical environment, which often serve as the main attraction (Swarbrooke *et al.*, 2006:194). According to Swarbrooke *et al.* (2006:194) tourism activities often have a positive impact on the environment and conservation. Due to several negative impacts on the environment though, the following impacts should be managed (Swarbrooke *et al.*, 2006:194; Coetzee & Saayman, 2009b:141; George, 2015:410):

- Development of facilities: the development of facilities, such as the site where shark cage divers and whale watchers meet, can cause a number of problems, such as degradation of the natural environment.
- Waste: waste, such as papers, plastic and left-over food, should be controlled and disposed of appropriately. Ways in which waste can be managed aboard the ship include provision of a dustbin, rules and regulations instated which involve a fine if not adhered to, recycling and removal of litter encountered in the ocean.
- Damage to the environment: boats anchoring for the purpose of shark cage diving can cause damage to reefs. Captains should therefore pay attention to the area in which anchors are dropped.
- High volume activities can cause disruption in the feeding and breeding patterns of whales and sharks: if a high volume of activity takes place in a certain area the natural patterns of whales and sharks can be disrupted. Therefore, the government has instated permits which allows operators to practice in a certain area. The rules and regulations should be adhered to by operators to ensure animals are not disrupted. This includes remaining 100 meters away from whales, not touching the animals, not feeding the animals and ensuring participants do not attempt to swim with the animals.

- Conservation of biodiversity, ecosystems and landscapes: it remains the responsibility of operators to ensure that appropriate measures are implemented to promote restoration of the environment, such as removal of pollutants in the ocean, paying consideration to the capacity of the environment in which activities are operated and respecting the integrity of vulnerable ecosystems (such as Dyer Island where sea birds are nesting) and protected areas are claimed.
- Promotion of education and awareness: the operators should ensure to educate participants and the public on the principles of environmental conservation and sustainability, such as recycling, whale and shark behaviour and the importance of the marine environment.
- Monitoring impacts: operators should monitor the impacts that their operations have on the environment constantly. It is important for operators to continually try and reduce their impacts, such as noise and waste pollution, to ensure that the marine environmental impacts are managed.

From the above points it is therefore clear that management of whale watching and shark cage diving operations do not only include general and functional management, but environmental management as well. Environmental management can greatly influence operations. For example, during 2017, sharks in Gansbaai have disappeared for as much as 6 weeks on end due to an increase in predators in the area. According to Rotherham (2017) sharks disappeared due to three reasons. Firstly, a pod of orca whales was found along the coastline. These whales are natural predators of the great white shark. Secondly, illegal shark fishing took place in the area which impacted the numbers of great white sharks significantly. Thirdly, a speed boat hit a great white shark in December 2016, but according to Marine Dynamics (Rotherman, 2017) this is a common observation in the area. If proper environmental management principles have been implemented by operators, such as boats paying attention to the area in which they travel and reporting shark and whale poaching, two of the three reasons could be avoided.

2.4.1.4 Different marine tourism management frameworks and models

The following section reports on relevant marine tourism management frameworks and models. These include Platt's marine tourism management model, Orams's strategies (1999:91) to managing marine tourism and various frameworks for the management of wildlife tourism, planning and managing wildlife tourism, decision-making for coastal zones and sustainable coastal tourism management.

2.4.1.4.1 Platt's marine tourism management model

Marine tourism is a small sector in relation to the collective sectors of the tourism industry, but the resources are vast and the use of marine resources are negligible (Bentz *et al.*, 2013:874; Orams, 1999:71). Whale watching and shark cage diving are both marine adventure activities where the focus is placed on marine animals, in other marine resources. In contrast to this though, the benefits which marine tourism poses to local communities are large. From this, it can be derived that efficient

management of the marine tourism sector will benefit the local community, local economy and the tourism industry largely, in the long run. Numerous authors (Orams, 1999; Bentz *et al.*, 2013; Daly *et al.*, 2015; Papageorgiou, 2016; Gallagher & Pike, 2011; Luksenburg & Parsons, 2014) have attempted to analyse, explain and offer improvement strategies for the management of marine tourism. Literature on the management of marine tourism, however is lacking but in dire need of attention due to the increased interest shown across the world in such activities.

The two most emphasised aspects in research on marine tourism management include the conservation and protection of marine environments and the provision of a high quality recreational, or leisure, experience for tourists (James, 2000:496). These services can include marine adventure activities, such as shark cage diving, whale watching, speed boating and deep-sea fishing, as well as leisure activities such as the provision of clean beaches and facilities. According to Platt (1995:267) a general model for marine tourism management will include the interrelationship between natural systems, management systems and socio-cultural systems. These three concepts make up the multi-dimensional environment of tourism management and can be adapted to apply to marine tourism management as well (Platt, 1995:267). Figure 2.6 is a visual diagram of this model for management of marine tourism.

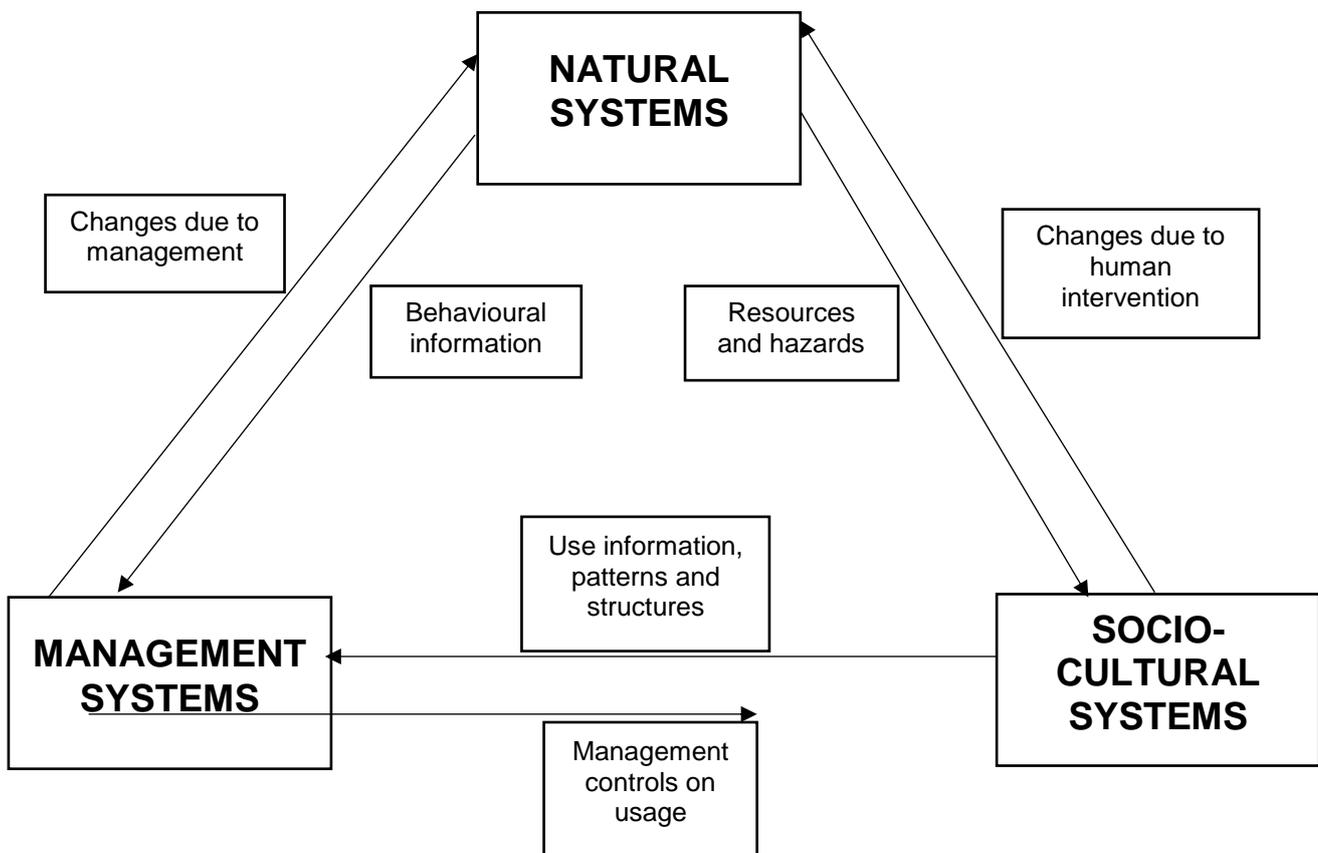


Figure 2.7: A model of marine tourism management

(Source: adapted from Platt, 1995).

Firstly, the natural systems of the marine tourism environment consist of the water (ocean), the interactions between the water, the ecological processes and the physical processes (James, 2000:497). This will include the water, marine animals, plants and the natural processes associated with these, such as the migration of Southern Right whales or the movements of Great White sharks. Secondly, the socio-cultural system incorporates the human interaction with these natural systems (James, 2000:497). This will include humans participating in the activity as well as the local community whom make a living from these activities. The local community as well as tourists will participate in marine tourism for a variety of reasons, including recreation, escape and adventure or thrill. Thirdly, the management systems of marine tourism include the interaction of stakeholders, including government bodies, non-government organisations, policies, regulations and programmes (James, 2000:497). Because management of marine tourism encompasses a complex and diverse range of aspects, environmental management is of utmost importance to ensure that the interaction between humans and the environment is efficient and will remain sustainable in the long run.

In concurrence, Orams (1999:72; 1996:33; 2002:59) and Kuo (2002:89) propose four strategies for the effective management of marine tourism. According to the authors (Orams, 1999:72; Orams, 1996:33; Kuo, 2002:89) these strategies range from having no control over activities or sectors at all, to those involving complex combinations of structures, namely physical, economics, regulation and education. Orams (1999:72) states that regulatory and physical strategies are used for controlling the behaviour of tourists through external manipulation, while economic and educational strategies are proposed for the improvement of sustainability and management of marine tourism. Each aspect is discussed in detail below.

2.4.1.4.2 Orams' strategies to managing marine tourism

Orams framework for marine tourism consist of four different strategies. The first strategy that needs discussion relates to **regulatory management strategies**. According to Orams (1999:72) regulatory management strategies are traditional methods of practicing control over tourist activities taking place at a destination. In a marine context, these regulatory strategies can be used to restrict visitor actions and numbers, access and times. The method for indicating regulatory strategies is usually through signs, notices and written material. For example, beaches have signs posted that informs visitors that no alcohol, pets, or glass is allowed on the beach. For beaches with strong tides, either such signs are used to inform visitors of the tides or that no swimming is allowed at the beach.

Regulatory management techniques have three primary purposes, namely to protect the safety of tourists, to reduce conflict between tourists and to protect the marine environment form negative impacts and degradation (Orams, 1999:77).

One example of marine tourism regulation is the restriction on litter in the marine environment (Chen, 2015:397). Governments across the world (such as South Africa, UK, USA and EU) have

implemented regulations aimed at restricting and minimising marine litter. South African marine tourism operators such as shark cage diving and whale watching operators, communicate these restrictions to all participants either verbally or through written notices. Furthermore, operators should abide by regulations surrounding the sustainable management of waste. According to the Government Gazette no. 35783 (2012:49) operators should recycle and reuse waste appropriately and should ensure that at least 50% of all sewage, waste water and solid waste are disposed of in line with the international norms and standards by the year 2015.

Other regulatory strategies for management of marine tourism include restricting operators to a specific area in which activities, such as shark cage diving, can be performed by providing operators with permits. According to South African regulation, shark cage diving activities in Gansbaai is only allowed in an allocated area just off the Coast of Dyer Island. The reason for this is that the area is a marine protected area and therefore no tourists are allowed to enter without permits, swim or participate in activities without a permit. Shark cage diving will therefore cause no harm to humans in the area. Another reason is that by restricting cage diving activities to a specific area, the sustainable use of the area is ensured through the allocation of a specific number of permits and licences to operate.

The second strategic management aspect is **physical management**. Orams (1999:77) states that physical management strategies include human-made structures that control human activity through restriction of movement or the type of activity that is undertaken. Examples in the marine environment include the use of a boardwalk to concentrate the movement of beach visitors to a specific area, which minimises impact on the environment (Orams, 1999:77). Shark cage diving is an activity where multiple physical management strategies are implemented, such as the use of a cage. Participants are not allowed to enter the water outside the cage, nor are they allowed to reach through the barriers of the cage. This is not only for safety purposes for the participants, but also for the safety and conservation of the sharks. Secondly, shark cage diving vessels are moored to buoys in a designated area where they can conduct the activity. Thirdly, whale-watching operators are restricted to a maximum approach distance of 50 meters to the whales.

Thirdly, **economic strategies** are those that offer a monetary incentive, or disincentive, for the modification of people's behaviour (Orams, 1999:78). Such a strategy can be implemented to positively affect the behaviour of tourists or operators. For example, the South African government implemented a system that requires whale watching and shark cage diving operators to have a permit and a licence to operate and conduct the activities. This restricts the numbers of operators in South Africa, therefore protecting the animals and the marine environment from over utilisation. Furthermore, Orams (1999:78) suggests that other economic strategies can be implemented as well, such as increased fees during times when animals are particularly sensitive to tourists. For example, during whale season on South Africa a higher price can be charged for whale watching or marine

eco-tours that will allow for a lower number of visitors taking part, while the operator is still making enough money to cover costs.

Lastly, Orams (1999:79) suggests that **educational strategies** should be implemented as well. This includes methods that can reduce the incidence of inappropriate tourism behaviour through the encouragement of changed behaviour and the increase in visitor enjoyment and understanding. Such strategies involve explaining aspects of the marine environment to tourists, such as the behaviour of whales during mating season, or the hunting strategies of great white sharks. Not only will this improve the tourists' understanding of the marine environment or the animals, it will also encourage them to behave in a responsible and sustainable manner.

Aside from these management strategies, it is also important to review important management techniques for working with marine wildlife, as is the case with shark cage diving and whale watching. Managing the tourist interaction with marine wildlife requires strict practices to ensure that the animals are left undisturbed while providing a satisfactory experience for the tourist (Orams, 2002:2282). Orams (2002) identifies three approaches for the management of marine wildlife interaction, namely prohibition, management and ignore (Orams, 2002:288). These approaches have been identified as ways in which the interaction between tourists and marine wildlife, such as whales and sharks, can be managed for the conservation and protection of these animals. These categories are discussed below (Orams, 2002:288).

Category 1: Prohibition

Prohibition is the most common approach to managing wildlife interactions and involves restricting tourists and operators in terms of certain activities. For example, shark cage dive operators are not allowed to operator in areas that are in close proximity to designated swim areas. Another concept where prohibition is implemented successfully in marine tourism is the feeding of animals. Shark cage diving operators is a good example, because the South African government has banned chumming and feeding sharks as a method of attracting the sharks to the boat. Instead, operators are allowed to create a chum slick, comprising of seawater mixed with fish intestines and blood. The sharks will then smell this and, out of curiosity, be attracted to the boat.

Participants of shark cage diving and whale watching are not allowed to touch the animals. This prohibition ensures the safety of both the animal and the tourist. Sharks and whales are dangerous and wild animals that can cause harm, as well as become conditioned to view humans as a source of food. This can result in changed behaviour on the part of the animal, such as sharks attacking humans and whales coming too close to humans (Orams, 2002:289).

Category 2: Manage

The second strategy Orams (2002:289) highlights is *manage*. The author suggests that by following this approach operators are managing the interaction between marine wildlife and tourists. For example, a whale-watching operator is, by law, not allowed to approach whales closer than 300 meters (Marine Living Resources Act, 1998:55). However, if the whale approaches the vessel, as does happen in most cases, there is no fault on the side of the operator. This approach permits a certain level of interaction, but under very strict conditions, such as the permission for tourists to dive with sharks but they are not allowed to be outside the cage, nor should any limbs or parts of the tourist's body be outside the cage at any given time.

By managing the tourist-wildlife interaction, potential risks associated with this interaction can be minimised (Orams, 2002:289; Higham & Lück, 2008:6). Risks that can result from the tourist-wildlife interaction include conditioning of the animals, disruption of migratory patterns and exploitation of animals (Johnson & Kock, 2006:43). Another impacting factor is the occurrence, density and frequency of vessels, which can affect and alter the behaviour of whales and sharks (Higham & Lück, 2008:6). For example, spinner dolphins and whales in Alaskan waters were found to show resting behaviour less frequently as the number of vessels increased to the area (Higham & Lück, 2008:6). When whales and dolphins portray resting behaviour, they are most sensitive to boat interactions and therefore most vulnerable as well (Higham & Lück, 2008:6). In order to manage such impacts successfully though, activities, such as shark cage diving and whale watching, should be based upon an understanding of the potential impacts that can derive from a close interaction with whales or sharks (Orams, 2002:289). This understanding should then be transferred into actions, where the operator ensures negative impacts are eliminated or minimised, for example, using a chum slick to attract sharks to the vessel instead of feeding them, ensuring that whales are approached in the correct fashion, or ensuring that vessel traffic is kept to minimum (Higham & Lück, 2008:6).

Category 3: Ignore

The third approach, according to Orams (2002:289), is to *ignore*. Ignore management approaches to tourist-wildlife interaction means that the operator encourages practices such as touching the animals, feeding them and being close to them (Orams, 2002:289). The risks associated with conducting such practices are ignored and, thus, impacts are enhanced (Orams, 2002:290; Higham & Lück, 2008:6). For example, shark cage dive operators who feed sharks as a method of attracting them to the boat is ignoring the laws surrounding feeding sharks. This can result in negative impacts, such as conditioning of sharks to see humans as food. Vessels being navigated erratically can also result in animals, such as whales and sharks, trying to elude the vessel (Orams, 2002:290; Johnson & Kock, 2006:43). Higham and Lück (2008:6) state that whales and sharks trying to evade vessels being navigated unpredictably and erratically behave similarly to animals trying to avoid a predator. This research is directly linked with boat-based whale watching activities, rather than land-based

activities. Whales behaving in this fashion feel threatened due to the vessel targeting them directly, which derives from times when humans used to hunt whales for meat using harpoons (Higham & Lück, 2008:7). Therefore, regulations are put in place, such as limiting the distance at which a vessel can be from a whale. If an operator chooses to ignore these regulations, however, the impacts which tourism activities, such as shark cage diving and whale watching, have on marine animals will be diverse and detrimental (Higham & Lück, 2008:6).

2.4.1.4.3 Frameworks for marine tourism management

Before a comprehensive sustainable management framework for marine adventure tourism can be established, it is necessary to conduct an analysis into already existing marine tourism frameworks (Dimmock & Musa, 2015; Foley *et al.*, 2014; Marafa & Chau, 2014; Higginbottom, 2004; Reynolds & Braithwaite, 2001).

Reynolds and Braithwaite (2001) propose a conceptual framework that classifies the main components of wildlife tourism while indicating the role and relationship between the components. The value of various components, such as conservation, animal welfare, visitor satisfaction and profitability of the industry are often in contrast with each other, necessitating a trade-off. The proposed model specifies the complexity of trade-offs and compromises that are specific to wildlife tourism which, if managed correctly, can assist operators and managers with efficient management of the industry (Reynolds & Braithwaite, 2001:40). Different methods of managing the wildlife experience include a differential taxation system, education and self-regulation. Although, the authors (Reynolds & Braithwaite, 2001:40) have emphasised the need for a multidisciplinary approach of techniques which will improve the effectiveness of the particular operation, instead of a generalised management technique.

Higginbottom (2004:5) establishes a framework for planning and managing wildlife tourism, with the goal of sustainability and maximising benefits. Higginbottom (2004:5) states that the concept of sustainability is widely adopted by governments and business sectors worldwide, but needs proper planning and management. The author (Higginbottom, 2006:5) advises that proper planning and management of wildlife tourism requires consideration of both the impacts of tourism on the natural environment (in this case the marine environment), the community (or the host), the tourism industry and the tourist. It is further proposed that the concept of triple bottom line sustainability should be implemented on a wider scale, thus focussing on economic growth, environmental sustainability and social equity (Higginbottom, 2004:5).

Marafa and Chau (2014) established a framework and a guideline that can be implemented by decision-makers of coastal zones in general, for the sustainable management of these areas. Because both shark cage diving and whale watching activities take place in the coastal zone, this is an important framework which should be taken into consideration for the purpose of this study. The framework and guidelines were established by taking into account the coastal environment's

multifaceted nature and the authors suggest that an integrated approach to coastal and marine tourism management should be developed which considers both present and future tourism interests (Marafa & Chau, 2014:9). The framework highlights five important aspects for sustainable management of coastal zones (Marafa & Chau, 2014:9). Firstly, all government levels must be involved with the coastal management plan, both during the creation and implementation phases. Secondly, the authors state that protected areas along wetland areas should be recognised. Thirdly, conservation should be a main goal in order to ensure the sustainable use of coastal resources. Fourthly, the authors state that multiple-use management systems are appropriate for coastal resource systems. Lastly, a multi-sector involvement approach is important and essential to sustainable utilisation of coastal resources. Sectors that can be involved include non-government organisations, academics, the government and civil societies (Marafa & Chau, 2014:9). Aspects highlighted by the authors, such as government involvement, conservation and sustainable use of resources are important for the management of all sectors of marine tourism. This include marine adventure tourism where the use and management of marine resources, such as whales and sharks are of dire importance to the activity and the survival of the industry.

In terms of sustainable coastal tourism management, Marafa and Chau (2014:7) suggest another framework that focusses on the four C's; compromise, commitment, control and cooperation. The guidelines, as set out by the authors (Marafa & Chau, 2014:8), are indicated in Figure 2.8 below. Firstly, compromise can be achieved through reaching a balance between tourism development and environmental conservation. Secondly, by recognising that sustainable development and sustainable tourism requires action instead of a rhetoric approach, commitment can be achieved. Thirdly, control can be practiced by establishing a plan for the effective regulation of scale and pattern of development taking place. Lastly, cooperation can be achieved through recognition of the need for partnerships within the local and international dimension of coastal and marine tourism.

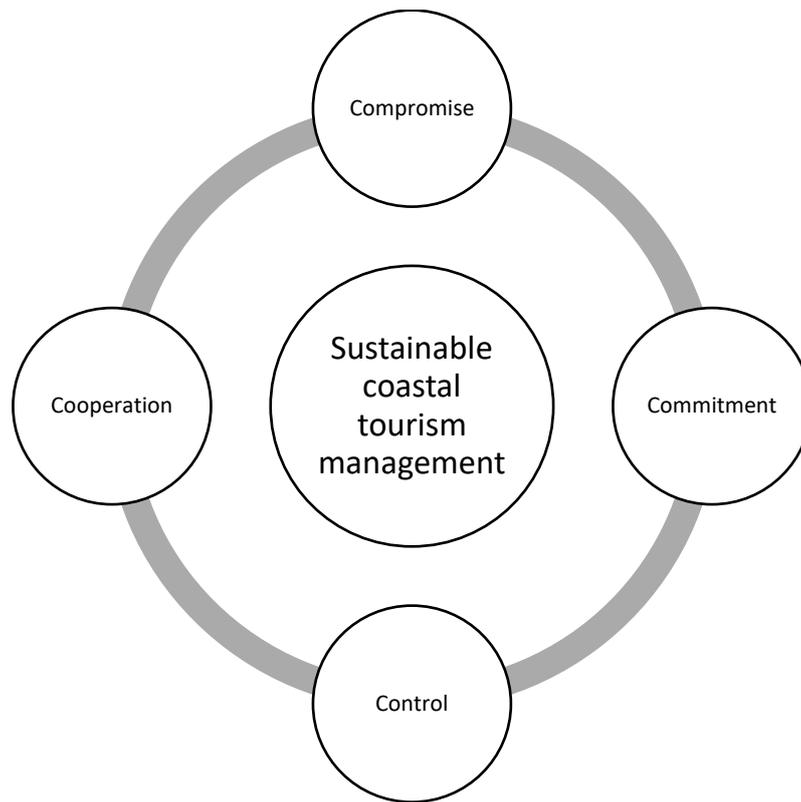


Figure 2.8: Framework for sustainable coastal tourism management

(Adapted from: Marafa & Chau, 2014).

Marafa and Chau (2014:8) suggest further guidelines for the effective implementation of this framework. The authors suggest that sustainable tourism management is in line with sustainable development, therefore sustainable tourism should be planned and implemented according to the following (Marafa & Chau, 2014:8):

- Tourism is an economic activity which can benefit all communities and should be managed accordingly
- The physical and cultural environments have intrinsic values which outweighs its value as tourism assets, especially where these environments support a population at the coast
- The scale and character of development should respect the character and capacity of the area
- Tourism development should be sensitive to the needs and aspirations of the community. Foley *et al.* (2014:21) concurs that economic and social information is of dire importance for the effective and efficient decision-making, management and regulation of marine tourism sectors. The authors agree that the construction of a decision-making framework, the involvement of the government as well as stakeholders in the marine and coastal environment is needed to ensure efficient management thereof (Foley *et al.*, 2014:21). The framework, developed by Foley *et al.* (2014), includes a user-friendly template for the comparison and analysis of marine socio-economic data, represented across time, space and industries. Furthermore, the authors developed a strategy for marine tourism in the Atlantic Area that aims to revitalise and improve

the economic contribution of the sector. The framework identifies four priority areas in which the need for marine socio-economic data is identified, namely business indicators, physical indicators, population indicators and social indicators (Foley *et al.*, 2014:10). Within these four, the creation of a socially inclusive and sustainable model for regional development has been identified as the most important area (Foley *et al.*, 2014:22). Recommendations include the development of a database on economic and social data for marine and coastal regions.

Dimmock and Musa (2015) created a framework for the collaborative management and sustainability of scuba diving tourism. The authors highlighted the central elements of scuba diving tourism, examined the key components of scuba diving tourism as well as the challenges posed to the sustainability of the industry in order to reach the study's goal. Therefore, the study took into account the scuba divers themselves, the marine environment, the host community and all associated industries and communities. The authors highlight the need for an adaptive management structure and leadership in order to encourage a future-focussed perspective and the integration of stakeholder concerns in order to manage the sustainability of the scuba diving tourism sector efficiently (Dimmock & Musa, 2015:1). It is suggested that a systems approach to scuba diving tourism is the most effective way to ensure the improvement of policies and management practices. The authors highlight once more the importance of integrating social and environmental systems as well as the needs and issues of stakeholders for the management of scuba diving tourism (Dimmock & Musa, 2015:15).

2.4.1.4 Shark cage diving and whale watching specific management aspects

Nel and Peschak (2006:4) highlight management and mitigation strategies for shark cage diving during a workshop regarding White shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. During this workshop, the following conclusions pertaining to the white shark cage diving industry have been reached (Nel & Peschak, 2006:4):

- No evidence exist which supports the statement that shark cage diving operations pose a risk to bathers in Cape Town, specifically
- A degree of conditioning can result from cage diving operators who do not comply with the regulations and whom allow sharks to feed on the bait. However, it is highlighted that this conditioning appears between the shark and the diving vessel and conditioning can therefore not be linked to bathers
- Negative conditioning can occur if shark diving operators abide by the regulations and do not allow sharks to gain any reward, for example, the animal will lose interest in the boat and move away
- It is recognised that a perception of the link between shark cage diving and shark attacks are detrimental to shark conservation, tourism, as well as the long-term viability of the shark cage diving industry

- A problem is identified with shark cage dive operators not complying with permit regulations. This non-compliance is mostly driven by client expectations, such as participants wanting to see sharks portray aggressive behaviour.

During this workshop (Nel & Peschak, 2006:5) important recommendations were made for the regulation and management of the shark cage diving industry of South Africa. Firstly, a limited daily bait allowance should be set for operators to limit rewards gained by sharks. Secondly, an independent observer programme should be established in order to monitor compliance with rules and regulations on the vessel. Thirdly, a greater awareness should be created amongst tourists about cage diving regulations, such as the inclusion of a code of conduct on the operator's website, boat and brochures. Fourthly, tourists should be able to report non-compliance of operators. Lastly, not all areas where great white sharks are found along the coast should be opened for cage diving purposes. The authors (Nel & Peschak, 2006:5) state that some areas should remain closed to cage diving operations in order to compare shark activity.

According to Bentz (2015:38) the regional government of the Azores published a code of conduct pertaining to shark cage diving activities on the island which aids the management of shark diving activities. The code of conduct addresses five sections, namely activity preparation, human safety, wellbeing of the sharks, attitude and miscellaneous concerns (Bentz, 2015:37). The table below represents the five categories with the recommendations made for each.

Table 2.3: Code of conduct for shark diving activities at the Azores

CATEGORY	RECOMMENDATIONS
Activity preparation	<ul style="list-style-type: none"> • Master divers should be present for every trip undertaken • The operator has the responsibility to evaluate the experience and preparedness of the clients
Human safety	<ul style="list-style-type: none"> • Number of divers may not exceed four, plus one dive master at a time • Feeding and touching sharks are forbidden • The type of chumming used to lure sharks are defined as a chum slick • The minimum approach distance is stated • Shark diving is only allowed during daytime
Wellbeing of the animal	<ul style="list-style-type: none"> • No flash photography is allowed • A distance of 100 meters should be kept between boats

	<ul style="list-style-type: none"> • Noises should be avoided • If the animals display signs of disturbance, divers should leave the water immediately • Dives with animals displaying reproductive activity is not permitted
Attitude	<ul style="list-style-type: none"> • The attitude of the operator, clients and the animals should be respectful
Miscellaneous	<ul style="list-style-type: none"> • No smoking or alcohol consumption is allowed on the boat • No waste may be discharged into the ocean • The government will do inspections of the activity on a regular basis • Operators should collect data on the dive sites, observed species, number of animals, sex, behaviour and size of the animals

(Source: Bentz, 2015:37).

The code of conduct is presented as a set of guidelines that should be implemented by all operators on the island. These guidelines serve as a management strategy for the operations on the island and has been developed for the shark cage diving sector specifically (Bentz, 2015:37). Some concepts can, however, be generalised to the sector for whale watching, with minor adaptations. For example, guidelines pertaining to the maximum approach distance a vessel can be from a whale should be instated. Furthermore, operators and clients are not allowed to touch or feed the animals, no waste should be discharged into the ocean, no smoking or alcohol consumption should be allowed on the boat and the attitude of the operators, clients and animals should be respectful.

According to Cunningham *et al.* (2012:143) whale watching can be viewed as an ecotourism product, it holds the potential for regeneration of local communities and promotes conservation and sustainable practices, while being a profitable sector. A study conducted by the authors aimed at exploring whaling and whale watching to determine the viability of both industries in terms of sustainability and to determine why they can co-exist in some cases. The study was conducted in Japan and Iceland, where the majority of the world's whaling practices are based and positions these two countries as examples to examine the sustainability frameworks and political rhetoric associated with these activities (Cunningham *et al.*, 2012:143). The authors found that whale watching as a sector has grown with 4 million tourists from 2001 to 2008, with a revenue contributing to US\$2.1 billion per year. The study emphasises the fact that whaling and whale watching can, indeed, co-exist and that both sectors are based on sustainable practices. Global public opinion dictates, though, that whale watching is favoured above whaling (Cunningham *et al.*, 2012:143).

2.4.1.5. Management of marine visitor-wildlife encounters

Research has also focussed extensively on the management aspects pertaining to the visitor-wildlife experience (Valentine & Birtles, 2004:15; Burns & Howards, 2003; Curtin, 2005), but literature pertaining to the aspects specifically important for successful wildlife tourism management is lacking. The following studies have attempted to identify management aspects of wildlife tourism, which include marine wildlife tourism.

Ballantyne, Packer and Hughes (2009) determined that the implementation of policies, planning and essential management strategies, such as marketing and financial management, are also essential, as discussed above in section 2.4.1.2. Part of marine wildlife tourism management is the element of conservation of the environment. As a means of ensuring conservation management, operators offer interpretation programmes for participants (Ballantyne *et al.*, 2009:2). The primary aim of these programmes is to raise awareness of the complex and fragile relationship between humans and the natural environment, as well as highlighting the positive impacts which could derive from conservation (Ballantyne *et al.*, 2009:2). By teaching participants of wildlife activities, such as whale watching and shark cage diving, participants are educated in the ways in which they can contribute to the marine environment and the conservation thereof, thereby facilitating a change in mind set and encouraging people to conserve and protect the marine environment in their day-to-day lives (Mason, 2000).

Furthermore, marine conservation management involves operators encouraging participants to make financial contributions toward the conservation and protection of the environment, or animals (Ballantyne *et al.*, 2011a:1243). One way of doing this is through interpretation programmes, as mentioned above. By educating people in the various manners in which their financial contributions can be used positively, people will feel more motivated to make a monetary contribution for the purpose of conserving and protecting, either a specific species, or the environment in general. The income generated from participants in marine wildlife tourism activities can be used in various manners, such as supporting research of a specific species, rehabilitation of animals, growth and rehabilitation of in a specific marine environment.

Curtin (2010) states that one important aspect which should be managed for marine wildlife tourism is the experience which tourists receive. Three important factors were highlighted in Curtin's (2010) study, namely tangible benefits of the tourist experience, the importance of a tour leader and tourists' perceptions of the environment and social impacts (Curtin, 2010:219). The author (Curtin, 2010:219) identified that the skills and experience of the tour leader is largely related to the experience of the tourist. These tourists' desire to see wildlife overrides their doubts pertaining to the service. Leaders (sharks cage dive instructors and whale watching tourist guides) are identified as the crucial interface between the environment and the tourists' experience, therefore the management of tour leaders play a major role in the management of wildlife tourism (Curtin, 2010:233).

In addition to conservation management and the wildlife experience, Reynolds and Braithwaite (2001:31) advises that information on the needs, desires and opinions of marine wildlife tourists are important. Operators should be well aware of how important wildlife is to the welfare of humans and for the identification of the economic and social benefits of wildlife resources (Reynolds & Braithwaite, 2001:31). This represents a strong relationship to marketing management for the sector. The authors (Reynolds & Braithwaite, 2001:31) further propose that important aspects of the management of marine wildlife tourism is being able to manage the welfare of animals, visitor satisfaction, economic profitability and to be able to manage the trade-off between these aspects.

2.5 CONCLUSION

This chapter had two goals, namely to analyse the sector of marine tourism and to analyse management aspects which are of importance for marine tourism. The first section focussed on the marine tourism sector, with specific focus on whale watching and shark cage diving. The marine tourism sector is a prominent and ever-growing sector in South Africa, which comprises a variety of different sub-sectors and activities. This chapter identified four various sub-sectors which make up the sector for marine tourism, namely cruise tourism, nautical tourism, coastal tourism and marine event and festival tourism. Seeing as shark cage diving and whale watching features prominently in this chapter, it was identified that both these adventure activities can be classified as nautical tourism, due to the nature of each.

Furthermore, it was determined that shark cage diving and whale watching can further be classified as marine ecotourism, which is a category of marine wildlife tourism. The relation between marine wildlife tourism and marine ecotourism was proven, as well as the relationship between marine ecotourism and sustainability. These concepts complement each other perfectly, seeing as all three areas focus on enhancing the visitor's experience, educating visitors, conserving and protecting the environment and ensuring sustainable development and management of resources. It is therefore concluded that shark cage diving and whale watching is classified as marine ecotourism activities.

Furthermore, various management aspects have been discussed, including those pertaining to tourism management in general, wildlife tourism management and marine tourism management. Consensus is reached amongst researchers in terms of sustainable management practices that should be implemented in these sectors, such as proper planning, regulation of the industry and prohibition of certain acts and activities. It can be highlighted that marine tourism management needs a multifaceted approach to management, which includes planning, organising, leading, control, financial-, marketing-, operations- and human resource management.

Chapter 3

Adventure Tourism

The ocean is a central image. It is the symbolism of a great journey

~Enya

3.1 INTRODUCTION

Over the past decade the tourism industry has become more complex and the market more segmented as a result of the increase in niche tourism markets (McKay, 2012:31). One such niche market in the tourism industry which has experienced immense growth is adventure tourism (McKay, 2012:31). Many tourism consumers are demanding novel, challenging and exciting adventure activities while on vacation (Williams & Soutar, 2009:247). Adventure tourism is increasingly playing an important role in the economy of South Africa as well as international countries (Cater, 2006:318; Buckley, 2010; McKay, 2012:31).

Areas such as national parks, protected areas and the coastal areas are usually selected as adventure tourism sites (McKay, 2012:32). The South African landscape offers endless opportunities for outdoor adventure activities due to its natural state (Rogerson, 2007:228). The benefit for South Africa, therefore, lies in the fact that the South African landscape offers enormous opportunities for adventure tourism development seeing as this type of alternative tourism largely focuses on elements of the natural surroundings, which already exist (Giddy & Webb, 2016:351). This is indicative of the fact that adventure tourists deliberately seek a form of adrenalin-filled activity, usually in an exotic or outdoor location, thus setting adventure tourism apart from other forms of tourism (Williams & Soutar, 2009). The purpose of this chapter is, therefore, to contextualise adventure tourism for the purpose of this study. The discussion aims to define the term *adventure tourism* by discussing relevant concepts and theories, the characteristics of adventure tourists are discussed as well as the adventure tourism industry in South Africa. Figure 3.1 indicates the contents of this chapter.

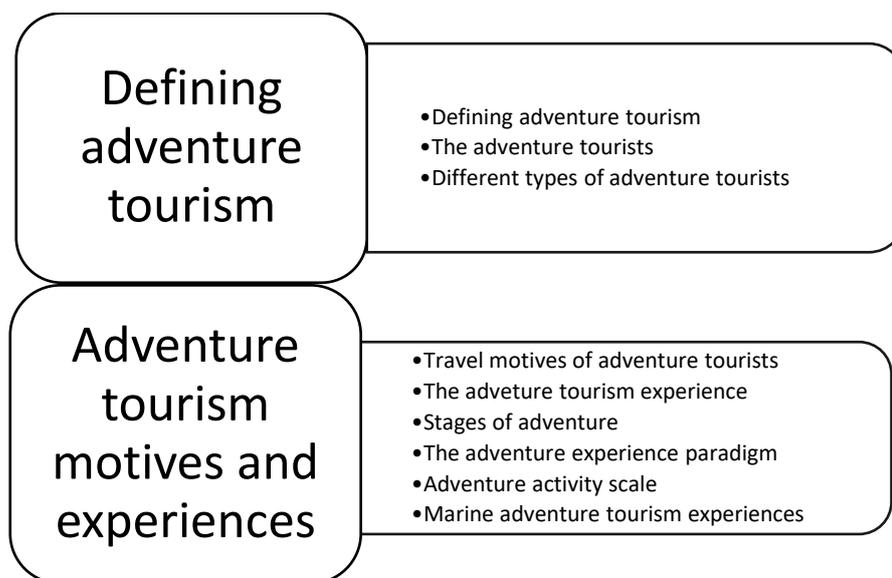


Figure 3.1: Outline of Chapter

3.2 DEFINING ADVENTURE TOURISM AND ADVENTURE TOURIST

Adventure tourism is a growing niche market in the South African tourism industry and one which places a strong emphasis on sustainability, conservation and protection of environments, both cultural and natural. Over the last couple of years, the adventure tourism industry has enjoyed much attention as a research topic (Buckley, 2007:1429). The reasons for the attention is the fact that adventure tourism has become much more commercialised and tourists are travelling all over the world in search of adventure activities, such as shark cage diving and whale watching. According to McKay (2012:32), adventure tourism can be defined in various manners. Broadly, the term refers to a guided tour which takes place outdoors, a natural environment and tourists will take part in an activity which utilises the characteristics of the environment, such as animals, the elements and landscapes (Beedie, 2005:38; Williams & Soutar, 2005:248). These activities require the use of specialised equipment and, in some cases, the participant should be in possession of a specific set of skills, such as the case of scuba diving (Beedie, 2005:38). The activity involves an element of excitement for the participant and often tourists will experience a rush of adrenaline, especially during activities such as skydiving and scuba diving (Buckley, 2007:1429).

According to Millington, Locke and Locke (2001:65), adventure tourism can be defined as a leisure activity which takes place in an unusual, sometimes exotic and remote, wilderness setting. These activities tend to be associated with high levels of risk by the participant. Adventure tourists can be defined as those tourists who engage commercial operators to take them on a guided adventure tour, which typically takes place in an outdoor setting, where physical activity and specialised equipment is required (McKay, 2012:32). Adventure tourists have high expectations regarding risk, excitement, tranquility and a sense of being tested in a personal manner (Millington *et al.*, 2001:65). Adventure tourists are often described as individuals who are explorers of unspoilt and exotic parts of the world in search of personal challenges (Millington *et al.*, 2001:65).

Adventure tourism is unique in the sense that even though the activity follows the same pattern, such as whale watchers being briefed on safety concerns, boarding the vessel, finding the whales and returning to the mainland, the experience will never be the same. Adventure tourism has a way of bringing together travel, sport and outdoor recreation while being considered as a niche market (Beedie & Hudson, 2003:626). The natural elements, such as the weather, ocean and other aspects such as the personality of the tourist as well as his motivations, will influence the experience (Buckley, 2007:1429).

Adventure tourism can be further explained by defining seven terms, as identified from the literature. These terms provide a holistic view of adventure tourism by summarising the important concepts which make up the industry (Orams, 1999:31; Buckley, 2007:1428; Rogerson, 2007:228; Van der Merwe, 2009:227).

- Recreation: includes leisure activities which take the participant, or tourist, out of his normal routine, such as going to the cinema
- Outdoor recreation: this involves activities of leisure and relaxation that takes places in nature, or outdoors, such as sunbathing
- Adventure recreation: adventure recreation is recreational activities which take place in an outdoor setting, but encompasses a certain level of skill and risk, such as scuba diving
- Exploration and discovery: part of the adventure experience is the fact that participants can explore new destinations and settings, along with the fact that new personal and recreational discoveries can be made
- Wilderness: a nature-based setting which is largely uninfluenced by human involvement
- Ecotourism: a concept which encompasses environmental factors, social factors, economic factors as well as conservation efforts
- Wildlife tourism: wildlife tourism includes all activities where the primary goal is to view or interact with animals in their natural habitat

3.2.1 Different types of adventure tourism

There are many ways in which adventure activities can be viewed. Researchers have attempted to divide adventure tourism activities according to a continuum which aims to explain the difference in behaviour amongst adventure tourists (Van der Merwe, 2009:230). The continuum includes soft adventure tourism on the one side, and hard adventure tourism on the other. Activities will move from one point of the continuum to the other based on the risks, experience and skills required. On the one side, soft adventure is the term used to describe adventure activities which have little to no real risk involved, no prior experience is needed and no special qualifications either. Soft adventure activities include snorkelling, whale watching and open-vehicle game drives (Van der Merwe, 2009:237). Soft adventure tourists participate in such activities for reasons involving the escape of daily routines and to experience a new environment or destination. Soft adventure tourism activities

have a far wider appeal to the population than harder adventure tourism activities are considered to have (Van der Merwe, 2009:237). The reason being that softer adventure tourism activities are perceived as 'safer' and are easier to come by.

On the other hand, harder adventure tourism activities require a specific set of skills and involve specialised equipment. These activities have high levels of danger and risk and require an intense commitment from the participant (Van der Merwe, 2009:230). Activities such as scuba diving, white-water kayaking, mountain climbing, abseiling, mountaineering and sky diving are representative of this category (Van der Merwe, 2009:238).

Table 3.1: Soft versus hard adventure tourism

SOFT ADVENTURE TOURISM	HARD ADVENTURE TOURISM
<p>PROFILE</p> <p>Beginners; enjoy activities with low risks and danger; limited to no previous experience; tourists participate in multiple activities per trip</p> <p>WATER-BASED EXAMPLES</p> <p>Snorkelling; whale watching; shark cage diving; marine eco-tours; sailing; canoeing; paddling; jet boating; kayaking; fishing; motorboat rides; surfing; paddle boats</p> <p>LAND-BASED EXAMPLES</p> <p>Camping; biking; horse riding; wilderness tours; animal watching; bird watching; photo safaris; hiking; team building; safaris; quad biking; backpacking; obstacle courses; archery; sandboarding</p> <p>AIR-BASED EXAMPLES</p> <p>Flights; micro-lighting; helicopter flights; zip lining; low-rope courses; ballooning</p> <p>COMBINED EXAMPLES</p> <p>Charity challenges; gap-year travel; hedonistic experiences; spiritual</p>	<p>PROFILE</p> <p>University educated; special skills are required; requires much experience; high levels of risk and danger; tourists participate in one activity per trip</p> <p>WATER-BASED EXAMPLES</p> <p>Scuba diving; sea kayaking; abseiling; power boating; kite surfing; white-water rafting</p> <p>LAND-BASED EXAMPLES</p> <p>Cave exploring; rock climbing; mountain climbing and biking; off-road biking; extreme snowboarding; climbing expeditions; cross-country trekking; bouldering</p> <p>AIR-BASED EXAMPLES</p> <p>Parachuting; skydiving; hang gliding; wind surfing; cliff jumping; bungee jumping</p> <p>COMBINED EXAMPLES</p> <p>Adventure racing; conservation expeditions</p>

enlightenment; wildlife watching; cultural experiences	
--	--

(Source: Van der Merwe, 2009:238)

Adventure tourism, both hard and soft, does not only occur in marine environments. Land-based adventure activities, air-based activities and combined activities can be identified as well, as portrayed in Table 3.1.

It is clear that whale watching and shark cage diving can be classified as soft adventure tourism activities. The reasons being that whale watching and shark cage diving does not pose an immediate danger for the participant, but the perceived risks and danger are high. Furthermore, the participant does not need to undergo any specific training prior to engaging in the activity and no special equipment is needed.

Another method for describing adventure tourism is to divide the activities into different quadrants. Activities are divided into the relevant quadrants based on the level of risk and danger and the technical skills needed (Van der Merwe, 2009:230). Each axis is representative of a different element of the experience. The x-axis represents the level of independency of the activity. In other words, the degree to which activities and the experience are arranged on behalf of the tourist. On the y-axis represents the level of challenge associated with the activity. Four quadrants are identified across the two continuums, namely high adventure, adventure competition, recreation and leisure (Swarbrooke *et al.*, 2006:32). Figure 3.4 indicates the adventure quadrants.

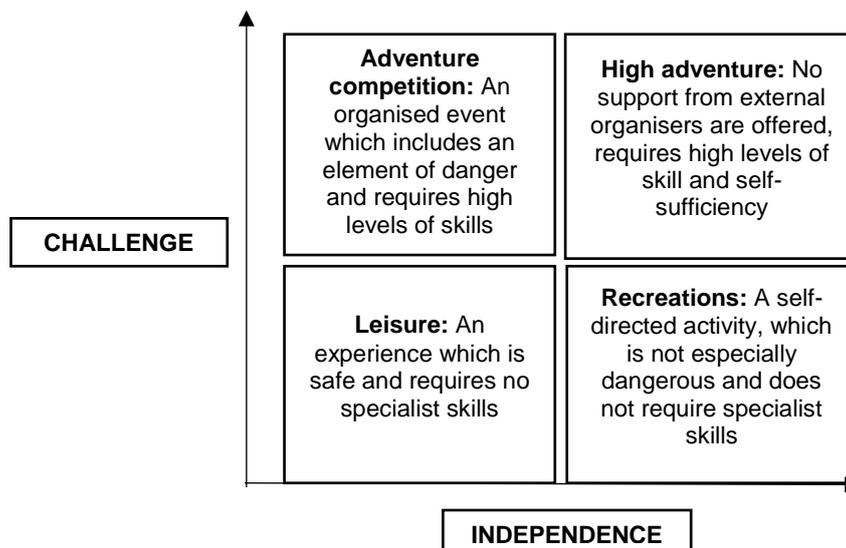


Figure 3.2: Adventure quadrants

(Source: Swarbrooke *et al.*, 2006:32)

Two quadrants can be divided into the category entitled soft adventure, which includes leisure and recreation activities (Swarbrooke *et al.*, 2006:32). The first quadrant, entitled *leisure*, is where the tourist will experience low levels of both independence and challenge. The activities are deemed safe and no special skills are required. An example of activity in this category is an adventure theme park, such as Aquaventure Waterpark in Dubai, or boat-based whale watching. The second quadrant, *recreation*, involves higher levels of independence but low levels of challenge. Activities categorised in this quadrant is mostly self-directed and therefore not dangerous and do not require special skills. For example, canoeing, snorkelling and shark cage diving can be classified as recreational activities.

The quadrants which make up the category for hard adventure include *adventure competition* and *high adventure*. Adventure competition involves high levels of challenge, but low levels of independence. It is an organised event which includes danger and high levels of skills, for example, the UCI World Championships Mountain Bike Championships and the Formula Windsurfing Open Hellenic National Cup. The category for high adventure includes both high levels of challenge and independence. Participants receive little to no support from organisers and requires high levels of skills and self-sufficiency (Swarbrooke *et al.*, 2006:33). For example, mountain climbing and scuba diving.

3.2.2 The adventure tourists

Adventure tourists are considered as very different from the traditional sense of what a tourist is characterised by. By realising the difference between the two types of tourists, resources can be utilised correctly and product development, service quality evaluation, image development as well as promotional activities will benefit (Van der Merwe & Saayman, 2008:154).

In recent years, it has come to light that adventure tourism does not merely attract youth travellers, but this sector spans a wide array of markets and age groups, dependent on the goal of the participant. The determining factor remains the lifestyle which is lived by the participant instead of the age group in which he or she falls. Age is no longer a determining factor, but rather the need to seek adventure, escape or a particular lifestyle (Van der Merwe & Saayman, 2008:154). Therefore, it can be assumed that a person in his mid-fifties might enjoy activities such as river rafting and scuba diving, while a young man in his twenties might prefer a more relaxed activity such as sun bathing.

According to Williams and Soutar (2009:415) as well as Active-tourism (2002:1) adventure tourists tend to be young, educated and active adrenaline seekers with a significant amount of money to spend on their adventure endeavours. On the other hand, Kumar (2009:13) rather believes that tourists are merely looking for adventure while travelling and that they want to see the destination as residents see and experience it. In more recent years, however, it has come to light that tourists are much more educated than initially believed. This means that they are well aware of the experience that can be anticipated and are affluent novelty seekers. Tourists are no longer seen as homogenous and predictable in their choices regarding travel. The “new” tourists can no longer be quantified as being interested in warm destinations but rather the quality of services rendered is held in much higher regard, along with aspects such as responsible and ethical practices and technological advancement (Swarbrooke *et al.*, 2006:58; Saayman 2017a). According to Figure 3.3 portrays the basic characteristics of adventure tourists (Swarbrooke, *et al.*, 2006:59).

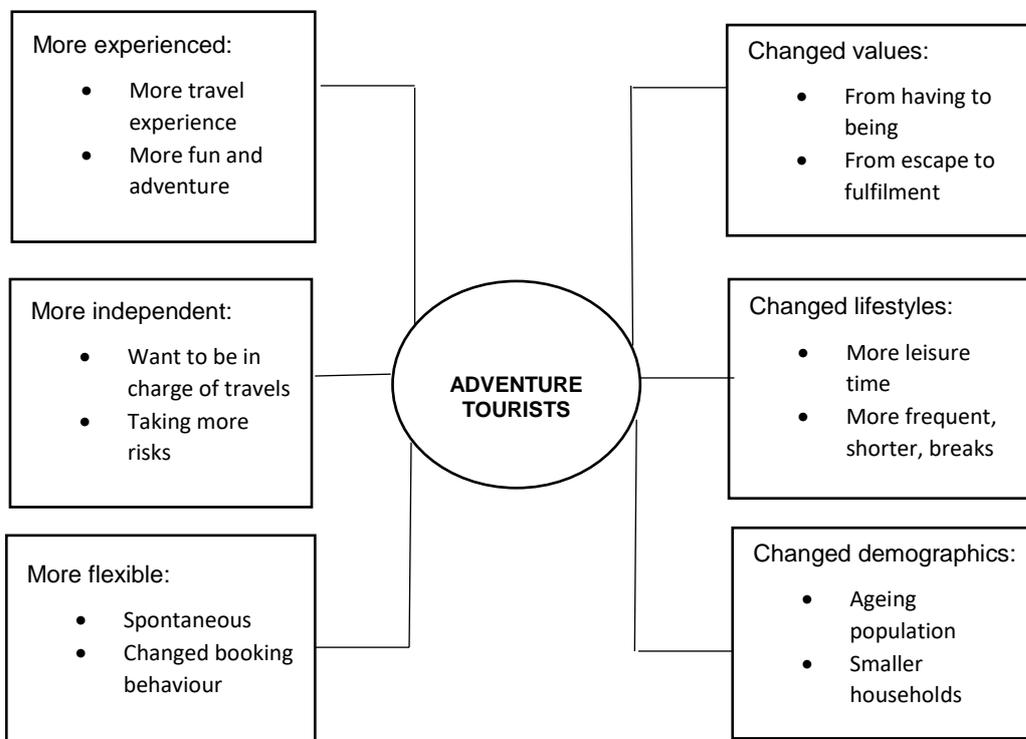


Figure 3.3: Characteristics of the “new” adventure tourist

(Source: Swarbrooke *et al.*, 2006:59).

From the figure above it is clear that adventure tourists are those who have had more experience in travelling as well as more adventure experiences. They are independent travellers who like to be in charge of their schedules and enjoy taking risks. These travellers are more flexible, spontaneous and show changed booking behaviour. As for the values, these travellers' values have changed from "having" to "being", all in the hopes of finding fulfilment, rather than merely an escape. Adventure tourists are often those who have more leisure time, therefore more time to travel which is spent taking shorter breaks on a more frequent basis. As for the demographics, this has changed due to an ageing population as well as smaller households (Swarbrooke *et al.*, 2006:59). According to Raj (2007) "new tourists" are participants and not spectators anymore. Raj (2007) suggests that "new" tourists want to get off the beaten path and mingle with the residents. These tourists prefer to experience high levels of involvement in the organisation of the trip they are undertaking, rather than travelling for the sake of leisure and recreation (Raj, 2007). Saayman (2017b) adds that "new" tourists are independent, they prefer to be active in the creation of their own experiences, they want to be part of the product or experience and not just stand by and watch, they actively seek memorable experiences, they make use of the internet more frequently and therefore know the different applications and platforms, they are much more critical towards marketing and being socially and environmentally responsible and they consume and purchase only when necessary. According to Saayman (2017b) the features of the "new" tourists has changed since that of Swarbrooke *et al.* (2006:59) has been developed and can be portrayed as depicted in Figure 3.4 (Saayman, 2017b).

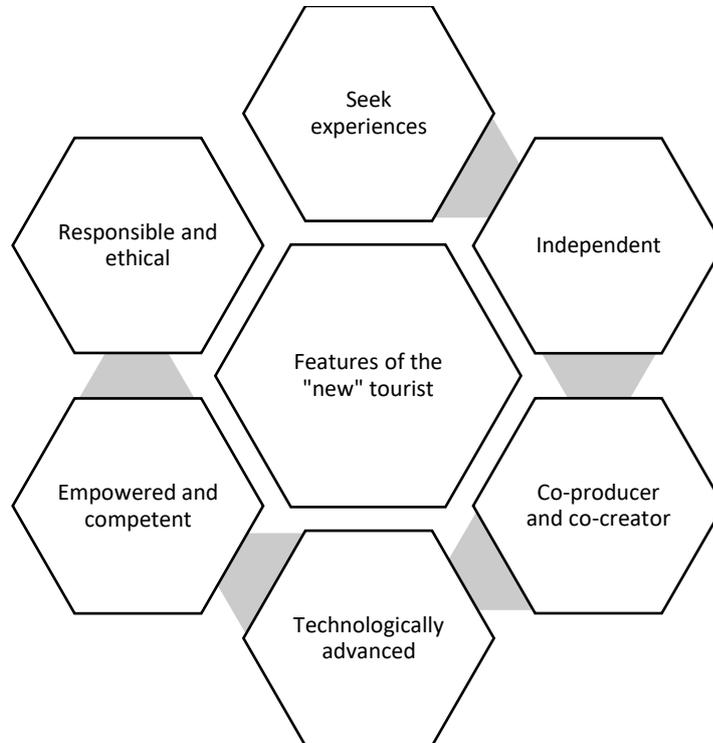


Figure 3.4: Features of the "new" tourist

(Source: Saayman, 2017b).

The characteristics of adventure tourists can, therefore, be analysed regarding demographics; behaviour, activities enjoyed, needs, motivations and methods of travelling. These are discussed next:

- **Demographics:** The typical adventure tourist is young, between the ages of 25 and 55 years, educated and an active thrill seeker who is willing to spend significant amounts of money on adventure related activities (Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5). These tourists are married and their decisions on which destinations to visit is based on the scenery and destination attributes. The largest percentage of the adventure tourism market are highly educated people who possess a tertiary qualification, professional qualifications, or special training (Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5). According to Swarbrooke *et al.* (2006:60) it has been recorded that the average age of adventure tourists is between the ages of 40 and 45 years. Therefore, supporting the premise that lifestyle, rather than age, is a determining factor and holds a much higher influence on the choices made by travellers (Swarbrooke *et al.*, 2006:60).
- **Behaviour:** According to Sung (2004:262) and Pomfret and Bramwell (2014:3) adventure tourists like to operate independently while taking advice and recommendations from friends, peers, reviews and testimonials into account.
- **Activities enjoyed:** Adventure tourists enjoy activities which offer a thrill. These activities are often fitness or health oriented and takes place in a natural setting (Schott, 2007:262; Pomfret & Bramwell, 2014:5).
- **Needs:** The needs of the adventure traveller have changed to seeking destinations and activities which offer an adventure experience, often found in unexpected tourist destinations (Weber, 2001:372). According to Pomfret and Bramwell (2014:5), adventure tourists are driven by the need to experience something 'out of the ordinary' and unique, such as shark cage diving.
- **Motivations:** Due to a changed work-life balance, adventure tourists are often motivated by the desire to get away from a routine lifestyle, which is once again found in unexpected destinations. They prefer to travel environmentally-friendly and are conscious about the environment, religions, communities and ethnicity (Weber, 2001:372; Buckley, 2012a:962; Pomfret & Bramwell, 2014:6; Giddy & Webb, 2016:353) (motivations of adventure tourism are discussed in detail under section 3.3).
- **The method of travelling:** Adventure travellers can be found travelling solo, as a couple, as part of a group or as honeymooners. These travellers do seek other travellers who enjoy similar activities as they do though (Weber, 2001:372).

From this analysis, a general idea can be gained regarding the adventure tourist, what drives them as well as how these tourists have evolved. In the next section of this chapter, the types of adventure tourism are discussed and further insight would be gained regarding this sector.

3.3 TRAVEL MOTIVES OF ADVENTURE TOURISTS

Adventure tourists, as with any other tourist, will have a certain motivation which has influenced their decision to participate in an adventure activity. Tourists usually have an expectation toward the activity which they will take part in, the level of service they will receive from the operator and the particular destination where the activity takes place (Askama & Kieti, 2003:75). Travel motives can be defined as a set of needs which can cause the tourist to take action to participate in a particular activity and thereby making certain decisions (Swanson & Horridge, 2006:673).

In an attempt to define and explain the motives and experiences of tourists in general, Maslow (1943) established a five-stage hierarchy of needs, Iso-Ahola (1989) established the seeking and escaping dimensions of tourists, the theory of Sunlust and Wanderlust was developed by Gray (1980) and the push and pull theory was developed. These theories can be defined as follows:

- **Maslow's five-stage hierarchy of needs:** Maslow states that a person has first to meet the needs of four other stages, namely psychological needs (food, water, sleep, oxygen), safety and security (freedom from fear and anxiety, physical and psychological fulfilment); love and belonging (affection, giving and receiving love), esteem (evaluating yourself, others and having the ability to cope with the demands from life while achieving personal goals) and self-actualisation (developing one's potential, achieving a certain level of self-fulfilment as well as the feeling of being one with the universe) (Maslow, 1943; Saayman, 2006:35).
- **Iso-Ahola's seeking and escaping dimensions:** Tourists' motivation for leisure can be explained using two fundamental forces, namely *seeking personal and social rewards* and *escaping from personal and social environments*. These forces are based on the concepts of intrinsic and extrinsic rewards. Intrinsic rewards are found in leisure activities seeing as participants derive satisfaction from aspects such as the challenge or the excitement received from the activity (Orams, 1999:32). Extrinsically speaking, the adventure activity offers the participant an opportunity to escape the routine lifestyles and working environments (Iso-Ahola, 1989; Orams, 1999:32).
- **Push and Pull theory:** A clear distinction can be made between factors which describe the travel behaviour of tourists (Kim, Oh & Jogaratnam, 2007:74). Kim *et al.* (2007:74) describe push factors as "the desire of the tourist to travel", such as excitement, relaxation and escape, while pull factors are defined as "the choice of the destination" and includes scenery, cultural aspects and water activities. The concept of push factors is said to enhance the decision of where the tourist will travel to, while the concept of pull factors enhances the decision of how the tourist will be travelling (Kim *et al.*, 2007:74).
- **Sunlust and Wanderlust:** The motivations for travelling can be classified according to two basic reasons, as stated by Gray (1980). These reasons are "sunlust" and "wanderlust". Gray (1980), according to Orams (1999:32), have incorporated the curiosity motive of tourists into this theory when he states that people will either travel due to need to experience a particular element of a

destination. According to Gray (1980), Sunlust can be described as being dependent on the existence of better and differing attractions than those which the tourist is familiar with because it delivers another specific experience or service (Gray, 1980). On the other hand, wanderlust can be described as the inner motivation which a tourist has for leaving all that is known behind in exchange for experience new and different cultures and to have entirely new experiences (Gray, 1980).

- **Intentional/unintentional motivation framework:** In criticism on previous motivation frameworks and models Saayman (2017b) compiled the intentional/unintentional motivation framework. This is based on the fact that not everyone participates intentionally in activities. For example, if you travel to a destination to see whales it would be your primary (intentional) reason. However, if you travel to a destination for other reasons say business but you are aware that it is whale watching season then the motive would be secondary intentional. But if you travelled for business and was totally unaware of whale watching opportunities then it is unintentional. It is therefore important to understand what were the key motives for visiting a destination or attraction.

Tourists' motives for participating in a particular activity influence the experience which they will have to a great extent (Gursoy, Chen & Chi, *et al.*, 2014:811). The relationship between motives and experiences is a multi-faceted and complex relationship, where the reasons for the tourist's participation will either be satisfied or not (Gursoy *et al.*, 2014:811). The theory established by Manning (2011), Pearce (2006), Todd, Graefe & Mann (2002:107), namely the expectancy theory, clearly identifies motives as being determined by the attractiveness of the outcomes of participation in a tourism activity and the expectation resulting thereof (Todd *et al.*, 2002:107). According to the authors, this theory will result in the perception of the desired outcomes which is gained from participation, will harbour a positive attitude with the tourist, therefore resulting in a positive experience. Furthermore, this theory also states that tourists will have more than one motive for participation in tourism activities (Todd *et al.*, 2002:107; Meyer, Thapa & Pennington-Grey, 2002:292). The experiences derived from participating in the activity might have a completely different outcome from what was expected.

Aside from the theories discussed above, fear and risk are two important motivational elements for adventure tourists. According to Kollmus and Agyeman (2010:249), the term 'motive' can be defined as the reason for a certain behavioural characteristics portrayed or the strong internal stimulus on which this behaviour is based. Venkatesh (2006:89) on the other hand, states that "the need to see the unseen and know the unknown" is what drives people to new places and exactly which motivates them to visit new destinations. The same concept can be applied to adventure tourism. The need to experience a sense of thrill, fear, or risk is the central aspect which motivates them to participate in adventure activities.

Adventure tourists have a strong pull towards fear and elements of risk (Van der Merwe, 2009:229). In the corporate industry, people tend to minimise risks as much as possible, such as safety and security risks or financial risks. With adventure tourism, the same trend is seen where adventure operators tend to minimise the risk associated with the activity as much as possible, such as the risk of drowning while doing white-water rafting (Van der Merwe, 2009:228). Adventure activities take place where risk is increased and competence decreased, while peak adventure occurs where the two concepts meet (Van der Merwe, 2009:228).

Another aspect which adventure tourists pursue is the element of fear. According to Cater (2006:31) adventure tourism is characterised by an element of fear. Every adventure activity is based on the irrational dreads, reverences and superstitions of the participant, making this a truly unique and authentic market segment. As the element of risk tends to decrease in the daily lives of people, it appears that the pursuit of risk increases in leisure activities (Cater, 2006:318). Cater (2006:318) states that there has been a clear increase in the amount of adventure tourism personality types while a definite decrease is apparent amongst low-risk leisure activities. People are becoming more accepting towards riskier activities as can be seen in the amount of increased adventure participants (Cater, 2006:318).

Aside from the element of risk which is sought by adventure participants, the idea of fear is also a motivating factor, such as the case with shark cage diving. Whale watching, on the other hand, can be classified as more of a leisure activity because the element of risk and fear is less. While the trend amongst operators is to minimise the risk about the specific activity and thereby the external aspects of fear, a co-modified fear is created (Van der Merwe, 2009:229). This co-modified fear allows the participant to experience an internalised thrill where the thrill experienced by the participant is merely perceived as such (Van der Merwe, 2009:229). The element of danger which the tourist fears is removed or minimised but the idea of something going wrong while taking part in the activity remains true to the participant. The operator ensures that safety measures and procedures have been put in place to remove the risk of injury or death as much as possible and the fear experienced by the tourist is his personal and internal perceptions of the activity (Van der Merwe, 2009:229). For example, when scuba diving all safety measures have been put in place to ensure that diver does not drown, such as skills taught to breathe underwater, dive masters, the buddy system and multiple equipment checks. The risk of drowning is minimum as long as the diver is qualified, the thrill experienced by the diver is real and the fear is internal.

Shark cage diving and whale watching can be classified as marine wildlife tourism, as discussed in Chapter two of this thesis. Therefore, marine wildlife tourists' travel motives for participating in marine animal viewing activities are also of consequence in understanding this sector. Reynolds and Braithwaite (2001:34) have identified nine different groups of wildlife tourists according to their exhibition of certain motivational factors. These groups apply to both marine wildlife and land-based wildlife tourists (Reynolds & Braithwaite, 2001:34):

- Naturalists: the primary interest for these tourists are their interest in nature and the outdoors
- Ecologists: these tourists are concerned with the natural environment as a habitat system
- Humanistic: these tourists have a strong affection for animals, their pets in particular
- Moralistic: the primary concern for these tourists are the correct treatment of animals
- Scientists: the main interest for these tourists are the physical attributes and biological functioning of animals
- Aesthetic: an interest in the artistic and symbolic attributes of the animal is the main concern here
- Utilitarian: the practical and material value of animals is the main concern for these tourists
- Dominionism: the primary concern here is in the mastery and control of animals such as sporting situations
- Negativistic: persons who actively avoid animals due to a general dislike, indifference or fear.

The reasoning behind the variety of motivational groups are that one person might express his or her characteristics of different categories at a different time and under different circumstances as the next person (Reynolds & Braithwaite, 2001:35). At the same time, though, an individual may encompass characteristics from more than one category (Reynolds & Braithwaite, 2001:34). Reynolds and Braithwaite (2001:34) propose that individuals who go on a wildlife tour will exhibit different values based on their motivations and interests, resulting in the fact that a variety of motivational factors can drive a range of different interest groups to embark on the same trip. Interesting to note is the fact that members of the general tendency to fall under the categories of humanistic and moralistic, while members are filling positions such as wildlife managers, tend to be ecologists, scientists and utilitarians (Reynolds & Braithwaite, 2001:35).

Jeong (2014:304) identified various motivational factors for marine tourists in general. Amongst these motives, the following were identified; to escape everyday life, to take a break from a routine life, to rest and recharge, to find introspection, to experience nature, for scenic beauty, to enjoy clear water and fresh air, to walk along the beach, adventurous activities, marine sports, a cruise and swimming in the ocean. Jeong (2014) goes further and classifies these motives as either push motives or pull motives. Jeong (2014:304) divides the pull and push motives of marine tourists as indicated in Table 3.2.

Table 3.2: Push and pull motives of marine tourists

PUSH MOTIVES	PULL MOTIVES
To escape everyday life	Adventurous activities
To take a break from a routine life	Marine sports
To rest and recharge	Going on a cruise

To find introspection	Swimming in the ocean
To experience nature	
For scenic beauty	
To enjoy clear water and fresh air	
To walk along the beach	

(Source: Jeong, 2014:304)

According to Jeong (2014:304), the difference in the motivational factors for marine tourists indicates that marine destinations with a primary focus on static activities, such as sunbathing and recreation, will appeal more to tourists portraying push motives. Tourists portraying pull motives, on the other hand, are those who are more inclined to participate in adventure activities, such as whale watching and shark cage diving (Jeong, 2014:304). Mohd and Ramli (2014:111) further proves that escape and relaxation are amongst the primary motivating factors for tourists visiting a marine environment. In the study conducted on the motivations of tourists to marine destinations in Malaysia, the authors (Mohd & Ramli, 2014:111) states that push factors are the main driving force behind tourists' decision to visit a beach or other marine destinations.

Travel motives have been researched for many years and in multiple tourism industries. Even though literature about the travel motives of shark cage divers and whale watchers are limited (Higham & Lück, 2008; Meyer *et al.*, 2002; Dicken & Hosking, 2009), a summary can be created from the research conducted previously on travel motives of tourists in marine tourism and marine adventure tourism. Table 3.3 is a portrayal of this summary (Van der Merwe *et al.*, 2011:460; Geldenhuys, 2012:41).

Table 3.3: Summary of travel motives in various tourism industries

TRAVEL MOTIVES TO MARINE DESTINATIONS		
Researcher	Motives	Title of article
Kozak (2002)	Culture Pleasure seeking or fantasy Relaxation Physical attributes	Comparative analysis of tourist motivations by nationality and destinations
Yoon and Uysal (2005)	Excitement Knowledge and learning Education Relaxation Family togetherness Achievement	An examination of the effects of motivation and satisfaction on destination loyalty: a structural model

	<p>Escape</p> <p>Safety</p> <p>Fun</p> <p>Destination attributes</p>	
Molero and Albaladejo (2007)	<p>Nature and peacefulness</p> <p>Physical attributes</p> <p>Culture</p> <p>Family togetherness</p> <p>Trip features</p> <p>Rural life</p>	Profiling segments of tourists in rural areas of South-Eastern Spain
Saayman, Slabbert and Van der Merwe (2009)	<p>Relaxation</p> <p>Escape</p> <p>Destination attractiveness</p> <p>Socialisation</p> <p>Personal attachment</p> <p>Site attributes</p> <p>Trip features</p>	Travel motivations: a tale of two marine destinations in South Africa
Tiedt (2011)	<p>Family togetherness</p> <p>Park attributes</p>	Travel motivations of tourists to selected Marine National Parks
Scholtz, Kruger & Saayman (2015)	<p>Accommodation</p> <p>Education</p> <p>Socialisation</p> <p>Park attributes</p> <p>Escape</p> <p>Relaxation</p>	Determinants of visitor length of stay at three coastal national parks in South Africa
TRAVEL MOTIVES OF MARINE LEISURE ACTIVITIES		
Jeong (2014)	<p>Escape</p> <p>Taking a break</p> <p>Novelty</p> <p>Active marine activities</p> <p>Static marine activities</p>	Marine tourist motivations: comparing push and pull factors
Petrack and Durko (2015)	<p>Relaxation</p> <p>Socialisation</p> <p>Culture</p>	Segmenting luxury cruise tourists based on their motivations

Kizielewicz, Haahti, Luković and Gračan (2017)	Visiting relatives Business purposes Tourism and visiting relatives	The segmentation of the demand for ferry-travel – a case study of Stena Line
TRAVEL MOTIVES OF MARINE ADVENTURE TOURISTS		
Ditton, Osburn, Baker and Thaling (2002)	Excitement Relaxation Escape Risk Devotion Exploration Discovery Social interaction	Demographics, attitudes and reef management preferences of sport divers in offshore Texas waters
Meyer <i>et al.</i> (2002)	Risk Self-improvement Confidence Learning Personal challenge	An exploration of motivations among scuba divers in north central Florida
Todd <i>et al.</i> (2002)	To experience adventure Social interaction Stature Learn Escape Personal challenge	Differences in scuba diver motivations based on level of development
Geldenhuys <i>et al.</i> (2014)	Personal challenge Devotion Relaxation and escape Exploration and discovery	Who is the scuba diver visiting Sodwana Bay and why?

(Source: Van der Merwe *et al.*, 2011:460; Geldenhuys, 2012:41).

Many of the motives identified for the various industries overlap, such as escaping, relaxation, knowledge and learning, status, excitement, risk, discovery and exploration. For similar reasons, Crompton (1979) identified seven general factors which he describes as socio-psychological motives of tourists. These motives are (Crompton, 1979):

- Escaping an everyday environment
- Discovery and self-evaluation

- Relaxation and recreation
- Prestige
- Regression
- Strengthening of family ties, or family togetherness
- Social interaction.

Crompton (1979) states that these motives can be regarded as the primary reasons why people travel or will participate in a specific activity. As evident from Table 3.4, these travel motives can be identified in all industries. Travel motives and experiences go hand in hand, therefore the following section discusses the adventure tourism experience by referring to relevant theories, concepts of interest and benefits gained.

3.4 ADVENTURE TOURISM EXPERIENCE

Adventure tourism is experienced differently by each participant, even though the activity remains the same. Adventure experience theories have been developed which aims to divide the behaviour of adventure tourists into certain categories, based on how the adventure is experienced. The literature states that adventure experiences are based on determinants of participation, namely challenge, competence and risk (Morgan, 2001:108). This ensures a different experience each time. Factors which influence the experience of an adventure tourist include the following (Buckley, 2007:1429):

- Emotions of tourists
- Previous experiences
- Demographic details, such as age and gender
- Expectations of the tourist
- Personal opinions and those of peers
- The level of skill of the tourist.

These factors can all differ from participant to participant during a single presentation of activity, the experience for each person will differ, but the fact remains that all the participants have done the same activity (Buckley, 2007:1429). The following activities can be typically categorised as adventure tourism activities; whale watching, shark cage diving, snorkelling, scuba diving, sea kayaking, mountain climbing, caving, abseiling, white water rafting, skiing, snowboarding, surfing, sailing, sail boarding, ballooning, skydiving, horse riding, mountain biking and off-road driving (Buckley, 2007:1429). For each of these activities, tourists will have a unique motivation which has either pushed them or pulled them towards the activity. The motivations of an adventure tourist will differ from that of a leisure tourist seeing as their needs will differ (Askama & Kieti, 2003:75).

The following adventure experience theories are discussed:

- Stages of adventure;

- The adventure experience paradigm; and
- Adventure activity scale.

3.4.1 Stages of adventure

According to Mortlock (1984:22), adventure can be divided into four different stages, or components, which takes into account the differing characteristics of adventure activities. These stages are identified regarding a descriptive model of adventure experiences which defines and analyses the different stages which participants move through (Mortlock, 1984:22). Figure 3.5 portrays the four stages of adventure according to Mortlock (1984).

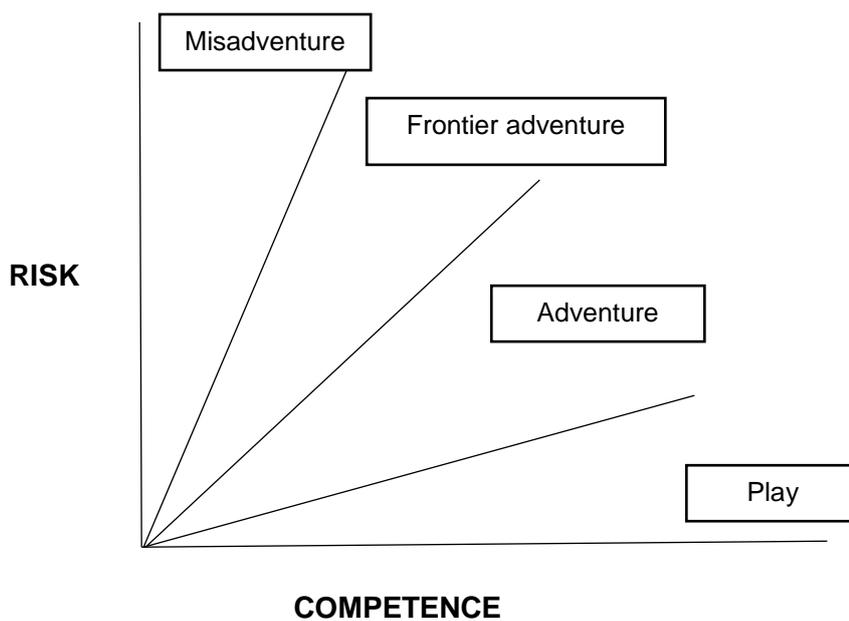


Figure 3.5: Stages of adventure

(Source: Mortlock, 1984)

The first stage, 'play' sees the participant operating below his or her capabilities. Minimum involvement regarding skills, emotions, concentration and mental control is required. This stage also does not involve high levels of fear or injury to the participant and the experience can be described as 'pleasant' or 'boring' (Mason, 2010:31). During the second stage, adventure, the participant will start to feel in control of the situation and will rely greatly on past experiences and skills gained to overcome challenges or obstacles (Swarbrooke *et al.*, 2003:11). This is also when the participant will start experiencing fear or unease, which is brought about by the remoteness of the setting in which the activity takes place. Thirdly, the participant will move on towards the stage of the frontier adventure. This stage involves little to moderate control over the situation at hand and can cause feelings of uncertainty and fear to be enhanced (Swarbrooke *et al.*, 2003:11). To overcome the challenges faced during this stage, concentration and non-passive actions will be required from the participant. According to Csikszentmihalyi and Csikszentmihalyi (1999:157), the level of satisfaction which is experienced during this stage is dependent on the level of intensity required. In other words,

the more intense the situation is, the higher the level of satisfaction will be. The last stage, 'misadventure', involves some of the challenges faced by the participant to be out of his or her control. This occurs where the skills, or competence, of the participant, is not efficiently matched with the level of risk faced. This can result in failure and can, therefore, lead to a variety of damage, such as mental, physical, emotional and social damage (Priest & Gass, 2005:50). According to Van der Merwe (2009:228) failure can be seen as an opportunity to learn and gain additional skills.

3.4.2 The adventure experience paradigm

The adventure experience paradigm (AEP) can be defined as the interaction between risk and competence (Morgan, 2001:109). The paradigm is based on the concept of uncertainty and can thus be applied to any leisure activity which possesses this characteristic (Carpenter & Priest, 1989). The AEP envelopes characteristics of several theories, namely Theories of Arousal (Ellis, 1973), the Concept of Flow (Csikszentmihalyi, 1975) and Mortlock's (1984) Spectrum of Adventure.

Firstly, it is important to note that individuals engage in activities which arouses their interest and offers an escape from daily routines (Morgan, 2001:110). Individuals, aside from the fact that they seek arousal, rely greatly on their level of experience to shape the outcomes of their participation in relevant activities (Morgan, 2001:110). From this, the AEP identifies five stages of challenge on which the experience of an adventure tourist is based, namely exploration and experimentation, adventure, peak adventure, misadventure and devastation and disaster (Morgan, 2001:110). Figure 3.6 visually portrays the five stages of the AEP, as developed by Martin and Priest (1986).

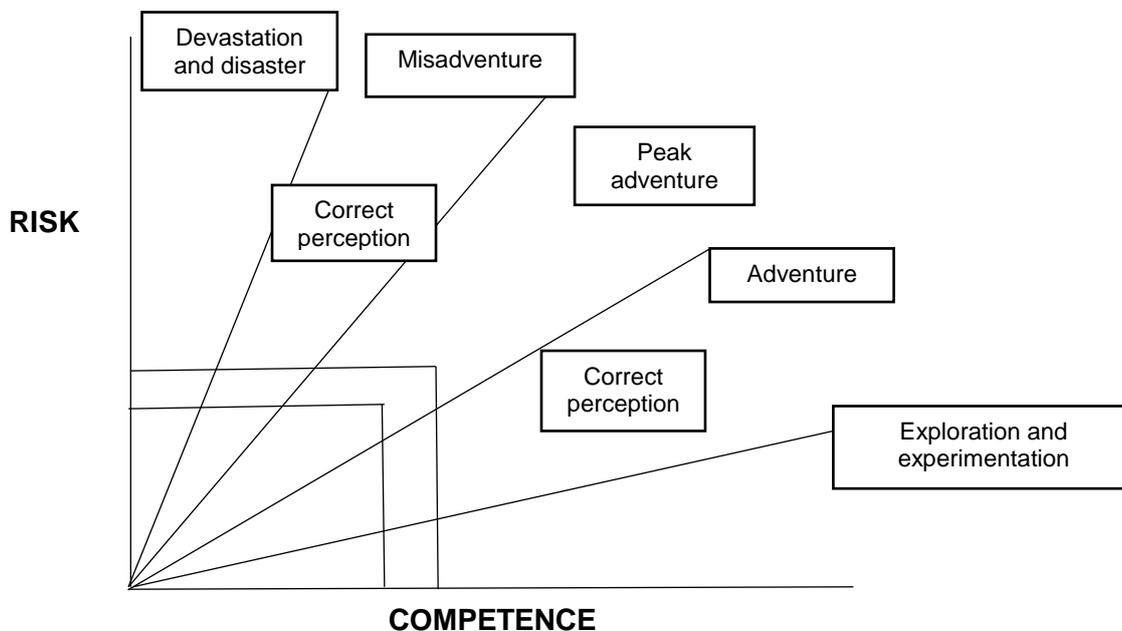


Figure 3.6: The adventure experience paradigm

(Source: Morgan, 2001:110).

As indicated by Figure 3.6 the results of the experience are dependent on the balance between risk and competence (Van der Merwe, 2009:227). With the first stage, exploration and experimentation are established when risks are low and competence is high. An example of such activity is a hike through the countryside. As the level of risk increases, the participant moves into the situation which is emphasised by adventure (Priest & Gass, 2005:49). Once the levels of risk and competence are balanced, a stage of peak adventure is reached, whereby the participant is experiencing high levels of risk but is competent to handle these risks (Priest & Gass, 2005:49). Once the level of risk exceeds the person's level of competence, in other words, not enough experience or skills are gained to handle the high levels of risk, the stage of misadventure is reached, which is similar to that of Mortlock's stages of adventure (Priest & Gass, 2005:50). Once this stage is reached the potential of minor mishaps becomes a reality. The last stage, devastation and disaster, appears where risks are very high and competence very low (Priest & Gass, 2005:50). The potential for permanent and fatal damage reaches a peak. The devastation and disaster stage should not play a role in educational experiences, but the stage of misadventure can be used as a basis for learning from mistakes made and improving skills and competence (Van der Merwe, 2009:228).

These stages represent all possible stages of the adventure experience, but ultimately the goal for any adventure participant lies with reaching peak adventure (Priest & Gass, 2005:50). According to Martin and Priest (1986:19) though, the term 'peak adventure' is relative. Each person's stage of peak adventure will differ and the experience will vary from person to person.

3.4.3 Adventure activity scale

The adventure activity scale, developed by Buckley (2007:1432), takes into account the level of difficulty of an adventure activity versus the volume of participants. The difficulty, regarding the adventure activity scale, is measured by the level of technicality of the activity, inherent risks, the remoteness of the setting, monetary costs of the activity, duration and prior experience of the individual (Buckley, 2007:1432). On the other hand, volume refers to a number of participants per year and the average size of a group (Buckley, 2007:1432).

The adventure activity scale is illustrated below, where difficulty is measured against volume. Figure 3.9 indicates that the volume of participants will increase as the difficulty of the activity decreases and vice versa (Buckley, 2007:1432). According to Figure 3.7, *icon adventurers* are those participants taking part in adventure activities with a high level of difficulty and a low volume of participants, such as mountain climbing and skydiving. On the other hand of the scale though, *thrill rides at fairs and theme parks* encompass adventure activities with high volumes of participants but very low levels of difficulty such as a theme park. Based on this, activities with high levels of difficulty can be described as those activities involving high levels of risk and danger, requires the participant to use specialised equipment and a qualified guide should accompany the expedition (Buckley, 2010:11). For these activities, training is usually required and the participant should possess a certain set of skills (Buckley, 2010:11). Activities with high levels of difficulty can also be associated

with high levels of financial cost, because specialised training is needed and the cost of acquiring and maintaining equipment can be high (Buckley, 2010:12). This can, therefore, be posed as a reason, aside for the fact that special equipment and competency is needed, for the low volume of a participant in adventure activities categorised as *icon adventurers* and *first, one-offs and adventures at extreme sites* (Priest & Gass, 2005:49).

Destinations which host activities on both sides of the scale, namely activities with high levels of difficulty and activities with a high volume of participants, have the benefit of involving a wider market. On the other hand, hosting activities categorised under high levels of difficulty will benefit conservation and preservation of the environment as well as positively impact environmental health. The reason being, lower volumes of participants, mean lower impacts on the environment. Additionally, seeing as these activities are usually priced higher than other activities, these will also have a positive economic impact on the destination.

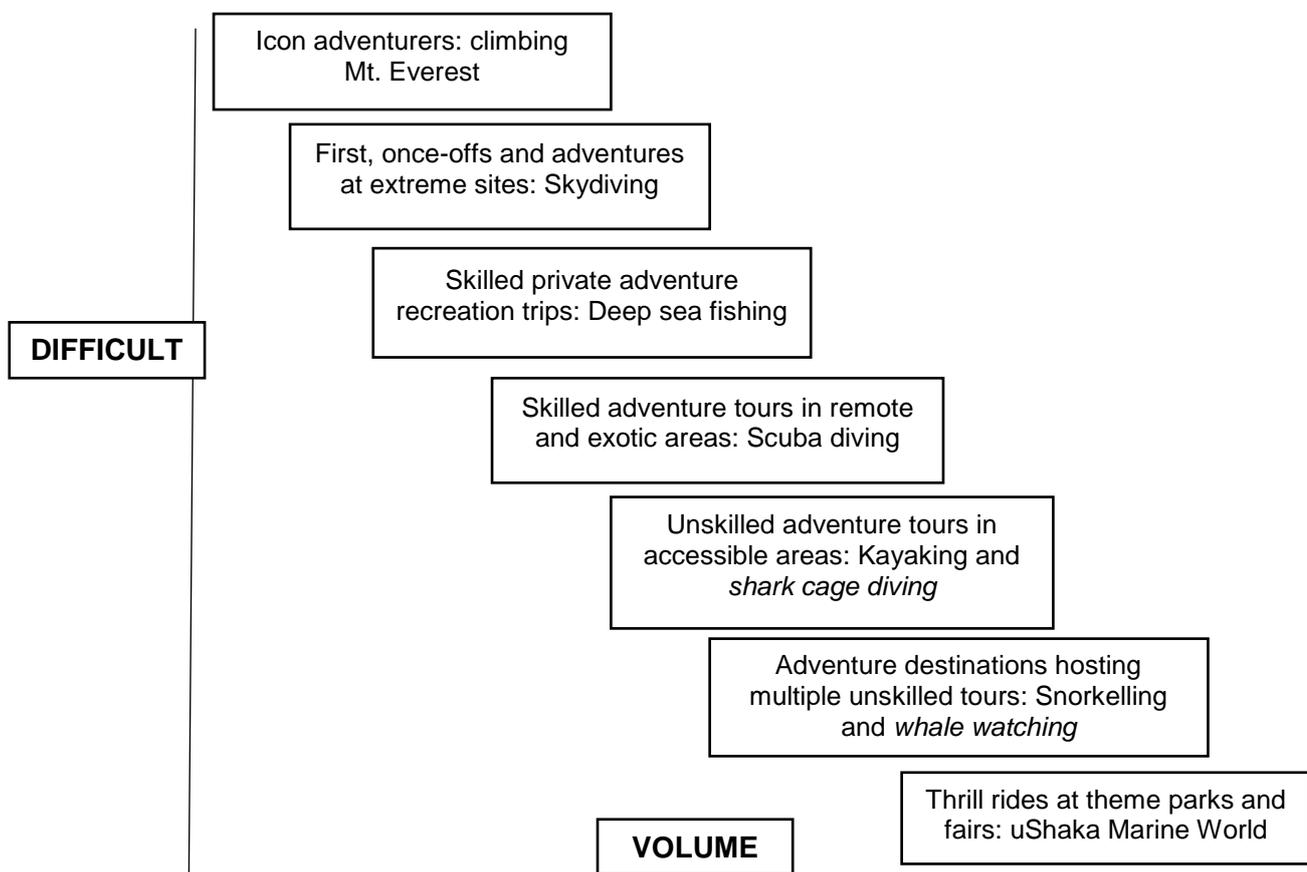


Figure 3.7: The adventure activity scale

(Source: Buckley, 2007:1432)

3.4.1 Marine adventure tourists' benefits and experiences

While motives are important and give insight into the driving force behind tourism, tourists experience a wide range of social and physiological, psychological, educational and conservation benefits which are derived from a marine wildlife encounter (Orams, 2000:561). Social and physiological aspects

influence the type of benefits sought from such an interaction, such as non-consumptive wildlife viewing rather than killing and escaping the daily routines of a normal lifestyle. Zeppel and Muloin (2008:21) discuss these experiences in terms of benefits derived by the participant from the experience and can be summarised as follows:

- Psychological aspects include the excitement of the encounter, novelty, intensity and the element of uniqueness, enhancing personal well-being and an improved quality of life.
- Educational benefits include learning about wildlife and personal growth.
- Conservation benefits include, amongst others, greater environmental awareness, supporting nature conservation work and aiding the protection of endangered species.

As far as benefits are concern, Orams (2000:565) determined that benefits drawn from the encounter greatly influence the overall experience of the marine wildlife tourist. The study conducted by Orams (2000) highlights the experiences which whale watchers drew from a whale watching expedition. Various factors have been identified which either enhanced the experience or caused a decrease in tourist satisfaction levels. The following factors have been identified to either enhance or decline the experience for tourists regarding whale watching (Orams, 2000:565):

- Good quality whale watches, referring to the fact that whales were encountered on the trip and tourists could see the whales clearly
- The crew adds great value to the experience as tourists can still be satisfied with the experience due to the crew making the trip fun and enjoyable, even without spotting whales
- The proximity of the whales is not a crucial influence on the experience, while a larger number of whales and more spectacular whale behaviour does impact the experience
- The number of passengers on board the vessel impacts on experiences. The more crowded the boat is, the less satisfied tourists are with the experience
- Tourists feel the duration of the cruise should not be too long, but it should not be too short either
- The construction of the boat for viewing greatly impacts on experiences
- The position of the boat should allow for optimal viewing of the whales for all passengers
- Issues of sea-sickness can greatly influence a decline in tourist satisfaction (this concept is tested in the questionnaire for marine adventure participants).

There are factors which cannot be controlled by the operator which has been identified in the same study (Orams, 2000) to either enhance or decrease the whale watching experience. These factors include calmer water breaching of whales while the proximity of the whales was not an important issue for tourists (Orams, 2000:567). In contradiction to this statement, however, Duffus (1988) found that orca whale watchers ranked the proximity of orca whales of great importance to their overall experience, while encountering the whales were ranked as most important.

Tourists participating in marine wildlife tours can gain a variety of benefits. These benefits can be divided into five categories, namely psychological, economic, environmental, social and

physiological benefits (Higham & Lück, 2008:49; Bentz, 2015:42). According to Higham and Lück (2008:50) psychological benefits include participants being able to relax in a marine environment and undergoing personal growth (shark cage diving offers participants the opportunity to take their mind of daily work and life while experiencing personal growth).

Conservation or environmental outcomes involve participants being exposed to the concept of conservation and they are educated in how to go about protecting and conserving the marine environment and marine wildlife (Higham & Lück, 2008:50). Operators of shark cage diving and whale watching will emphasise the need for conservation of white sharks and the protection of whales while participants are enjoying the activity. Educational benefits can also be drawn from the environmental or conservational benefits and involve the participant learning more about marine wildlife, such as the behaviour of white sharks while hunting, or specific species of marine wildlife, such as various whales found along the South African coast (Higham & Lück, 2008:50)

Accordingly, physiological benefits encompass feelings of excitement, novelty, intensity and uniqueness, promotion of personal well-being and an enhanced quality of life for the participant (Higham & Lück, 2008:49). For example, tourists participating in whale watching will benefit from the environment by being close to the whales as well as exposed to the elements, while feelings of excitement, novelty and uniqueness will be felt during the trip.

While the above-mentioned benefits all refer to the tourist personally, the social benefits refer to the fact that whale watching and shark cage diving are group activities. Tourists are therefore exposed to other participants, cultures and personalities, which can enhance cross-cultural harmony and break down such barriers (Saayman, 2009:69). Economic benefits, on the other hand, refer to the concept of making money, boosting the local economy by means of selling more products and services to tourists, generating foreign income and creating more job opportunities for local residents, which will in turn aid the economic situation of the host community (Higham & Lück, 2008:49).

Research conducted by Dobson (2008:55) on the key features of shark-based tourism in general determined that the following benefits can have an impact on tourists taking part in shark-based tourism activities, such as shark cage diving:

- Education and attitude change: by exposing the public to sharks is one of the most effective and efficient ways to contribute towards the conservation of marine wildlife tourism. From a psychological perspective, it enhances individuals' attitudes towards conservation by exposing them to relevant stimuli, such as viewing a shark in the natural habitat would.
- Economic benefits: not only does shark-based tourism hold great economic benefits for local communities, but it also emphasises conservation ethic in the light of highlighting the value of live sharks.

- Research and lobbying: shark-based tourism can contribute to research on certain shark species, such as the Great White Shark. In South Africa, many shark cage dive operators conduct research on the Great White shark in terms of migration patterns and the behaviour of the shark (Marine Dynamics, 2015).

In addition to the factors mentioned above, Lück (2008b:340) proposes that marine wildlife tourists desire interpretation where a learning experience is incorporated. Furthermore, well-planned and structured interpretive programmes can alter tourists' attitudes towards conservation and their intentions to being more environmentally friendly as a result of improved knowledge regarding a species (Lück, 2008b:340).

Furthermore, key features of marine wildlife tourism are the perceived naturalness or authenticity of the encounter and the elements of animal attributes, surprise encounters, natural environments and new animals (Higham & Lück, 2008:51). A study conducted on marine wildlife viewing in New Zealand identified that close viewing of unique animals (such as whales and sharks) behaving naturally in a natural environment to be the biggest influencing factor for an excellent marine wildlife experience (Moscardo, 2001). On the other hand, aspects such as a knowledgeable guide, information on wildlife and touching or handling wildlife was found to be least important for a valuable experience for marine wildlife tourists (Moscardo, 2001).

Zeppel and Muloin (2008:24) suggest that key factors for satisfaction a wildlife tourism experiences in general include the following (Reynolds & Braithwaite, 2001; Moscardo & Saltzer, 2004):

- The intensity of excitement of the experience should be high
- The variety or large numbers of animals are important
- The experience should be authentic, or natural
- The experience should be unique
- Interpretation of the trip should be of a good quality
- Staff should be knowledgeable about the environment and the animals
- The more popular an animal that is encountered, the more exciting the experience
- The status of the species (rare or endangered) contributes to the experience
- A clear orientation or structure of the experience should be identifiable
- The facilities offered to visitors should be of appropriate quality.

These authors (Reynolds & Braithwaite, 2001; Moscardo & Saltzer, 2004) agree that the type of animal encountered, the authenticity of the experience and the authenticity of the marine environment is important for a quality marine wildlife experience. When considering the experience derived from shark cage diving and whale watching, two very different experiences can be addressed. Firstly, shark cage diving involves high levels of adrenaline and active participation from the participant is necessary for the participant to receive the full experience. The participant is

required to enter the water in order to see the shark's natural behaviour in its habitat. Therefore, the shark cage diving experience will rely greatly on aspects such as safety of participants, no presence of crowds and an educational experience is needed (Techera & Klein, 2013:23).

In 2004, Moscardo and Saltzer conducted research with the focus on tourists participating in marine wildlife tourism in Australia and New Zealand. The authors (Moscardo & Saltzer, 2004) have identified three aspects which are of importance to tourists viewing wildlife, these aspects are the setting conditions, visitor characteristics and wildlife characteristics. Firstly, setting conditions to refer to the variety of animals, large numbers of animals available, the natural setting in which animals are viewed, the quality of the interpretation, knowledge of the staff, clear orientations, the physical setting and absence of crowded places. These aspects have been identified by various researchers of wildlife tourism (Duffus, 1988; Orams, 2000; Lück, 2008; Dicken & Hosking, 2009). Secondly, visitor characteristics refer to elements such as the culture of tourists, previous experiences and the social element present in the group (Moscardo & Saltzer, 2004). Thirdly, the aspect entitles *wildlife characteristics* to refer to the size of the animal being viewed, the colour, rareness of the animal, the level of danger associated with the animal, whether small or baby animals are present, as well as endangered species (Moscardo & Saltzer, 2004).

Curtin (2010) on the other hand, identified the following aspects as contributing to a memorable wildlife experience; being able to make memories, charisma and appeal, large numbers of wildlife, first-time sightings, spontaneity, being mesmerised by nature, being in close proximity to the animal and embodiment. Curtin (2010) identified these elements by conducting qualitative research on the experiences of wildlife tourists. The following Table 3.4 provides a description of the aspects included in each of the factors influencing wildlife tourists' experiences (Curtin, 2010).

Table 3.4: Description of aspects influencing marine wildlife tourists' experiences

FACTOR	ASPECTS INCLUDED
Making memories	While viewing animals, tourists tend to get excited and might miss something taking places, such as the whale breaching or the shark grabbing the bait. Curtin (2010) describes the memories as the ability of the tourist to recall or trace parts of the experience and having access to these experiences after the activity is concluded.
Charisma and appeal	Some animals have a specific and strong attractions for human interest, such as sharks and whales. The attraction is based on the charisma of the animal, or in other words the connection which people have with the animal's approachability.

Large numbers of animals	The higher the number of varying animals tourists have seen, the more memorable the experience will be for them. For example, seeing more than one species of whales on a trip or seeing more than one species of sharks on a dive.
First-time sightings	Tourists usually experience a sense of thrill when seeing a specific animal, such as whales or sharks, for the first time. Curtin (2010) suggests that spotting some animals for the first time is more special than others, such as a southern right whale compared to a penguin.
Spontaneity	Experiencing the 'unknown' is one element which is very important for tourists. For example, a whale approaching the boat to scratch itself or hide from other a pursuing male is a spontaneous happening which will offer much surprise and joy for tourists.
Mesmerised by nature	The anticipation and excitement of witnessing a dramatic scene in nature, such as a shark grabbing the bait line aggressively, is an element which relates to a memorable experience for tourists.
Close proximity of animals	Being close to a wild and dangerous animal, such as whales or sharks, translates to a rare and exciting experience and one which tourists will remember.
Embodiment	The term 'embodiment' refers to an intense awareness of the connection between a body and its environment (Van der Merwe & Saayman, 2014:6). Tourists become very aware of their bodies in relation to that of wildlife when in close proximity to wildlife.

(Source: Curtin, 2010)

According to Van der Merwe and Saayman (2014:11) factors which have an influence on experiences of wildlife tourists include, special conditions (such as being able to spot whales and sharks easily), interpretation (the way in which guides communicate important aspects of the trip), meeting the expectations of the tourists, diversity and quantity of the animals seen, authenticity of the experience, wildlife ambience, proximity to the animals and attributes of the operator. The findings have been substantiated by that of Reynolds and Braithwaite (2001) and Moscardo and Saltzer, who specified similar findings for factors which contribute to a memorable wildlife experience.

Triantafyllidou and Petala (2016:80) investigated sea-based recreation activities to define the impact of different experiences on tourists' satisfaction, word-of-mouth and re-experience intentions. The authors (Triantafyllidou & Petala, 2016:80) identified the most important aspects of a memorable experience to be feelings associated with intense pleasure and immersion and activities which offer a personal challenge. Furthermore, aspects such as learning, challenge, socialisation, escaping a routine, being immersed in the activity and feelings of fun and joy played a big impact on sea-based adventure tourists' experiences (Triantafyllidou & Petala, 2016:80).

The whale watching experience differs from the shark cage diving experience in the sense that participants are not required to enter the water to experience the whale in its natural habitat. The most important influencing aspect identified from the literature is the closeness of the whale in proximity to the participant (Higham & Hendry, 2008: 356). The closer the whales are to the vessel, the more satisfied the participants are with the overall experience. In agreement, Catlin and Jones (2010:390) identified aspects such as being close to whale sharks and swimming with whale sharks to be the most important factors contributing to a valuable experience for participants in whale shark tourism in Western Australia. Furthermore, Catlin and Jones (2010:390) further suggest that the staff, food served and the operational elements of the experience was important to participants.

Dicken and Hosking (2009) suggest that one of the most important factors contributing to the experience of diving with sharks in the Aliwal Shoal Marine Protected Area, South Africa, is the fact that participants can observe sharks that are large in size and be close to nature, while fear was not ranked as an important influencer on the experience (Dicken & Hosking, 2009:229). Furthermore, Dicken and Hosking (2009:229) state that the proximity of these sharks also contributes toward a positive and good shark dive experience. In contrast to this seasickness, the smell of the bait (chum) and the long duration of the boat trip were causes of a bad experience (Dicken & Hosking, 2009:229).

If taking into account the experiences of both the whale watching and shark diving industry, it is interesting that the factors contributing to a good experience, or the benefits of tourists, is similar in both instances. Both the whale watching market and shark cage diving market feel that seasickness and long boat trips are causes for a bad experience (Orams, 2000; Dicken & Hosking, 2009) while positive influencers include the large number of the species that can be seen and being close to nature (Orams, 2000; Dicken & Hosking, 2009).

Regarding experiences, Pratt and Suntikul (2016:867) state that marine tourism experiences can be both educational and entertaining in nature. Education can be offered by providing an engaging learning experience that might induce tourists to undertake environmental-friendly actions in their daily and professional lives (Pratt & Suntikul, 2016:867). Furthermore, tourists can be left with lifelong memories or life changing experiences, such as a whale breaching next to the boat or a shark breaking the surface. These experiences can enhance the overall satisfaction of the tourists and might induce a change of mind-set towards conservation or protection of marine animals.

The market for marine tourism is increasingly emphasising the fact that visitor experiences should incorporate a learning experience has raised awareness of the market's needs to learn about the marine environment. Marine tourists are increasingly moving towards a state of protection and conservation of marine resources, especially whales and sharks (Ballantyne *et al.*, 2011b:770). According to Ballantyne *et al.* (2011b:770), tourism experiences are placed effectively to enhance a positive educational message. These experiences contribute towards the satisfaction of the market's needs to be close to nature and to feel connected to nature once again (Ballantyne *et al.*, 2011b:770). Kals, Schumacher and Montada (1999) further argue this point by stating that direct experiences in nature, such as viewing whales and sharks in their natural habitats, can promote a state of emotional affinity with towards nature.

3.5 MANAGEMENT OF ADVENTURE TOURISM

According to Bentley, Page and Laird (2001:44) management of adventure tourism requires management of three factors, namely individual factors, equipment factors and environmental factors. The factors were identified by means of primary research conducted amongst operators of adventure tourism products and a generic model was established (Van der Merwe, 2009:245). This conceptual model is generic in nature and therefore not directly applicable to a specific type of adventure tourism product. Figure 3.10 below is a portrayal of the model, as established by Bentley *et al.* (2001:44).

According to the model, management of adventure tourism operations are structured into the above-mentioned three categories. Firstly, operators should pay attention to individual or client factors, such as ensuring clear briefing and instructions are given, personal characteristics of participants, physical fitness levels and safety measures should all be taken into account (Bentley *et al.*, 2001:44). Secondly, equipment used for the activity should be of a high quality and not low-budget or cost-saving equipment, it should be maintained and equipment should be fitted to the participant (Page *et al.*, 2005:314). Thirdly, environmental factors should be monitored, such as the weather conditions and ocean conditions (Page *et al.*, 2005:314).

Operators of shark cage diving and whale watching should pay attention to the same factors to ensure a satisfactory and safe activity. For example, shark cage diving operators should fit participants with the correct size wetsuit, booties and masks to ensure comfort as far as possible. They should also ensure that the weather and ocean conditions are appropriate for the activity to reduce discomfort and sea sickness as far as possible. Lastly, operators should ensure that the equipment used for diving, such as wetsuits and the cage, is in proper working condition and will not pose any risks to the participants. In terms of whale watching, operators should once again pay attention to weather and ocean conditions to ensure that a comfortable trip can take place. Little equipment is used for whale watching, but the boat should be comfortable and in good working condition, as well as the lifejackets. Marine adventure operators should ensure that a clear briefing is conducted before and after the trip to inform participants of the procedure to be followed, what to

expect and how to behave while on the trip (Van der Merwe, 2009:246). By managing the aspects as indicated in Figure 3.8 operators will not only ensure satisfaction, but a safe environment as well.

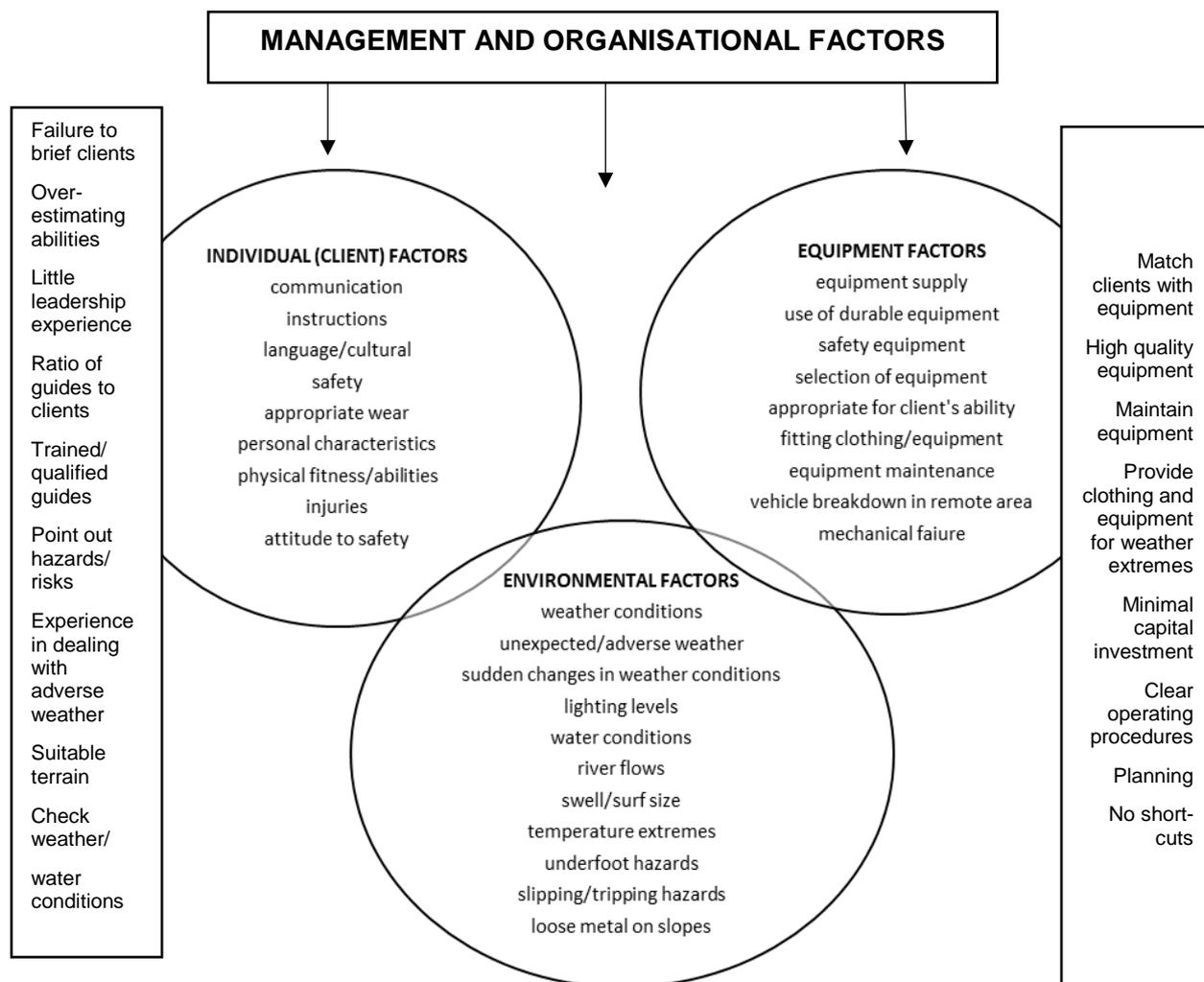


Figure 3.8: Conceptual model for adventure tourism management

(Source: Page *et al.*, 2005:384)

3.6 CONCLUSION

The aim of this chapter was to analyse literature pertaining adventure tourism through discussing important definitions and concepts. Firstly, the concept of adventure tourism was defined as an activity involving elements of excitement for the participant and a rush of adrenaline. In order to analyse the concept of adventure tourism properly, the characteristics of adventure tourists have been identified as people between the ages of 25 and 55, who enjoy spending significant amounts of money on adventure activities, who are highly educated and have experience as travellers. Adventure tourism forms part of the lifestyle of tourists taking part in such activities. Furthermore, the categories of adventure tourism were discussed, which includes soft adventure, hard adventure and the adventure tourism quadrants. This contributes to formulating a decent idea of what adventure tourism entails.

Furthermore, aspects which influence the level of experience of adventure tourists have been discussed by referring to relevant literature. Aspects identified include emotions, previous experiences, demographic details (such as gender, age and home language), expectations, personal opinions and level of skills. Lastly, the chapter was concluded by discussing the specific factors of experience for marine adventure tourists. These factors were similar to those of alternative adventure tourists, with differences identified as excitement, novelty, intensity, proximity of the animals and learning about the animals. The knowledge and friendliness of the staff and crew, quality of the trip, duration of the trip, number of passengers, sea-sickness and the boat can contribute greatly towards the experience of marine adventure tourists.

After analysing the concept of adventure tourism, it can be concluded that shark cage diving and whale watching activities are categorised as soft adventure tourism taking place in a marine environment. These activities involve a unique element, participants are close to nature, a level of fear and risk is involved and multiple benefits are derived from participation in these activities, such as social, psychological, physiological, educational and conservational benefits. Discussing adventure tourism is therefore important for this study as it contributes to the knowledge necessary for establishing a sustainable management framework for marine adventure tourism products.

Chapter 4

Sustainable Tourism Management

Individuals of all ages can make an important difference in the overall health of our ocean by the actions they take every day. Simple things like picking up trash on the beach, recycling and conserving water can have a big impact on the health of our ocean

~Ted Danson

4.1 INTRODUCTION

Humans have an interest in the marine environment, but aside from mere interest in relaxing, the marine environment also provides livelihood (Bentz *et al.*, 2013:874). Local communities can make a living from either tourism to the area or from using the ocean as a resource for exportation (Bentz *et al.*, 2013:874). The benefits derived for the local community include, amongst others, a source of food, a source of tourism spending as well as a source of recreation (Deltori & Giudici, 2015:1). Although the community can benefit greatly from the marine environment, there is also a negative side to this. Negative impacts which can derive from an increase in tourism to an area include social impacts such as reduction in tourist and community satisfaction (due to crowding and overpopulation) as well as biological impacts such as a change in the behaviour of marine wildlife and reduced quality of the habitat (Seminiuk, Haider, Beardmore & Rothly, 2009:195). Therefore, it is important to ensure the sustainability of marine tourism activities, such as adventure tourism products (whale watching, surfing, shark cage diving and scuba diving) and recreational activities (sun bathing and swimming), both socially, biologically and economically (Bentz *et al.*, 2013:875; Pratt & Suntikul, 2016:897).

Sustainability can be defined as the survival of a product within a destination in the long term (Ioannides, 2001:59). The World Commission on the Environment and Development (here after referred to as WCED (WCED, 1987:7), on the other hand, defines sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their needs.” Although the definition as stated by WCED (1987:7) is the most widely accepted definition for sustainability, other definitions have been formulated which are more specific in nature. According to Hamid and Isa (2015:85), another appropriate definition is that “sustainable global development requires that those who are more affluent adopt lifestyles within the planet’s ecological means” as well as “sustainable development can only be pursued if population size and growth are in harmony with the changing productive potential of the ecosystem”.

According to Kokkis and Tsartas (2001:35) these definitions can be extended in terms of sustainable tourism development. Sustainable tourism development refers to a form of tourism development which has the potential to establish a suitable balance between the ecological environment,

economic environment and the social environment, where conditions are created involving services, structures and knowledge bases for the uninterrupted use of tourism products (Kokkis & Tsartas, 2001:35).

The need for the implementation for sustainable tourism development practices within a globalised society has been proposed as the answer to sociocultural and environmental problems (Polyxeni & Ourania, 2008:2). As sustainability can be directly linked with social responsibility (the participation of the local community in tourism development) it has been proposed as the solution to negative impacts created by the tourism industry (Polyxeni & Ourania, 2008:2).

Therefore, the aim of this chapter is to discuss existing literature regarding the sustainable development of tourism products. Concepts regarding sustainability of tourism products which will be discussed include the concept of sustainability, elements of sustainability and various models, theories and frameworks on sustainability. Figure 4.1 is a summary of the discussions to be followed for this chapter.

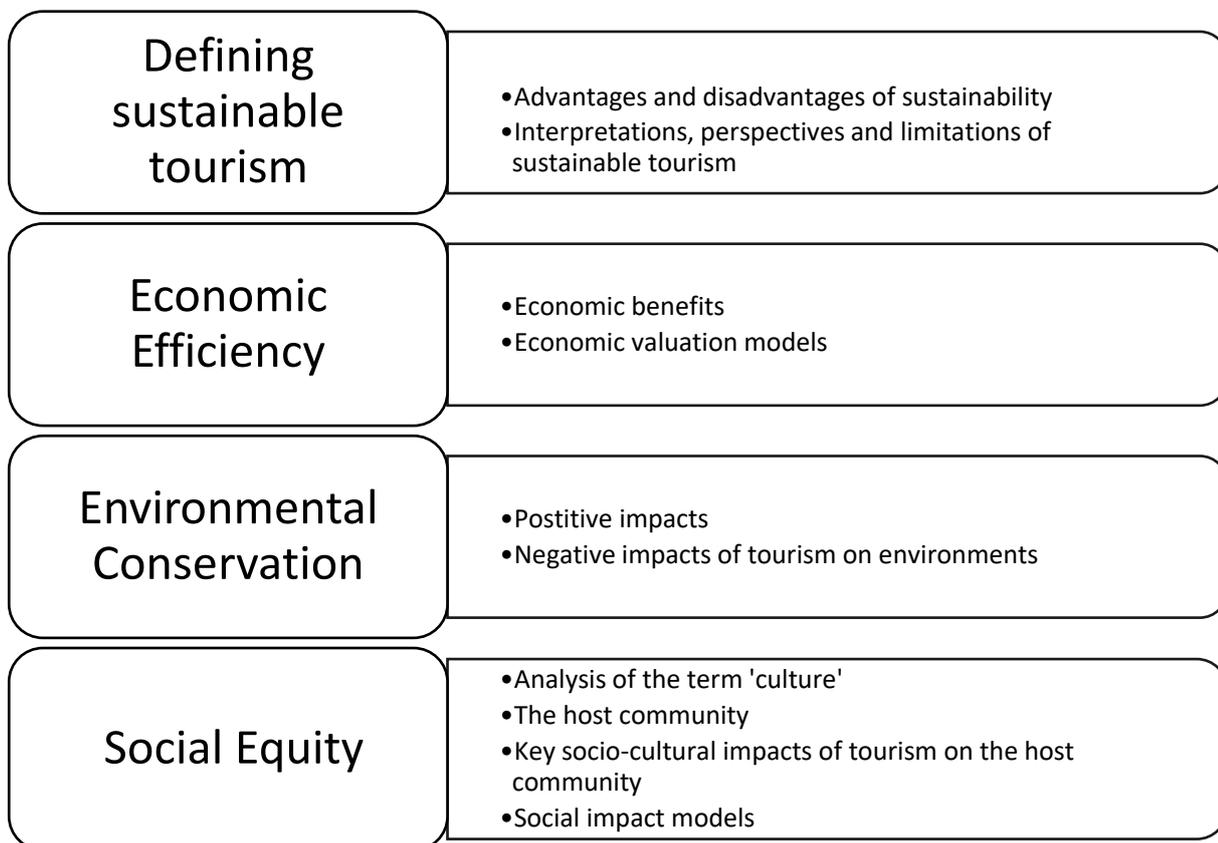


Figure 4.1: Outline of chapter

4.2 DEFINING SUSTAINABLE TOURISM

Sustainability and sustainable practices have been a catchword amongst academics for a long time, even though no agreement on the definition of sustainable tourism has been reached (Manwa, 2013:31). According to the World Tourism Organisation (2001) the working definition of sustainable tourism is as follows: "sustainable tourism is envisaged as leading to management of all resources

in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems.”

According to Liam and Cooper (2009:90) the concept of sustainability has been the topic of many discussions. These discussions often criticise the definitions as being vague, ambiguous, secretarial and can create confusion through its linkage to environmental issues (Liam & Cooper, 2009:90). In recent times, though, literature on sustainability suggest that a paradigm shift in terms of tourism requiring a holistic and systematic approach is needed in order to ensure an integration of interventions (Pulido-Fernandez, Andrades-Calidito & Sanches-Rivero, 2015:48). According to Pulido-Fernandez *et al.* (2015:48) these interventions should take into account the complex and dynamic interactions between economic, environmental, social and cultural challenges which the tourism industry faces in terms of sustainable development.

The paradigm shift can be seen as a multidimensional concept, incorporating three elements; social, environmental and economic (Pulido-Fernandez *et al.*, 2015:48). Figure 4.2 illustrates the relationship between the three concepts (economic, environmental and socio-cultural) of sustainability.

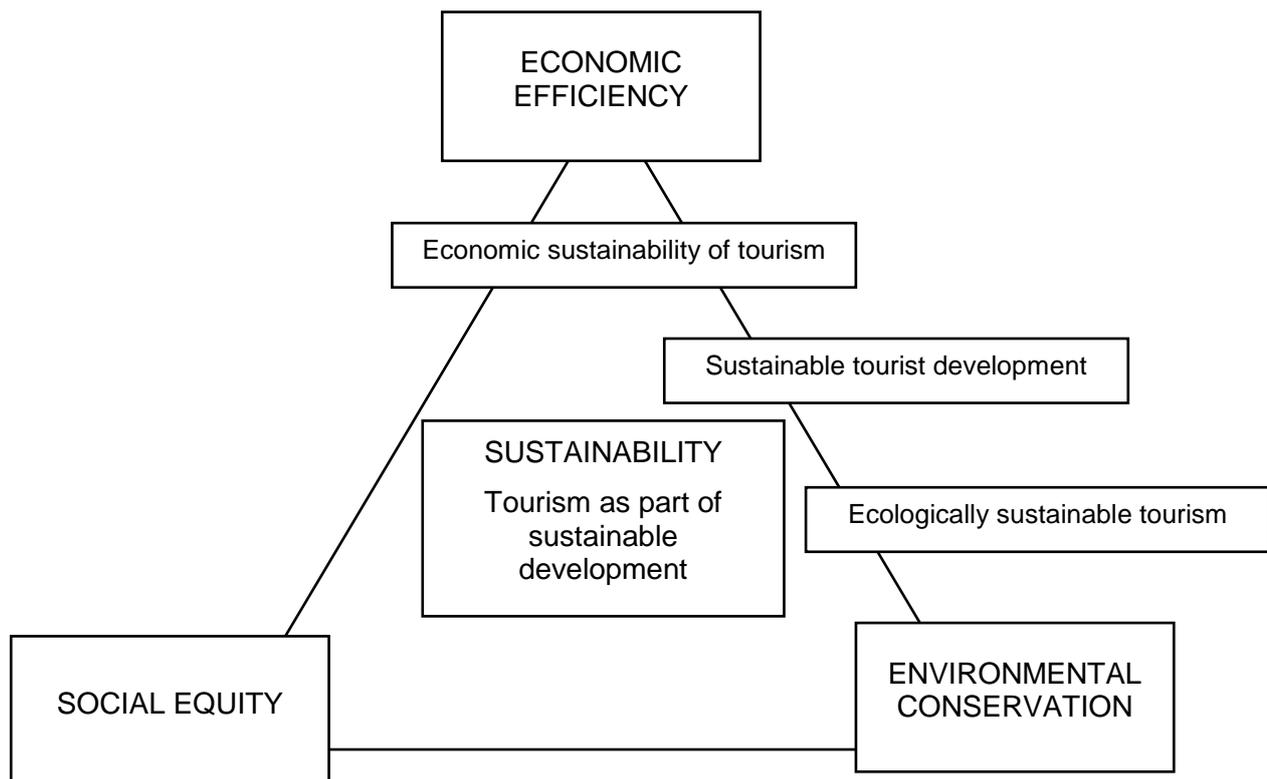


Figure 4.2: Sustainable tourism

(Source: Coccossis *et al.*, 1996)

Figure 4.2, illustrates sustainable tourism as based on ecologically sustainable economic development, where sustainability is dependent on the entire environment system, including humanity (Coetzee & Saayman, 2009b:131). Therefore, sustainable tourism can be analysed in terms of three legs of a triangle (Figure 4.2 consisting of economic efficiency, social equity and

environmental conservation (Coetzee & Saayman, 2009b:131). Hereby tourism policies are integrated with social, economic and environmental policies, without tourism policies taking priority over the latter (Coetzee & Saayman, 2009b:131). In other words, tourism policies incorporate economic efficiency, social equity as well as environmental conservation without tourism in the area being more important than the other three aspects and vice versa.

The three legs of the triangle form the three pillars of sustainability, namely economic sustainability of tourism, sustainable tourist development and ecologically sustainable tourism. Firstly, tourism should encompass the aspect of economic efficiency whereby the economic growth and health of a destination is contributed towards (Coetzee & Saayman, 2009b:131). Secondly, tourism is a catalyst for social equity at a destination. Tourism has the ability to contribute towards the social wellbeing and growth of a community at the destination where tourism is practiced (Coetzee & Saayman, 2009b:131). Tourism also has the ability to create many job opportunities for low-skilled workers, providing many local inhabitants with a source of income (Polyxeni & Ourania, 2008:4). Furthermore, tourism can contribute towards the improvement of infrastructure (such as roads and maintenance of buildings), provide foreign currency (such as tourists spending money at a destination that has not previously been in the economic cycle of that destination) as well as offer growth opportunities for the destination in the form of expansion (Polyxeni & Ourania, 2008:4). Thirdly, environmental conservation is a goal that should take equal importance to economic and social sustainability (Buckley, 2012b:531). The ecological environment should be conserved and protected and resources should not be exploited. With climate change and the increased in carbon emissions produced, tourism's contribution to pollution is extensive (Buckley, 2012b:531). Recently however, there is an increase in self-regulating companies within the private sector which aids the sustainability of the ecological environment and improves the relationship between the economy and the environment (Buckely, 2012b:532).

Furthermore, the three elements of sustainability; economic efficiency, environmental conservation and social equity is once again portrayed by the three corners of the pyramid in Figure 4.3. Each leg serves as a connection between the three corners (elements) ultimately connecting all three elements. The three connecting elements include tourist satisfaction and participation by the local community and conservation and promotion of the economic as well as ecological environments. This model is aligned with other models of sustainable tourism development which aims to indicate the linkages between the economic, environmental and socio-cultural dimensions (Baumgartner, 2013:46). The general aim of this model is to identify solutions for the challenges faced when developing tourism in a sustainable manner by indicating the relationship between the three elements of sustainability along with the needs to balance these elements (Baumgartner, 2013:46).

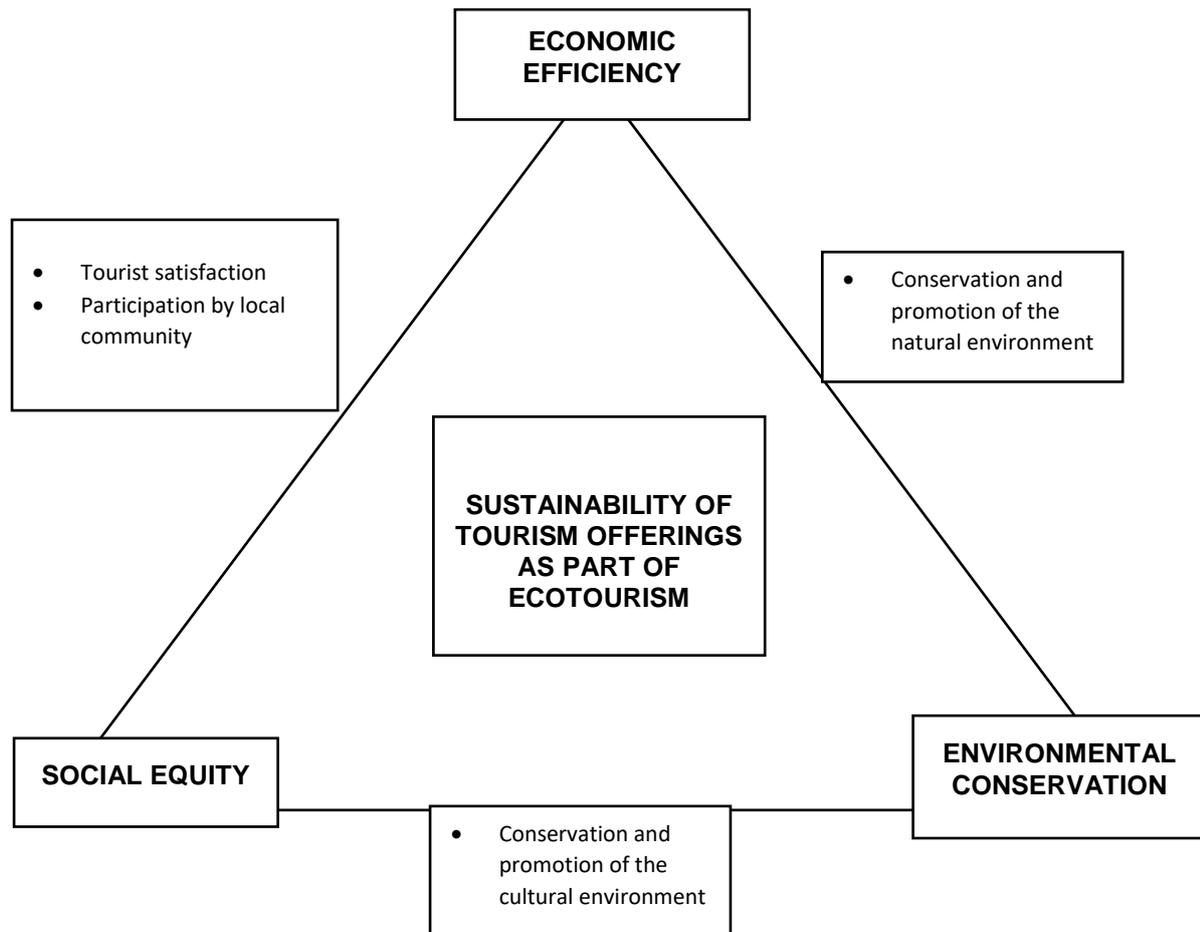


Figure 4.3: Sustainability of tourism offerings as part of ecotourism

(Source: author's own creation).

According to Baumgartner (2009), as seen in Figure 4.3, key aspects to sustainable tourism development can be identified which has an impact on the outcome of such developmental schemes. These aspects include (Inskip, 1991:461; Baumgartner, 2009; Deale, 2013:105; Senge, 2014):

- Respect for the natural environment stems from public policies or private sector self-regulation. Therefore, maintenance of the quality of the environment on which sustainability is dependent should be maintained, as well as reducing environmental impacts through, for example, the reduction of the carbon footprint
- Tourism should be embedded in a sustainable, regional-specific and networked manner
- Respect for the social well-being of the local community, the culture as well as employees in the tourism sector is important through promotion of equity in development, along with the improvement of the quality of life for the local community

- There should be a focus on employees and the community as important components for fostering and supporting the process of sustainability, indicating the importance of participation of the host community in decision-making and planning processes
- Intensely visited destinations should see the implementation of environmental management systems
- Making use of triple bottom line sustainability reporting systems, such as those developed by the Global Reporting Initiatives (2013), should be implemented. Such systems include integrated reporting that combines the analysis of non-financial performance (involving corporate social responsibility efforts as well as environmental efforts) with financial performance
- Implementing the sustainable development process as “a way of travelling” rather than a destination can contribute to sustainable practices in the long term
- Companies should keep in mind the significance of corporate social responsibility for the well-being of a company and all its stakeholders
- Companies can work towards the development of greater awareness and understanding of significant contributions which tourism can make towards the environment, community and the economy
- Provision of high quality experiences for tourists can ensure tourist satisfaction.

When implementing sustainability as a way of travelling rather than a destination, it means that the organisation does not reach a state of sustainability after development (Deale, 2013:106). Rather sustainability is dynamic to the nature of the organisation (Deale, 2013:106). Organisations should thus adapt their portfolio and brand to the various stakeholders and their needs, including socio-cultural, environmental and economic issues (Deale, 2013:106).

Sustainability is a long-term goal, instead of fast economic growth (Lee & Brahmasurene, 2013:70). Therefore, short-term goals are found which tend to give preference to less tangible social justice and environmental protection goals (Kent *et al.*, 2012:90). In other words, tourism operators who are more concerned with fast economic rewards are not concerned about the environment and social affects (Padin, 2016:511). It is therefore difficult to convince a community to adopt a long-term sustainable development process if economic growth is pursued (Padin, 2016:512). This view of tourism can be distinguished as non-sustainable tourism development. The main difference between sustainable and non-sustainable practices lie within the management structure followed by the operator. Saayman (2009a:134) indicates that this difference can be seen across three separate fields, namely general concepts (such as timeliness of development, control and scaling), development strategies (such as planning, concerns and pressuring) as well as the behaviour of tourists (such as mentality, educational element and respect). Table 4.1 clearly indicates the differences between sustainable and non-sustainable tourism (Saayman, 2009:134).

Table 4.1 Sustainable versus non-sustainable tourism development

SUSTAINABLE	NON-SUSTAINABLE
General Concepts	
<ul style="list-style-type: none"> • Slow development • Controlled development • Appropriate scale • Long term • Qualitative • Local Control 	<ul style="list-style-type: none"> • Rapid development • Uncontrolled development • Inappropriate scale • Short term • Quantitative • Remote control
Development Strategies	
<ul style="list-style-type: none"> • Plan, then develop • Concept-led schemes • Landscapes concerned • Pressure and benefits diffused • Local developers • Local employment • Vernacular architecture 	<ul style="list-style-type: none"> • Develop without planning • Project-led schemes • Concentrating on honey-pots • Increase capacity • Outside developers • Importing labour • Non-vernacular architecture
Tourist Behaviour	
<ul style="list-style-type: none"> • Some mental preparation • Learning the local language • Tactful and sensitive • Quiet • Repeat visits 	<ul style="list-style-type: none"> • Little or no mental preparation • No learning of local language • Intensive and insensitive • Loud and rowdy behaviour • Unlikely to return

(Source: Saayman, 2009:134)

4.2.1 Advantages and disadvantages of sustainability

As with all tourism products and services, there are both advantages and disadvantages that need to be considered. The following advantages can be identified for sustainability (Saayman, 2009:134; Kent *et al.*, 2012:90; Waligo, Clarke & Hawkins, 2013:343):

- Brings satisfaction and enrichment to visitors: visitors escape the daily routines and busy lifestyles to reconnect with nature
- Strengthens the respect for natural and built heritage: tourists tend to respect attractions, cultures and natural environments more if they understand or learn about the attraction.
- Promotes an understanding of and appreciation for other communities and cultures: mutual respect and understanding can be achieved

- Supports the maintenance and improvement of heritage: heritage is kept alive for the sake of tourism
- Acts as a catalyst for clearance of eyesores and dereliction: sustainability ensures that the environment is kept as close to the natural element as possible, that involves maintenance of the sight
- Creates jobs and wealth: the community has a great impact on tourism and sustainability ensures that local community members are offered jobs and an income before labour is outsourced
- Diversifies narrowly-based rural economies: sustainable tourism development generates other revenue-generating tourism opportunities
- Improves the quality of community life: with the increased household income offered by tourism development in the area, community members' standard of living is increased
- Supports businesses and services that might close down, had it not been for ecotourism: sustainable tourism development involves local service or product providers instead of outsourcing these services or products.

The advantages offered by sustainable tourism is vast and the positive impacts surely outweigh the negative impacts. On the flipside of the coin, though, some disadvantages can be identified, these disadvantages come with the development of sustainable tourism. Development often equals expansion and an increase in interest in the destination can lead to disadvantages, if not managed and maintained appropriately (Saayman, 2009:135). The following disadvantages are listed in the literature (Saayman, 2009:135):

- **Overcrowding of visitors:** at destination with high interest or biodiversity value
- **Traffic congestion:** an increase in visitors means an increase in traffic as well, which leads to an increase in congestion
- **Wear and tear:** more visitors mean higher wear and tear to infrastructure, such as gravel roads and buildings, which in turn, means higher maintenance costs
- **Inappropriate development:** such as overexploitation of local cultures and breaching the carrying capacity threshold
- **Conflicts with the local community:** where the local community is against tourism development in an area, disaffected community members can sabotage or cause destruction to tourism infrastructure and tourism activities.

In order to overcome the negative impacts (or disadvantages) of sustainable tourism development, Barkin (2000) suggests that a model should be developed and implemented in order to break the cycle of impoverishment and environmental degradation. Barkin (2000) states that sustainable tourism can be used to provide employment and other opportunities for local communities, but merely as a complementary activity to other land use. Barkin (2000) further proposes the following:

- The government should recognise the community's right to be in control and benefit from the tourism activity, through training, assistance and resources
- Mechanisms should be in place to ensure the system of food provision is maintained
- The relevance of sustainable tourism practices should be considered in terms of the environment and the community
- In order to overcome the problem of seasonality the promotion of cultural tourism and other aspects of the indigenous biodiversity should be researched
- The benefits of sustainable tourism development should be spread to all and not be kept to a select few
- A movement should be made away from policies which are destructive to the environment, contributes to social polarisation and which offers economic leakages
- An attempt should be made to integrate tourism into regional development in order to achieve a more balanced economy.

4.2.2 Interpretations, perspectives and limitations of sustainable tourism

Deming (1996:3) suggests that humanity has an insatiable need to see and discover more and to get closer to the natural attractions. As a result of this need, the tourism industry continually pushes the limits in terms of acceptable versus unacceptable human-wildlife interactions (Fennel, 2015:63). According to Fennell (2015:64) humans have evolved through stages of having an urgent need to preserve their own lives to having a concern for and valuing other people's lives; a social value. This social value is reflected in economic development priorities which holds serious implications for the long-term sustainability of communities and resources on which they rely (Fennell, 2015:64).

Interpretations and perspectives of sustainability

To ensure that sustainable tourism is implemented across all sectors of the tourism industry, strategies must be found which will aid this implementation (Coetzee & Saayman, 2009b:130). The problem arising with the identification of applicable strategies is the fact that there are various interpretations and perspectives amongst academics and the industry of sustainable tourism, such as the following (Coetzee & Saayman, 2009b:130):

- The first perspective is that sustainable tourism can be interpreted, where the primary objective is the viability of the tourist activity, from a sectoral point of view
- Political and socio-cultural areas strongly emphasise the fact that there is a need for ecologically sustainable tourism practices. Included in this view is a conservationist approach that puts the protection of the environment first, including ecosystems and natural resources
- The third viewpoint identifies the fact that environmental quality is important for competitiveness. Environmental quality involves aspects such as aesthetics, cleanliness, monuments, regulation of traffic as well as laying out recreational areas

- The fourth viewpoint takes into account ecologically sustainable economic development, according to which sustainability is based on the human-environment system. This suggests that environmental conservation is equal to economic efficiency and social equity.

Limitations of sustainability

The above-mentioned viewpoints suggest that the three elements (economic efficiency, environmental conservation and social equity) of sustainability is interrelated. If one element is removed, sustainable development will be compromised. According to Sierra (2002:16) sustainability cannot be identified as the ideal goal which suggests a “fixed state of harmony”. Rather as a process of adaptation and reorientation of the tourism industry and development thereof to achieve the desired balance between the three elements of sustainability (Sierra, 2002:16). According to Aronsson (2000:23), the best which could be hoped for is the constant development and improvement of the tourism industry through implementation of sustainability. The limitations on the concept of sustainability mentioned in this section is both practical and ethical in nature (Pulido-Fernandez *et al.*, 2015:48).

The following section of this chapter discusses the three elements of sustainability namely, economic efficiency, environmental conservation and social equity, in detail.

4.3 ECONOMIC EFFICIENCY

The economic dimension of sustainable tourism seeks to enforce the fact that long term planning should take all stakeholders’ opinions and needs into account (Padin, 2016:512). All socio-economic benefits should be evenly distributed amongst those whom have stable employment opportunities based on competitive businesses (Padin, 2016:512). For example, the small town of Hermanus draws economic benefits from the annual Whale Festival held in the town in honour of the whales’ return to the South African coast. Community residents whom have businesses in the town benefit from the influx in visitors and the increased economic contribution which is made by the festival.

Economic benefits can be extended to national and local economies as well (Eagles, 2014:532). The concept of total economic value is therefore identified as an attempt to describe the widespread beneficial impacts which can stem from tourism activities and is one way in which this dynamic and complex industry’s impacts can be measured (Eagles, 2014:532). Seeing as the tourism industry impacts on more industries than one, for example transportation, manufacturing, services and retail, measuring the true economic impact is difficult (Saayman, 2013:110). Economic impact valuation is a method developed which can determine the value which tourism adds to the local economy (Eagles 2014:532). This concept identifies the societal values that can be captured from tourism activities, enhancing the capture of revenues by the tourism industry, tourism activities and local communities (Eagles, 2014:532). With proper management these activities can be managed in a sustainable fashion (Eagles, 2014:532).

4.3.1 Economic Benefits

In order to gain economic benefits, some academics believe sustainability of the destination must be sacrificed (Pulido-Fernandez *et al.*, 2015:48). This is especially true in the case of coastal tourism development where the natural environment and resources are downgraded and overexploited in the quest for profit maximisation (Pulido-Fernandez *et al.*, 2015:48). For example, shark cage diving in Gansbaai, Western Cape, is dependent on the sharks in the environment, meaning that all operators in the town will compete for the sharks' attention by making use of chumming and baiting methods. This can have certain detrimental impacts on the sharks in the environment, such as sharks being conditioned to view the shark cage diving boats as suppliers of food (Johnson & Kock, 2006:45).

Arguments for the suggestion that tourism negatively impacts on the natural environment and resources is that the main goal of tourism development is to maximise the economic benefits drawn from the industry (Choi & Sirikaya, 2005). Those advocating for sustainability is of the opinion, on the other hand, that sustainable tourism development should remain within the destination's capacity to accommodate the growth of the industry along with the restoration of downgraded and overexploited environments and resources (Pulido-Fernandez *et al.*, 2015:48).

In addition to the above mentioned, Lundie, Dwyer and Forsyth (2007:15) and Buckley (2012b:531) emphasise the fact that destinations which yield high economic benefits can be associated with adverse environmental effects, such as ecological footprints, water and energy usage. This results in the fact that destinations should make trade-offs between the economic benefits and environmental benefits that could be gained (Lundie *et al.*, 2007). As an example, Dwyer and Forsyth (2007) as well as Dwyer and Thomas (2012) suggest that it is of utmost importance to identify new product opportunities and new market segments which could ensure greater economic benefits. According to Pulido-Fernandez *et al.* (2015:48) the following aspects is recognised as economic benefits of tourism:

- Contributes to foreign exchange earnings
- Contributes to government revenue
- Generates employment
- Creates business opportunities
- Tourism can be regarded as one of the main sources of economic impact.

Furthermore, Oberholzer *et al.*, (2010:3) suggest that the greatest economic benefit of tourism is the fact that it contributes to the improved livelihoods of communities. Additionally, tourism is also important for the maximisation of long term stable income through small-scale, high-value tourism opportunities (Oberholzer *et al.*, 2010:3).

Without a comprehensive understanding of the economic benefits of tourism activities, such as whale watching or shark cage diving, along with sufficient information which allows the undertaking of

benefit-cost assessments it is difficult for managers and operators of tourism activities to make an efficient and informed investment decision (Windle & Rolfe, 2014:2).

4.3.2 Economic impact studies on marine tourism

Many researchers have attempted to determine the economic impacts of tourism, specifically marine tourism (Turpie *et al.*, 2005; Dicken & Hosking, 2009; Vianna, Meekan, Pannell, Marsh & Meeuwig, 2012; Cisneros-Montemayor, Barnes-Mauthe, Al-Abdulrazzak, Navarro-Holm & Sumaila, 2013; Orams, 2013).

Turpie *et al.* (2005) conducted research on the economic impact of the whale watching industry of South Africa to determine the profitability and reasons for success or failure of the industry, as well as to estimate the value of the industry. In order to reach these goals, the authors (Turpie *et al.*, 2005) conducted interviews with the operators of boat-based whale watching operations and a survey of participants. During the time of this study, 25 areas were allocated for boat-based whale watching and 18 permits were allocated across South Africa, with the Western Cape possessing 14 in total (Turpie *et al.*, 2005:25). The results indicate that 79% of income is generated by whale watching, while 21% are generated by other activities undertaken by the operator, such as marine eco-tours, accommodation establishments or restaurants. During the time of this study, prices for whale watching trips varied from R150 to R650, which resulted in a turnover of R12.8 million (Turpie *et al.*, 2005:26). According to Turpie *et al.* (2005:27) individual permit holders generated over R200 000 from whale watching trips only. Based on these findings the authors (Turpie *et al.*, 2005:31) estimated that the industry for boat-based whale watching generates up to R45 million in tourism expenditure throughout South Africa, contributing up to R37 million to the Gross Domestic Product (GDP).

Secondly, in 2009 Dicken and Hosking (2009) identified the socio-economic aspects of the tiger shark diving industry within the Aliwal Shoal Marine Protected area of South Africa. The authors (Dicken & Hosking, 2009:227) found that a total of R12 405 274 was contributed to the local economy by the tiger shark diving industry. According to Dicken and Hosking (2009:230) this amount is not derived from purely tiger shark diving activities, but tourists participating in this activity also spent money on other aspects, such as going on package holidays or eating out.

In international cases, however, Vianna *et al.* (2012) determined the socio-economic value and community benefits from shark-diving tourism in Palau. According to the authors shark-diving tourism generates up to 39% of the GDP of Palau, which can be translated to US\$85 million (R1.15 million at the time this research was conducted). The authors (Vianna *et al.*, 2012:273) indicate that shark-diving tourism is of immense importance for the GDP of Palau, as it represents the highest contributing industry. Furthermore, the authors (Vianna *et al.*, 2012:274) state that several economic benefits are also derived from shark-diving tourism, such as higher employment rates, dispersion of

revenues, generates taxes to the government and a multiplier effect is identified which results in further dispersion of revenues and job creation.

According to Cisneros-Montemayor *et al.* (2013:384) a total sum of US\$215 million (R2.9 million at the time this research was conducted) per year is generated by shark watching tourism in 260 sites around the world which have been studied, including China, America and Japan. Globally, however, the authors (Cisneros-Montemayor *et al.*, 2013:385) have estimated that shark watching tourism generates a total of US\$314 million (R4.2 million at the time this research was conducted), which supports over 10 000 jobs annually. In terms of the global whale watching industry, the authors (Cisneros-Montemayor *et al.*, 2013:386) state that more than UD\$2 billion (R40.5 billion at the time this research was conducted) is generated annually with the potential for further growth. According to the numbers, it is clear that whale watching tourism generates a higher income than shark tourism, although both these industries are highly profitable and shows potential for further growth.

Orams (2013) identified the economic activity derived from whale-based tourism in Vava'u Tonga. Important economic benefits have been identified by Orams (2013) include the fact the whale-based tourism in Vava'u, Tonga, is the highest contributing economic factor, with a total direct expenditure of US\$ 4.6 million (R62 million at the time this research was conducted). The total whale-based tourism business expenditure in the community was calculated at US\$300 000 (R4 million at the time this research was conducted) per season and whale-based tourism therefore generated a total of US\$5.2 million (R70 million at the time this research was conducted) per season. Orams (2013:489) state that the results of the calculations estimate a total of US\$600 000 (R8.1 million at the time this research was conducted) direct expenditure on whale-based tourism in 2009, of which 54% was spent on trip fares.

From these studies it is clear that shark- and whale-based tourism are big economic contributing factors to the global economy. As stated by Orams (2013:490) a clear growth can be seen in the industries (shark- and whale-based tourism) in general, therefore resulting in further potential for growth.

4.4 ENVIRONMENTAL CONSERVATION

Conservation is seen as the sustainable use of natural resources, such as water, plants, animals, soil and minerals (Saayman, 2014:59). The loss of conservation leads to two viewpoints, namely an economic loss and an aesthetic loss. Conservation includes maintenance of parks, wilderness areas, historic sites and wildlife (Saayman, 2014:59). Natural resources can be divided in renewable or non-renewable resources, from where it is further subdivided, as shown in Figure 4.4 (Saayman, 2014:59).

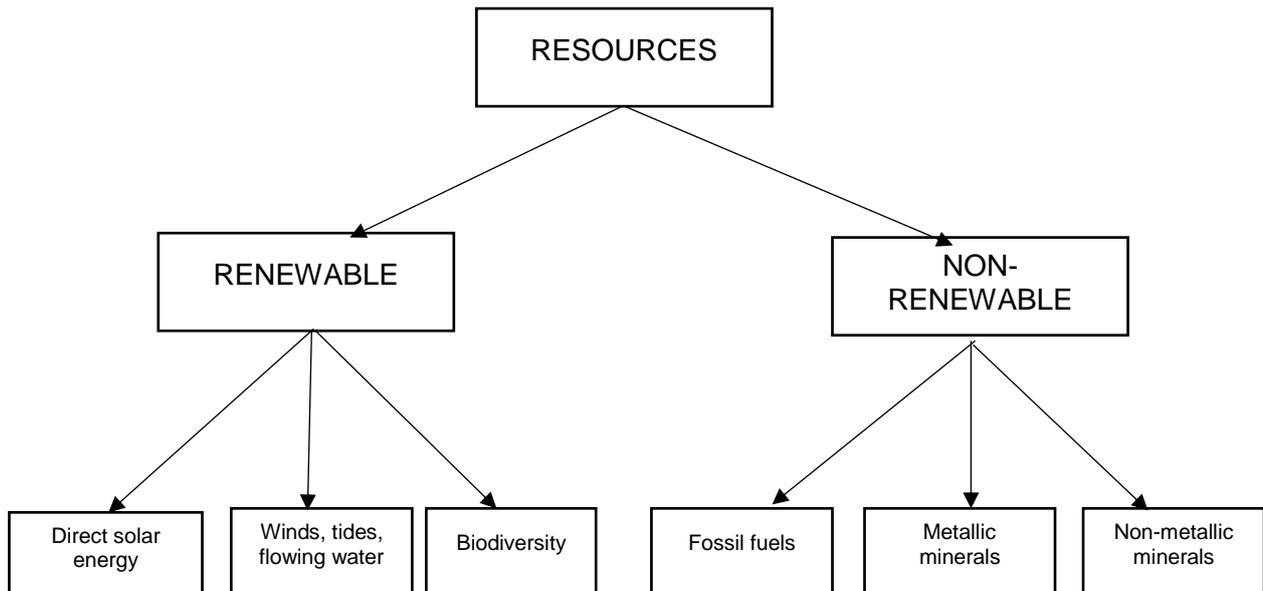


Figure 4.4: Renewable and non-renewable resources

(Source: Saayman, 2014:59)

Renewable resources are resources which can be maintained indefinitely by careful management and pollution control (Saayman, 2014:59). Renewable resources include wildlife and natural vegetation of all kinds, including soil and water (Saayman, 2014:59). Shark cage diving and whale watching is dependent on renewable resources, which include whales and sharks, for the survival of the sectors. On the other hand, non-renewable resources are resources which cannot be replaced, or can only be replaced over extremely long periods of time (Saayman, 2014:59). These resources include fossil fuels (coal and natural gas) and metallic and non-metallic ores.

The term 'environment' can be defined as the external surroundings in which an organism lives (Stout & Green, 1986:212). In contrast, Fuggle and Rabie (1996:84) see the environment as a concept involving a multitude of elements, namely:

- Natural environment (biodiversity): involves renewable and non-renewable natural resources, such as water, air, soil, plants and animals. In a stricter sense, though, it is the natural world in its pure state. The ocean in which shark cage diving and whale watching activities take place is the natural environment.
- Spatial environment: this concept involves both man-made, landscapes and natural areas, for example suburbia, towns, mountains and provinces. The towns of Gansbaai and Hermanus, with the harbour, ocean and surrounding landscapes forms the spatial environment for shark cage diving and whale watching activities.
- Sociological or social environment: the people living in the area, such as families, groups and societies. The community of Hermanus and Gansbaai provides the sociological environment.

Biodiversity can be best explained as the sum of all the different species of plants, animals, fungi and microbial organisms which live in a variety of habitats on earth (Guitierrez *et al.*, 2005:13). Each of the species found in a particular environment is uniquely adapted to its surroundings (Guitierrez *et al.*, 2005:13). All living organisms within that particular area, along with their interaction with the physical and environmental factors, make up the ecosystem (Guitierrez *et al.*, 2005:13). According to the United Nations Environment Programme (UNEP) merely 1.7 million species are known to man world wide while an estimation of 10-100 million species exist which is not yet identified (Ryan, 2012:10). Therefore, it is clear that the number of identified species are well under the actual number in existence (Ryan, 2012:10). A reason for this is the fact that methodologies vary as well as the inconsistency of data collection (Ryan, 2012:10). A healthy ecosystem is of utmost importance to life on earth seeing as it enables species to respond to environmental change as well as fulfilment of important functions, such as birds pollinating plants (Guitierrez *et al.*, 2005:13).

Communities are dependent on biodiversity for the provision of food, shelter and medicine. Therefore, with the majority of species identified to humans it is essential that one help maintain biodiversity across the world (Ryan, 2012:10). To ensure that conservation of the environment takes place in sustainably, the following principles are discussed: marine conservation, forest conservation, conservation of grazing lands, wildlife conservation, soil conservation and carrying capacity.

Marine conservation

One very successful method in which conservation of the marine environment can take place is the establishment of marine parks, or marine protected areas (Orams, 1999:80). Marine protected areas (MPA's) have been defined by various researchers (Dixon & Sherman, 1990:8; Fabinyi, 2008:898; Baker & Roberts, 2008:180; Page & Connell, 2009:645). According to Dixon and Sherman (1990:8) a MPA is any area of the marine environment which has been given special status to aid long-term protection on part, or all, of the natural and cultural resources found in the specified area. In 2008 Fabinyi (2008:898) proposed that MPA's are established by multiple organisations over the course of several years with a system of user fees, such as Shark Alley and Dyer Island in Gansbaai. Furthermore, Barker and Roberts (2008:180) suggest that MAP's provide a focus for conservation management and regulatory oversight of visitor activities which is welcome from the perspective of environmental management. Lastly, Page and Connell (2009:645) added that a MPA is a water-based reserve with protective policies in place for the protection of marine life.

From these definitions it is clear that the goal of MPAs is to protect and conserve marine resources in all forms for the long term. The following characteristics can therefore be identified from the above-mentioned definitions:

- MPAs should provide opportunities for long-lasting protection of marine resources, including natural and cultural resources (Dixon & Sherman, 1990:8).

- MPAs are established to protect and maintain biotical values, to ensure ecological sustainability, while maintaining options for human utilisation (Harriot, Davies & Banks, 1997:173).
- MPAs should provide opportunities for conservation of the marine environment while allowing recreational activities to be conducted to the extent that it is compatible with conservation of the natural environment (Davis, Banks, Birtles, Valentine & Cuthill, 1997:260).
- Supervised marine activities should be welcomed, but the focus should remain conservation of marine resources and sustainable environmental management (Barker & Roberts, 2008:180).

Industries such as shark cage diving and whale watching are heavily dependent on areas such as MPAs because that is usually where whales and sharks are found in abundance (Davis *et al.*, 1997:260). Within South African waters three MPAs have been declared, namely Tsitsikamma Nature Reserve along the Garden Route, Western Cape, De Hoop Nature Reserve near Cape Agulhas, Western Cape and Dwesa Nature Reserve in the Eastern Cape. Although the shark cage diving and whale watching sites in Gansbaai have not been proclaimed a MPA, it has been proclaimed protected sanctuaries for seabirds (such as the African Penguin and other rare and endangered species), great white sharks, whales and the Cape Fur Seal colony on Dyer Island (Marine Dynamics, 2017).

The establishment of marine parks can facilitate both protection of marine resources as well as provision of recreational opportunities (Orams, 1999:80). The designation of a no-take marine protected area is seen as an extreme method, but allows for undisturbed areas where the removal of marine life is not permitted, such as that of Cape Rodney to Okakari Marine Reserve at Leigh, New Zealand (Orams, 1999:80). On the other hand, a marine park can also be managed with the focus on management of the publicly owned area instead of the management of marine resources specifically, for example Hauraki Gulf Maritime Park (Orams, 1999:81).

Forest conservation

Three fundamental principles can be identified in terms of forest conservation, namely protection of growing tree crops from fire, insects and diseases, proper harvesting methods and the complete use of all trees harvested. Firstly, the protection of trees from fire, once seen as a destructive, are now implemented as a measure of control. Some tree species, such as timber trees, require the implementation of fire control methods in order to successfully regenerate. To implement this effectively, though, it is necessary to look at aerial spraying, proper cutting cycle and slash disposal (Saayman, 2009:60).

Secondly, proper harvesting methods should be implemented, which ranges from the removal of trees to the removal of selected mature trees as well as the provision for reproduction. The rate and frequency of cutting trees should be implemented sustainably to ensure production over an undefined period of time (Saayman, 2009:60).

Thirdly, technological advances, such as wood pressing and gluing, have ensure that all parts of a trees can be used, including branches, defective logs, small trees and inferior trees. Management practices and policies for the use of wilderness areas and commercial forests will become more intense as the demand for recreational use of forests increase (Saayman, 2009:60).

Conservation of grazing lands

In order to maintain the healthy growth and reproduction of plants in an area, principles of range conservation can be implemented. This can be done in the form of utilising only a portion of the annual forage plant production of a particular zone. In addition to dividing the area up into certain zones, each zone is stocked with an appropriate number of animals, which can be nourished properly on the forage usable. The number of animals permitted to graze in each zone must only be permitted to do so during the appropriate season and only animals appropriate for the type of zone should be permitted. The reasoning behind the implementation of conservation ranges is based on a programme which is designed to improve depleted areas in the form of natural reproduction or artificial seeding (Saayman, 2009:60).

Wildlife conservation

Through careful management, wildlife can be maintained as an important biological, economic and recreational resource. The basic principle pertaining wildlife conservation is the ability to provide adequate natural food and shelter for maintenance of the populations of species within a specified habitat. Aspects which pose a threat to wildlife conservation initiatives involve the following: drainage, agricultural activities and urban expansions can destroy habitats, fragmentation of habitat, illegal trade in animal by-products, such as feathers, ivory and rhino horn and exploitation of the hunting industry (Saayman, 2009:60).

Soil conservation

Soil conservation is implemented for various reasons, amongst which is the fact that soil is used for agricultural purposes, cultivation and production and reproduction of plant species. Several methods have been identified which contributes to the conservation of soil. The first of which involves the zoning of land according to capability classes. Secondly, soil conservation can take place in the form of soil building plants in crop rotations. Thirdly, cultivation methods that leave a litter or trash cover on the surface is used for land development (Saayman, 2009:61).

Carrying capacity

Carrying capacity refers to the maximum use of a site without causing damage to the environment, resource, reducing visitor satisfaction or impacting negatively on society, the economy or culture. Being essential to the environment, it is difficult to determine the carrying capacity of an area, but it is essential for the development and planning of recreational activities in an area (Saayman, 2009:61).

4.4.1 Positive impacts of tourism on environments

According to Archer, Cooper and Ruhanen (2005:79) tourism can have a positive impact on the environment. As much as negative impacts arise from tourism, positive impacts can be maximised in order to ensure sustainability and improvement of the natural environment. Archer *et al.* (2005:79) and Guitierrez *et al.* (2005:88) and George (2015:367) state that the following positive impacts can arise from tourism:

- **Voluntourism:** this new concept stems from the words *volunteer* and *tourism*. Many tourists make use of opportunities in countries such as South Africa, to volunteer their time for the benefit of the environment. Voluntourism opportunities exist in the form of rehabilitation of animals and the environment and marine volunteers.
- **Clean up tourism:** clean-up projects are being organised, such as beach clean ups and coral reef clean ups, which benefits the environment because litter and pollution is removed from the environment.
- **Income generated for conservation:** tourists can contribute to conservation by paying entrance fees to marine national parks, concessions, taxation, grants, traveller donations and participation fees.
- **Economic alternatives:** by providing alternative means of making a living for local residents, over-fishing, over-harvesting, poaching and hunting can be eliminated. This can be done by offering local residents job opportunities in the tourism environment, such as tour guides, boat crew and managers in the operation. Negative impacts on the environment will then be eliminated.
- **Environmental conservation:** tourists expect scenic, pristine and natural surroundings while at a destination. This leads to the host community taking care of the natural environment to ensure that these expectations are met, therefore conservation is practiced.
- **Conservation of historical buildings and derelict land:** tourism can generate income for the restoration and maintenance of historical buildings. These buildings could otherwise have fallen to ruin, but due to the tourism activities at a destination, buildings can be restored and maintained to serve as visitor attractions. Similarly, urban landscapes can be developed into tourism attractions, such as Green Point Park in Cape Town, which was developed into an urban park for the 2010 Fifa World Cup Soccer.
- **Wildlife protection:** parks and game reserves are established as a means of protecting wildlife, while at the same time providing attractions for visitors.

These impacts can be seen in light of the marine environment as well. For example, tourism taking place in marine environments, such as the case of shark cage diving and whale watching, can generate enough income to aid conservation of sharks, whales and the environment. This can take place through raising awareness of the animals and the environment amongst participants and by increasing sales of items such as locally made jewellery, souvenirs and coffee shops or restaurants.

Gansbaai (a partial location for this research) is a good example of where tourism contributes to protection and conservation of the marine environment. Due to the cape fur seals living on Dyer Island, the area has been proclaimed a marine protected site (Marine Dynamics, 2017b). This means that tourism activities, such as marine ecotours, can take place in the area, but regulations have been implemented to help protect the seals. These regulations include no swimming, fishing, diving, or docking at the island (Marine Dynamics, 2017b).

Furthermore, coral reef clean-up missions have increased over the past few years due to the increased awareness amongst divers, especially, of litter that is thrown into the ocean. Litter, such as plastic bags, bottles, packets and paper, are thrown into the ocean and have detrimental impacts on the coral reefs and the animals. Coral reef clean-up missions therefore help to remove the litter, while raising awareness for environmental friendly practices.

4.4.2 Negative impacts of tourism on environments

Humans as well as natural processes have an influence on the environment (Guitierrez *et al.*, 2005:13). Where humans alter ecosystems, such as through creation of agricultural lands, natural events have caused extinction of species (Guitierrez *et al.*, 2005:13). Over the past 50 years, though, the rate of extinction of species have increased dramatically where the main causes include the following human activities (Guitierrez *et al.*,2005:13):

- Exploitation of natural resources: such as fish stocks in the ocean and trees in forests
- Draining of wetlands and clearing of forests and grasslands for agricultural use
- Introduction of harmful, invasive plant and animal species into ecosystems
- Releasing of pollutants
- Poaching of animals, unsustainable hunting or illegal trade in wildlife.

Davenport and Davenport (2006:280) identified negative impacts on marine environments and divided these impacts into two categories. Firstly, negative marine environmental impacts can arise due to the number of tourists in an area and their demands, while secondly, negative impacts can also arise from individual, often novel, forms of transportation (Davenport & Davenport, 2006:280). According to Davenport and Davenport (2006:281) the following negative impacts on marine environments, specifically, can be identified:

- Coastal transport infrastructure: the rise in demand for transportation has led to an increase in coastal infrastructure development, which increases habitat loss and fragmentation.
- Cruise ships and ferries: illegal discharge of substances, anchoring in tropical waters and dredging channels for larger vessels has led to damage to coral reefs.
- Intertidal trampling or collection disturbance: by walking in the intertidal zone, turning rocks over or searching the rock pools for food can cause declines in algae and barnacles and loss of mussel beds. This causes the community structure of the rock pools to change as mussel cover is replaced with algal turf.

- Beach cleaning: by removing naturally deposited debris, such as coral and kelp washing up on shore, decreases sandy shore biodiversity immensely. Living inside the debris that washes up is a variety of marine and terrestrial vegetation, such as isopods and larvae. Which attracts predators, gulls and scavenging terrestrial animals to the beach.
- Marine ecotourism: activities such as whale watching and shark cage diving, if too heavily demanded by tourists, can cause negative impacts such as disturbing wildlife patterns and breeding habits and disturbance in marine mammal behaviour and acoustic activity.

According to Davenport and Davenport (2006:285) marine ecotourism often follows the 'self-destruct theory of tourism'. This theory implies that an attractive natural environment will be developed for an upscale exclusive market who have minimum requirements but are willing to pay top prices (Holder, 1988). Thereafter, competition will increase as other developers become aware of the area, causing mass tourism at the destination. The result is that the original market moves on to unspoilt areas, while the quality of the environment decreases with the increase in tourism to the area (Holder, 1988; Davenport & Davenport, 2006:281).

Aside from the above-mentioned causes, Tovar and Lockwood (2008) state that tourism in general has significantly contributed to the degradation of the environment. Poor preparation to receive and manage tourists has caused damage to the natural and socio-cultural environments (Lee & Brhamasrene, 2013:71). These negative impacts have led to the growing concern for conservation and preservation of natural resources (Lee & Brahmasrene, 2013:71).

Causes of biodiversity loss

According to Fennell (2015:98), biodiversity is valued on a number of levels, which can either be directly or indirectly. Directly, humanity impacts on biodiversity through food production, medicine and other industrial products (Fennell, 2015:98). Indirectly, though, humanity impacts through ecosystem services such as water purification, climate regulation, aesthetically (which concerns the loss of species and landscapes) and ethically (humanity has the responsibility of protecting species and individuals from destructive actions) (Fennell, 2015:98).

One of the biggest causes of biodiversity loss is climate change (Saayman, 2014:62). Climate change leads to instability and vulnerability of ecosystems, especially where other causes of biodiversity loss add or remove stress (Saayman, 2014:62). According to O'Riordan and Stoll-Kleemann (2002) the following forecasts are made in terms of the impacts of climate change:

- Migration of plants and animals will increase at a rate faster than humans are possible to adapt
- Species will become stressed and more threatened as a result of being sensitive to temperature and precipitation patterns
- Extinctions will increase dramatically
- Adaptions through gene banks, special reserves, transference corridors and zoos will contribute to extinctions. Although this might prove costly and ecologically ephemeral

- Polar ice caps melt as a result of temperature increases, causing sea levels to rise and endangering marine animals such as Emperor Penguins, Polar Bears and Seals
- Coastal environments could be critically endangered due to increased salt incursions as the sea level rise
- Behavioural changes are identified amongst marine life due to temperature increases and melting of the polar ice caps
- Insect pathogens and migration will adversely affect human health in ways which are bound to impact more on those whom are vulnerable, suffer from diseases, suffer from immuno-deficiency and those with least access to healthcare
- Natural mechanisms of response, adaptation, migration and opportunism may be impaired.

Overharvesting is a function of inappropriate property rights, false price signals, rigged markets, unequal power relations, criminality and lack of knowledge regarding the future tragedy of losses (Saayman, 2014:63). Overharvesting is a result of inequality and poverty which drives people to overexploit lands (Saayman, 2014:63). This leads to the break-down of traditional mechanisms for recreating, sharing and protecting resources (Saayman, 2014:63). Furthermore, overharvesting is also a function of wealth accumulation driving the poor to more desperate measures and onto ecological marginality (Saayman, 2014:63). Overharvesting takes place in marine environments in the form of fishing. In a country such as South Africa where fishing plays an economic role within a community, overharvesting leads to the depletion of fish stocks (Venter & Mann, 2012:1). According to Venter and Mann (2012:1) the Dwesa-Cwebe Marine Protected Area, Eastern Cape, has been established in 1991 as a no-take park. As a result of illegal fishing within the park, it has been suggested that park management authorities should rezone the park in order to allow for subsistence and recreational fishing (Venter & Mann, 2012:2). Due to the depletion in fish stocks, it has, however, been strongly advised against as a measure to preserve marine life (Venter & Mann, 2012:2).

Another reason for biodiversity loss is habitat loss and alteration (Saayman, 2014:63). Due to urbanisation and a greater need for more products and services, the resilience and survival capabilities of species are impaired (Saayman, 2014:63). Lastly, pollution of water, ground and air contributes to biodiversity loss (Saayman, 2014:63). The pollution stems from travelling methods of tourists (Cruise ships), use of energy, carbon offsets and carbon neutrality (Buckley, 2012b:531).

Seeing as a large portion of negative impacts stem from the fact that tourist activities are directly dependent on natural resources and the natural environment, tourism development is not likely to contribute to conservation of the environment (Lee & Brahmastre, 2013:71). That is, unless sustainable environmental conservation practices are implemented (Lee & Brahmastre, 2013:71). If such practices are implemented, tourism can contribute to conservation by raising awareness for the importance of the environment and educate the public on environmental-friendly practices. According to Gossling and Hall (2006) the effects of negative global environmental changes have been visible since 2006, while more dramatic changes are anticipated. Such negative changes

include, amongst others, climate change and extinction of species such as the black rhinoceros (Lee & Brahmašrene, 2013:71). Environmental changes have, in turn, an impact on a whole range of tourism destinations, such as mountain regions and coastal areas (Schott, 2007:258).

4.5 SOCIAL EQUITY

Today, more than ever, travelling for the sake of travel is easier than ever before due to a rise in the standards of living, changes in the age population composition, the increased levels of educational attainment, improved communication, increased social consciousness of the welfare and activities of people across the world and globalisation (Saayman, 2012:78). Therefore, an increase in tourist numbers are visible to multiple destinations across the world due to the need of people to experience environments unfamiliar to them in terms of geographical, personal, social and cultural differences (Saayman, 2012:78).

Fennell (2007:47) states that social impacts are amongst the most prominent topics in tourism research, along with the ecological and economic impacts of this diverse industry. A vital aspect of successful and sustainable tourism development at any destination is the support and positive attitudes of the local residents. Tourism plays a significant role in the lives of community members due to the provision of income generation for locals and visitors, thereby enhancing the image of the community (Saayman, 2012:78). In essence, tourism can be seen as a vehicle for improving social relationships in surroundings, for attaining relationships with one another, for strengthening abilities to comprehend one another and also for the well-being of community members (Kurtzman, Zauhar, Ahn & Choi, 1998:2). According to Doiron and Weissenberger (2014:22) dive tourism acted as a vehicle for improvement of the social situation of the island community of Honsuras. The community of this island has been enjoying improved social circumstances since the 1980's when dive tourism was introduced (Doiron & Weissenberger, 2014:22). The negative side of this development on the island is the fact that immigration became a problem. Many foreigners immigrated to the island and took employment opportunities from the community due to the increased awareness of Honduras as a destination (Doiron & Weissenberger, 2014:22).

The unique interaction taking place between tourists and the host community leads to certain social impacts relating to the change in value systems, individual behaviour, social relationships, lifestyles and modes of expression and community structures (Page & Connell, 2009). These changes can result in either short-term or long-term changes and can either be positive or negative for the community (Saayman, 2013:148).

The following section presents a literature review of issues and theories relating to the social impact of tourism on the host community. The aim is to analyse the term culture and the social impacts of tourism and to discuss the theories and models identified by various researchers concerning tourism's social impacts.

4.5.1 Analysis of the concept “culture”

Culture refers to a way of life of a particular group of people and their behaviour patterns, values and perceptions of themselves as well as the world (Saayman, 2012:79). According to Reisinger and Turner (1998:534) certain differences are visible between different cultures. These cultural differences are differences between groups of people who do things differently and hold different perceptions of the world (Reisinger & Turner, 1998:534). These differences can be the main cause of differences in behaviour and the interpretation of behaviour which in turn, ends in miscomprehension of other cultures (Reisinger & Turner, 1998:534). Furthermore, Saayman (1999) suggests that culture entails the knowledge, experience, meanings, values, attitudes, religion, concept of the self, concept of a relationship, hierarchy of status, role expectations, spatial relationships and time concepts commanded by a group of people transferred from generation to generation, through individual and group aspirations.

The question therefore remains: where does culture fit in with the society and what does culture do for the society. Culture can be seen as the “glue” keeping people together and the following factors have been identified in answer to the question raised above (Saayman, 2012:79):

- It enables communication between groups of people or individuals through a learned and commonly shared language
- Culture makes it possible to anticipate how others in a society are likely to respond to one’s actions
- Culture provides standards for distinguishing between what is considered right and wrong, ugly or beautiful, reasonable or unreasonable, tragic and humorous, safe and dangerous
- Culture provides methods for training children to behave in certain ways generally considered appropriate according to the society
- Culture provides the knowledge and skill necessary for meeting sustenance needs
- Culture enables one to identify with other people of similar background and to think in terms of social “we” in addition to the personal “I”.

In order to understand the socio-cultural impacts of tourism, it is necessary to further analyse the concept by discussing the host community, the role of the community in the tourism industry as well the positive and negative impacts tourism have on the host community.

4.5.2 The host community

The local community of a destination can be regarded as the centre of the tourism product (Saayman, 2013:151). The term ‘host community’ refers to residents, or people, staying at or near the tourism location or in close proximity to the location. They are the people most likely to understand the tourism product and the impacts due to the fact that they live in the tourism area (Orams, 1999:65). The term is derived from the word *communions*, which means ‘to share a common task together’ and it is in this sharing of tasks that people are capable of reaching greater heights than they thought

possible. The host community includes residents, traders and lobby groups along with public authorities such as councils, transport services, police services, fire brigades and ambulance services (Stamboulis & Skayannis, 2003:36).

Three elements are identified of which the community consists (Saayman, 2013:149):

- **The local economic system:** this is the system providing the livelihood for residents of the tourism destination. Included in this system are all economic activities along with the tourism industry, such as the local supermarket in Hermanus.
- **The local residents:** these are the people giving the community its human content. They are the operators of the services and facilities needed for tourism to be successful in the community. For example, permanent residents of Hermanus.
- **Community infrastructure and services:** these are the facilities enabling the community to live and operate in the area. Included are roads, power utilities, telephone services, water and waste disposal services as well as police and fire services.

The success of a tourism destination is to a great extent reliant on the support of the community, particularly where financial assistance is required (Jago, Chalip, Brown, Mules & Shameem, 2003:32). The role of the community within the tourism industry is one of importance but lacks recognition (Saayman, 2013:149). It is important for the residents of a host community to recognise and take ownership of the impacts of tourism. Residents of the host community have experience with the impact of tourism on their lives which results in valuable knowledge for future tourism development in the area (Reisinger & Turner, 1998:534). According to Saayman (2013:149) the role of the host community in tourism can be summarised as follows:

- Tourism provides current and future opportunities for community cultural development and direction for communities
- The value systems of individuals united by shared customs, images, collective memories, habits and experiences are reflected through tourism
- The host community can contribute to a successful sustainable tourism industry, but the community can only be involved if they have the desire to be
- Residents should be employed as guides or guest speakers due to the fact that they often are very knowledgeable about local attractions
- Local resources are to be explored which previously might have remained unnoticed or protected by independent organisations or lost amongst the complex social workings of the community
- If local residents see themselves as an integral part of the tourism interest, their interest and support will have a positive impact on the visitors to the area
- Awareness regarding community resources and expertise and can be raised through the interaction between planners, local business and the general community. This interaction also facilitates social links between groups of people whom have been unrelated in the past

- The local residents' expertise on the available resources in the area also aids in the identification of possibilities for development and in general it serves as encouragement for a stronger interaction between existing community organisations.

Furthermore, it is important for the development of tourism at a destination, such as the case of Hermanus, to be compatible with the values and expectations of the host community in order to ensure that local residents do not view themselves and the community as being exploited (Williams, Hainsworth & Dossa, 1995:12). Through ensuring the well-being of the local residents it can be ensured that the satisfaction of tourist experiences will contribute to a positive image of the destination, which in turn influences the decision-making of tourists (Saayman, 2013:150). If for any reason the community comes to the belief that tourism is the cause of negative social and environmental impacts this can result in the interaction between tourists and the community to become damaged (Hall, 2000). In turn this will influence of the community to shift from being friendly and welcoming to a negative image (Hall, 2000).

Influencing the community to adopt a positive outlook on the tourism is easy in the case of once-off events, such as the Olympic Games or, in a South African setting, the FIFA Soccer World Cup (Saayman, 2013:151). It is not as easy though to encourage a positive attitude amongst the community towards annual events (such as a national arts festival) or seasonal destinations (such as coastal town experience an increase in tourists over holiday periods) (Saayman, 2013:151). Therefore, it is important to realise that tourism can have both positive and negative impacts on the host community (Saayman, 2013:151). The following section discusses the positive as well as the negative impacts of tourism on the host community.

4.5.3 Impacts of tourism on the host community

Even though the impact of tourism on the host community can be viewed as extensive in most cases, it is important to remember that tourism acts as a medium for social change rather than being the cause itself (Saayman, 2013:159). The changes or impacts on the community is brought on through the interaction between the members of the community and the visitors (Saayman, 2013:159). A host community can act as an attraction itself, in the sense that cultural art and craft works, music, dance and religion can attract a very specific type of tourist (George, 2012:302). The degree to which these impacts will influence the community is dependent upon several factors, namely (George, 2007:203):

- The degree of contrast between the tourist-generating country and the destination (or the receiving country) in terms of culture and economic development. The greater this contrast is, the more significant the impact will be on the host community
- The type of tourist which the destination attracts: for example, a tourist partaking in a packaged tour are more likely to busy himself with Western amenities, while an explorer-type tourist will want to experience the local culture and environment

- The demographic structure of the tourists (where they originate from)
- The scale of tourism involvement
- The visitor-resident ratio
- The level of development of the tourism industry at the destination
- Level of tourism infrastructure available
- Seasonality of tourism at the destination
- The extent of foreign ownership.

According to George (2007:301) the above-mentioned factors will have an influence on the scale of the impacts caused by tourism on the host community. These impacts can be both positive and negative. When evaluating the negative impacts which marine tourism can have on a community, the example of the islands of the Caribbean should be kept in mind (Orams, 1999:63). The community of the Caribbean has revolted against destination managers due to over forty beaches being allocated for the specific use of tourists (Orams, 1999:65). Aside from this problem, residents were further impacted in terms of loss of traditions and cultures (Orams, 1999:65). The following can be identified as negative impacts of tourism on the host community (Orams, 1999:65; George, 2007:301; George, 2012:304):

- **Crime:** Tourists are susceptible to crime for various reasons as they are considered to be 'easy targets'. It is assumed that all tourists carry with them various items of significant value, such as cameras, iPods and significant amounts of money. In 2014, in the Quarterly Newsletter of Hermanus, it is stated that crime in the town has increased, due to increased numbers of tourists (Ratepayers Association Hermanus, 2014:2).
- **Prostitution and sex tourism:** tourists leave behind their moral and social restrictions and thus will be willing to indulge in activities considered as immoral in their home environment. Many European destinations (Amsterdam, Hamburg and Soho) as well as various places in South Africa (Green Point and Durban) have become notorious sex destinations.
- **Gambling:** destinations offering gambling as an activity to visitors are often associated with criminal activities, such as begging and prostitution.
- **Rural-urban migration:** tourism's effect can lead to the younger generations leaving their traditional activities in order to seek employment in cities or urban areas.
- **Health issues:** tourists travelling from one destination to another may bring various kinds of diseases into the destination, affecting residents of the local community, such as HIV/AIDS, sexually transmitted diseases and the H1N1 flu virus.
- **The demonstration effect:** local residents will adapt and change their values, beliefs and behaviour to imitate those of tourists. This will occur where there is notable contact between tourists and residents on a superficial and short-lived basis. An example is that of Antigua, where local residents of the beach destination transitioned from traditional values to a 'western-style materialism', in other words the loss of a cultural identity.

- **Conflicts between tourists and residents:** as tourism to an area increase, so does the levels of pollution, noise, water consumption and litter, bringing with this rise in unwanted happenings (such as prostitution and drunkenness), conflict between tourists and residents as well as overcrowded beach areas and traffic problems. In a South African marine tourism context residents of small holiday towns such as Hermanus and Gansbaai experience traffic congestion and price increases during summer months when marine tourism is most popular, this leads to many residents making their way to other destinations, such as Cape Town, during peak season when the Whale Festival is hosted.
- **Language:** the use of the vernacular language will decrease as the level of tourism to an area increases due to the fact that tourists and residents communicate with each other using an international language, such as English, German or French. New words or phrases will also be introduced into local vernacular.
- **Commoditisation:** the culture of a destination is transformed into a commodity as the demand for cultural activities or goods by tourists increase. Commoditisation of crafts, art and cultural performances or dances may be experienced.
- **Staged authenticity:** residents of a community will stage performances for tourists of cultural dances or traditions, making the tourist feel as if he is viewing/partaking in an authentic cultural activity, such as Zulu tribal dances at shopping centres. Hermanus makes use of a whale caller during the Hermanus Whale Festival. The whale caller used to serve the purpose of calling whales closer to the shore by means of a horn. Today however, the whale caller serves more as a tourist attraction with whom tourists can take photos.
- **Facilities being closed down to local residents:** in areas where marine tourism is highly popular situation might arise where public facilities, such as beaches, are closed down to locals in the sense that an entrance fee is charged. This can result in the local residents feeling excluded from the tourism industry.

Aside from these negative impacts influenced by tourism, many positive impacts can also be identified, such as those stated below (George, 2007:303; George, 2012:305).

- **Preservation of culture and heritage:** experiencing a culture at a destination can often be a major attraction for tourists and one of the reasons why they visit the destination. Revenue accrued from tourism at the destination is often put towards preservation of heritage and cultural landmarks, such as Robben Island, South Africa. In a marine tourism context, this can refer to maritime museums (Diaz Museum, Mossel Bay) or naval bases (Simon's town, Cape Town). Within the community of Greater Hermanus the Old Harbour Museum serves to preserve the fishing culture of this town (Vogelgat Private Nature Reserve, 2017).
- **Renewal of cultural pride:** tourism can boost a community's pride when residents experience an interest amongst tourists in their rituals, ceremonies and beliefs. An example is that of Swodana Bay, KwaZulu-Natal, where local residents experience high volumes of tourists each

year. Aspects residents are proud of include the area enveloped by the St. Lucia Wetland Park, world class scuba diving sites and beaches.

- **Promotion of peace and cross-cultural understanding between tourists and locals:** due to direct contact between the different cultures meeting at a destination (tourists and residents) stereotyping can be dispelled, thereby promoting a culture of peace and understanding between different cultures.
- **Improved infrastructure for the community:** infrastructure such as roads and buildings are a necessary to meet the needs of tourists at a destination. Tourism often leads to improvements in roads, telecommunications and public transport which not only stimulates growth in tourist numbers but also benefits local residents. During the years 2015/2016 Hermanus experienced improved infrastructure in terms of roads, water and sanitation, solid waste assets, storm water assets, building assets and community facilities (Overstrand Municipality, 2015:39). This has led to improved conditions for the community of Hermanus.
- **Provision of community facilities and public services:** additional facilities, such stadia and tourist information centres, can often be the result of growth in tourism to an area. While these facilities and public services are established primarily for tourists, local residents also benefit from being able to use it. For example, Hermanus has implemented multiple programmes for the local community, such as the sport and recreation programme (Overstrand Municipality, 2015:42). This programme aims to offer residents of Hermanus a place to practice various sport genres, such as netball, soccer, cricket, tennis and golf. The local municipality has thus ensured to provide these facilities for the different sport genres to be practiced (Overstrand Municipality, 2015:42).

4.6 SOCIAL IMPACT MODELS

The following section is a discussion on the relevant models explaining the social impact of tourism. These models have been identified as important to the knowledge of what social impacts activities such as whale watching and shark cage diving can have. Models which are discussed include: Butler's Model of Intercultural Perception, Doxey's Irridex Model, the Lifecycle Model, the Social Exchange Theory, the Social Representation Theory and Smith's Model of Cross-cultural Contact. For the purpose of this study, social impacts can be described as changes brought about in a community regarding norms, values and structures due to an increased amount of other cultures passing through the community and coming into contact with the local community members, which can result in positive or negative alterations in the way of life of individuals or the community (Scholtz, 2014:36). The models discussed below all provide relevant information pertaining to how such changes are brought about, or which factors act as stimuli for certain changes.

4.6.1 Doxey's Irridex Model

Doxey (1975) developed a model in order to assess the interactions and relationships between the community of a tourism destination and tourists to the destination (Fennell, 1999:100; Kuvan & Akan, 2005:691; Hall & Page, 2006:161; Holden, 2006:153; Cooper, 2007:13; Saayman, 2013:153). The aim of the model is to describe the changes in behaviour and attitude of the members of the community as the destination moves through the tourism growth cycle (Saayman, 2013:153).

Doxey (1975) states that during the early stages of development the host community will welcome visitors warmly and with enthusiasm. The tourism industry is seen as a provider of employment opportunities, increased household income as well as an improved standard of living (Saayman, 2013:153). From the visitors' perspective, they are appreciative and respectful towards the traditions and lifestyles of the local community (Saayman, 2013:153).

As the tourism industry develops and visitor numbers increase, contact between the local community and visitors become more formal and commercialised (Saayman, 2013:153). The tourism industry, in this particular stage, is taken for granted and residents develop an apathetic attitude towards tourism (Saayman, 2013:153). With a further continuation of development, residents' tolerance thresholds are exceeded because of increased congestion, increase in prices and perceived threats to the culture (Murphy & Murphy, 2004). This marks the turning point of residents' apathy towards annoyance as residents feel the cost of accommodating tourism is exceeding the benefits drawn. After annoyance, residents become antagonistic towards visitors and open hostility to tourism facilities and visitors can occur (Jennings & Nickerson, 2005:128). The tourism industry is blamed for economic and social problems which the local community suffer during this stage (Saayman, 2013:154).

Doxey has realised, though, that not all residents would develop similar negative reactions and the attitudes of residents will vary according to certain factors (Murphy & Murphy, 2004). Table 4.2 is a summary of the four stages through which communities move (Kuvan & Akan, 2005:691; Saayman, 2013:154).

Table 4.2 Doxey's Irridex

STAGE	DESCRIPTION
Euphoria	This is the initial phase of development. Visitors and investors are welcomed by the community and little planning or control is practiced
Apathy	The local community take visitors for granted and contact between residents and visitors becomes more formal and commercialised. Planning is mostly concerned with marketing the destination

Annoyance	The destination's saturation point is reached and residents have misgivings about the industry. Policy makers attempt solutions by increasing infrastructure
Antagonism	Irritation with visitors are openly expressed by the community and visitors are being blamed as the cause of economic and social problems. Planning is now in the remedial phase, but promotion is increased to offset deterioration of the destination

(Source: Saayman, 2013:154).

4.6.2 Butler's Lifecycle Model

To understand the changes through which a destination progress from the moment of introduction, it is necessary to look at Butler's Lifecycle Model.

Butler (1980) adapted the original Lifecycle Model to one which is applicable for tourism destinations (Saayman, 2013:151). Butler states that all tourism destination will pass through seven different stages during its evolution as tourism destination. These stages include exploration, involvement, development, consolidation, stagnation, decline and rejuvenation (See Figure 4.5) (Saayman, 2013:152).

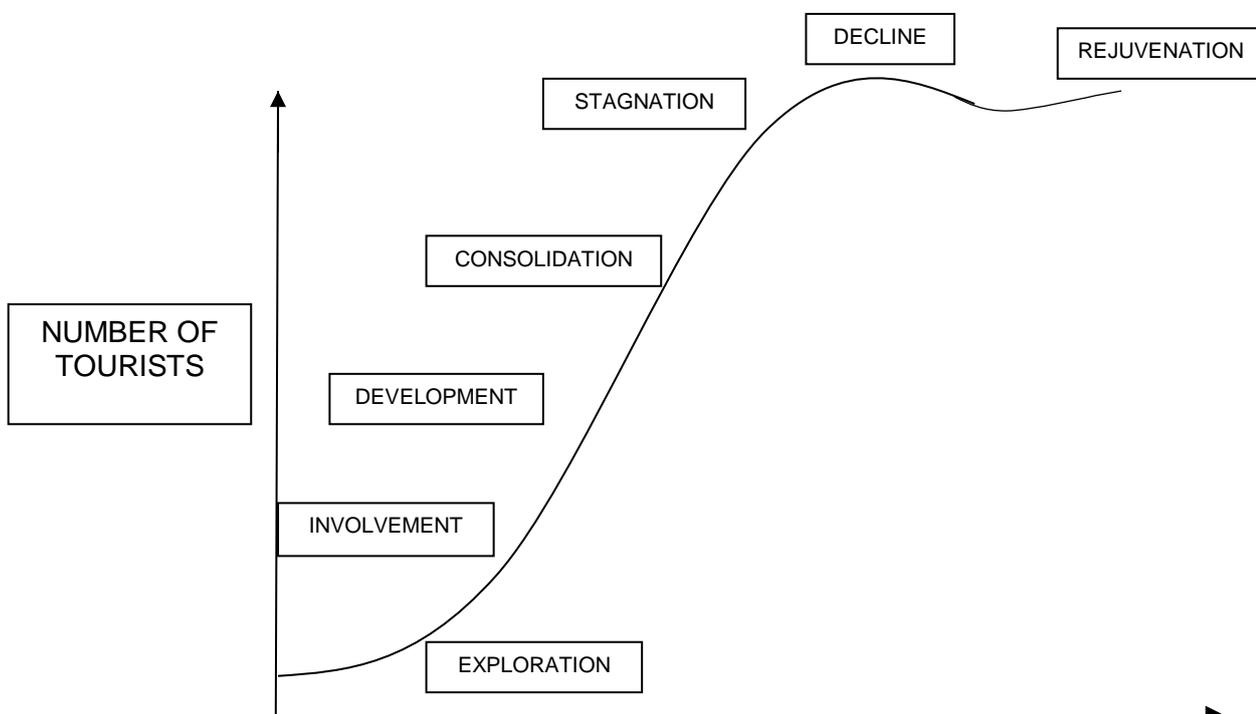


Figure 4.5 Butler's Lifecycle model

(Source: Butler, 1980)

Each of these seven stages has its own set of characteristics (George, 2014:517):

- **Exploration:** a small number of tourists visits the area because independent travellers just discovered the area as a tourism destination
- **Involvement:** a transition from exploration to involvement takes place due to the fact that entrepreneurial activities, word-of-mouth recommendations and reviews are in circulation about the destination
- **Development:** the destination is transformed from a relatively unknown destination to a fully developed destination or resort
- **Consolidation:** the rate at which tourist numbers to an area increases drop and the exclusivity and uniqueness of the destination is lost
- **Stagnation:** tourist arrivals to the destination has reached its capacity and the destination is no longer part of the trends in the market
- **Decline:** the destination starts to lose tourists to competing destinations and repeat visitors are no longer coming back to the destination
- **Rejuvenation:** once a destination has entered the stage of decline it is still possible to rejuvenate the destination through the development of new product offerings or identification of a new market to enter into.

Butler's model is based on eight elements which aims to explain the growth, change, limits and intervention of tourism in an area (Saayman, 2013:152). These elements include (Butler & Boyd, 2000):

- **Dynamism:** The tourism environment is very dynamic and constantly changes
- **Process:** Changes in a destination go through an extreme process of development where the community should be involved in
- **Capacity or limits to growth:** If visitor numbers exceed the capacity of the destination, satisfaction levels of visitors will decline
- **Triggers:** Triggers are factors which can initiate change in a destination, such as innovations
- **Management:** The destination should be managed holistically, aside from facilities and resources being managed individually
- **Long-term viewpoint:** Looking to the future from the beginning will ensure avoidance of declination
- **Spatial components:** A new destination would begin as a result of a spatial shift of development because development at a specific destination has stagnated
- **Universal applicability:** The model can be applied globally, to any destination.

According to Rodriguez, Para-Lopez and Yanes-Estevez (2007:60), this model highlights the importance of management and control in order to overcome potential difficulties and negativities. Aside from the benefits which the implementation of this model can hold for tourism destinations, George (2014:520) suggests that there are three limitations to this model. The first limitation is that

it is difficult to specify within which of the stages a destination is at (George, 2014:520). Secondly, it can be misleading to apply the model to a destination in its entirety seeing as one of the area can be declining whilst another area at that destination could be in the development phase (George, 2014:520). And lastly, the model is more useful as a diagnostic tool than a predictive tool (George, 2014:520). It is important to note that some destinations might reach a particular stage faster than other destinations, or the destination might stay in a particular stage for a longer period of time (George, 2014:520).

4.6.3 Dogan's Framework

In contrast to Butler's and Doxey's models, which focus on the attitudes of residents towards tourism in a community, Dogan's framework focuses on residents' reactions to tourism impacts (Cordero, 2008:38). According to Dogan (1989:220) residents will adjust themselves to particular conditions. The framework consists of four stages, namely adoption, boundary, maintenance and resistance (Zhou & Ap, 2009:79; Cordero, 2008:38; Dogan, 1989:220). Communities will move through these four stages in order to cope with the impacts generated by tourism. It is therefore stated that this framework implies that the extent to which tourism impacts are perceived as either positive or negative will influence residents' reactions to lean towards either acceptance or resistance (Cordero, 2008:38).

As with the social exchange theory (discussed below), this framework implies that the more positive residents' perceptions are towards the impacts of tourism, the more accepting their reactions will be of the tourism industry. On the other hand, the more negative residents' perceptions are, the more residents' reactions will be become resistant (Dogan, 1989:220). This framework further states that any of the four stages may occur in any phase of tourism development (Cordero, 2008:38).

4.6.4 The Social Exchange Theory

Ap (1990) developed this theory based on the identification of the community's perceptions of the impact of tourism as well as how these perceptions are measured. The theory is behavioural in nature which attempts to understand as well as predict the reactions of community members in an interactive situation (Ap, 1990). It is seen as an examination of large-scale issues and challenges through the investigation of smaller scale social situations (Stole, Fine, Cook, 2001:410).

The social exchange of resources is essentially an exchange of goods, which can involve material goods as well as non-material goods (such as prestige and status). Ap (1990) is of the opinion that people who give also try to receive and those who receive are under pressure to give in return. The theory states that what is given by one person is seen as a reward to the person receiving (Ap, 1990). The theory is further based on fact that when the difference between the cost and the reward reaches a maximum, the less a person's behaviour will change (Scholtz, 2014:38).

The possibility of this theory is based on the fact that humanity has developed intellectual and emotional motivations which directs their behaviour towards cooperation instead of towards any forms of unfair behaviour (Wischniewski, Windmann, Juckel & Brune, 2009:306; Ward & Berno, 2011:1558). Figure 2.6 is an illustration of the model for the social exchange theory (Scholtz, 2014:38).

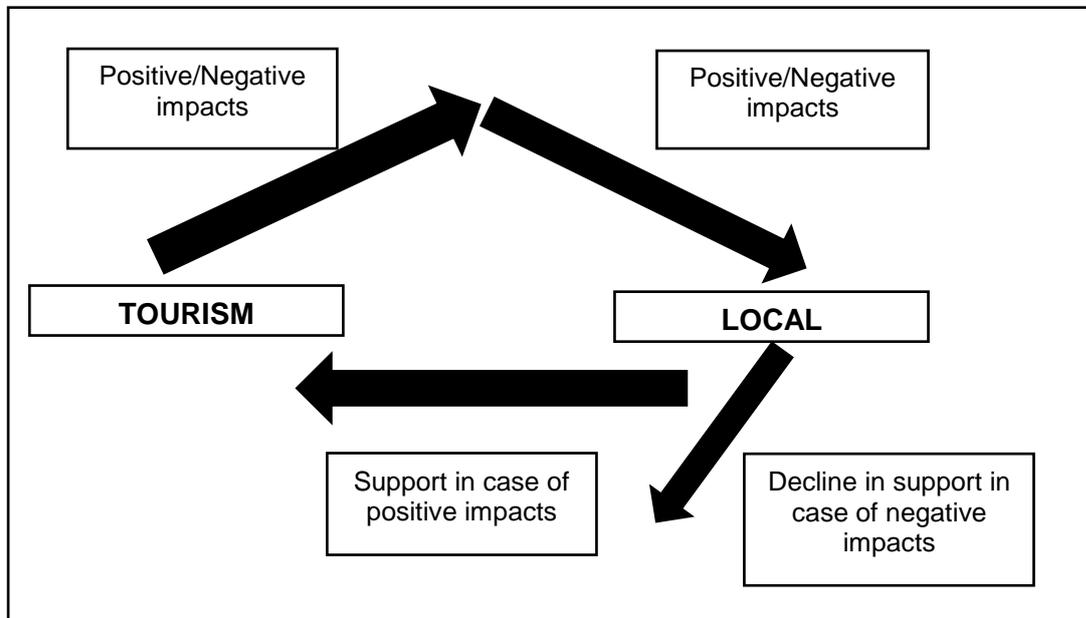


Figure 4.6: Social exchange theory

(Source: Scholtz, 2014:38).

The model illustrates the fact that tourism can have both a positive or negative impact on the local community. As shown, if the impacts generated are positive, residents will return the favour by supporting the tourism industry (Scholtz, 2014:38). If, on the other hand, the impacts are negative, residents' support towards the industry will decrease and the industry can result in failure (Jurowski & Gursoy, 2004:297).

According to Ward and Berno (2011:1556), this model lacks theoretical sophistication and should thus be used together with other social impact models. Although, Bignoux (2006:619) states that the social exchange theory is more complex and innovative, due to the following reasons:

- Both economic and non-economic exchanges are taken into account
- The theory states that exchange is voluntary
- Exchange is not guaranteed
- The process of exchange takes place in the social system
- The theory emphasises social relations and personal ties, shaping the exchange of tourism resources.

4.7 LITERATURE ON SUSTAINABLE MANAGEMENT FRAMEWORKS

Multiple authors have established sustainable management frameworks for tourism sectors, such as frameworks for management of tourist interactions with cetaceans (Higham, Bejder & Lusseau, 2009), for involvement of stakeholders in sustainable management (Waligo, Clarke & Hawkins, 2013) and for parks management (Hermann, 2015). Below follows a discussion on the sustainable management frameworks as identified above.

Higham's Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals

Higham *et al.* (2009) established an integrated and adaptive management framework to address the long-term sustainability of tourist interactions with cetaceans, such as whales and sharks. This framework highlights the need for a multi-stakeholder involvement for management purposes in such a way that it contributes positively to the sector. The framework is based on four research platforms, namely social sciences research, tour operators, planning and management agencies and natural science research. The authors (Higham *et al.*, 2009) divided the management of tourist interactions into two phases. The first phase is known as the pre-tourism phase and highlights the importance of aspects such as development of legislation, community support, licensing systems, the target market, permits issued, operator guidelines, monitoring criteria and control sites. During this phase emphasis is placed on policy, planning and management agencies to establish legislation and regulation for managing the interaction between tourists and marine animals. The second phase, named the tourism phase, places emphasis on visitor satisfaction, visitor perceptions, effectiveness of environmental education, organisation, modification of commercial operators, active management decisions and data collection (Higham *et al.*, 2009). The authors (Higham *et al.*, 2009) state that ongoing research is important for the effective management of animal-tourist interactions. This framework further indicates the integrated relationship between the four research platforms and how each platform can contribute to the management of tourist-animal interactions. Figure 4.7 is a visual diagram of the framework established by Higham *et al.* (2009).

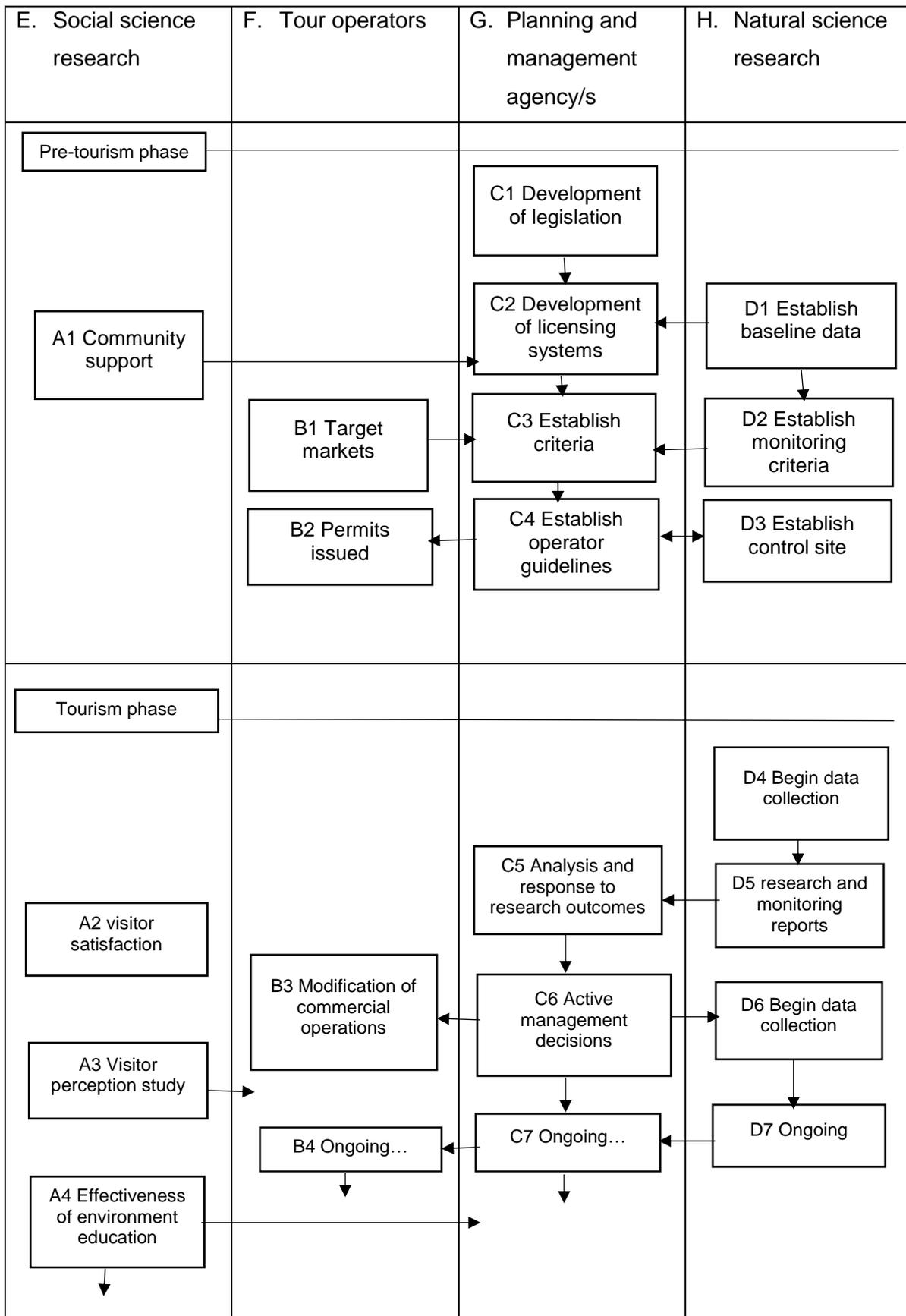


Figure 4.7: Framework for the integrated, dynamic and adaptive management for tourist interactions with marine animals

(Source: Higham *et al.*, 2009).

Waligo's multi-stakeholder involvement management framework for sustainable tourism

Waligo *et al.* (2013) developed a multi-stakeholder involvement management framework for sustainable tourism. The aim of the framework is to address key stakeholder-related issues while involving stakeholders in sustainable tourism management practices. The framework is divided into two parts. Firstly, it suggests three strategic levels for stakeholder involvement in sustainable tourism management, namely attraction, integration and management. This part of the framework identifies the strategic decisions that should be considered by sustainable tourism stakeholders and operators to adopt a stakeholder approach to implementing sustainable tourism (Waligo *et al.*, 2013). The second part of the framework consists of six stages that are embedded in the three main decisions highlighted in the first part. The six stages consist of scene-setting, recognition of stakeholder involvement capacity, stakeholder relationship management, establishing objectives, influencing implementation capacity and monitoring stakeholder involvement. Figure 4.8 represents the framework established by Waligo *et al.* (2013).

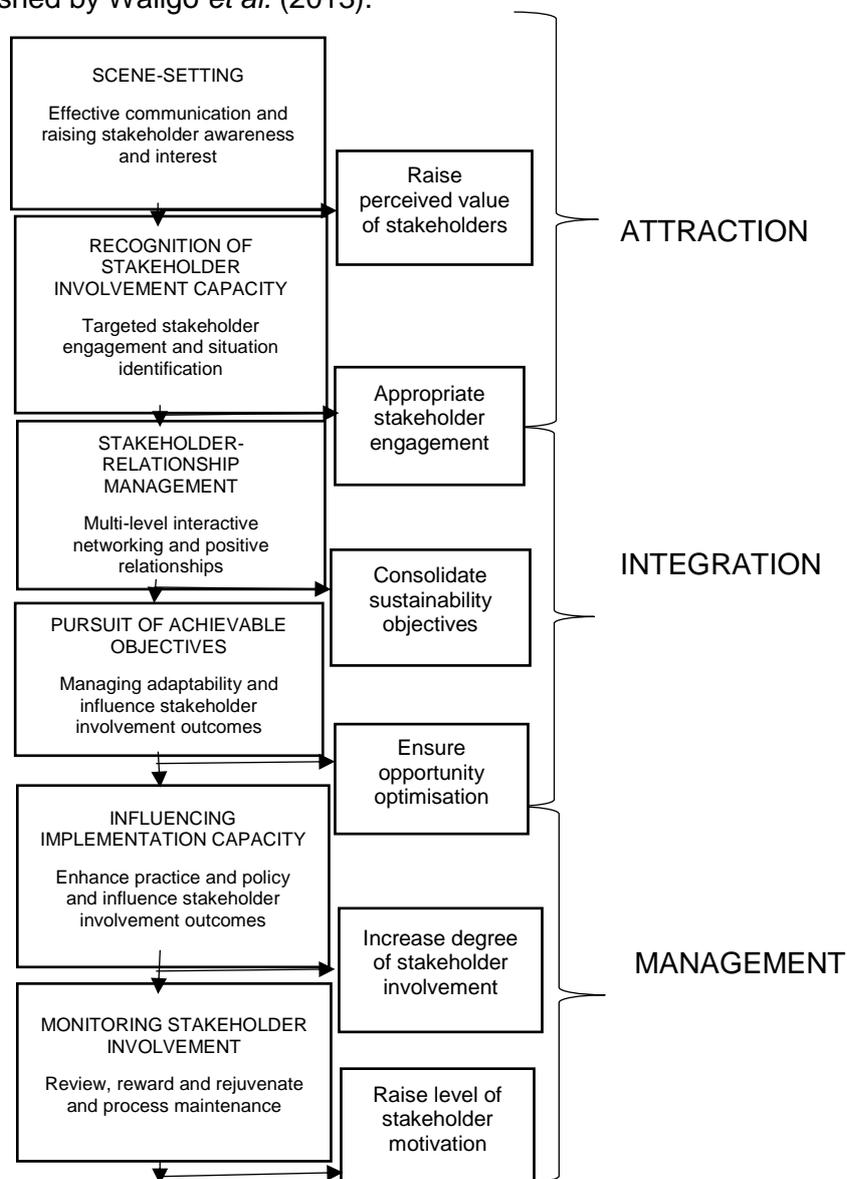


Figure 4.8: The multi-stakeholder involvement management framework (Source: Waligo *et al.*, 2013)

Hermann’s sustainable management framework for Mapungubwe National Park

Thirdly, Hermann (2015:213) established a sustainable management framework for Mapungubwe National Park (MNP). The framework includes elements of the external environment (uniqueness of the park’s forces and management forces), the internal environment (adaptive planning, adaptive implementation and adaptive valuation) and sustainability forces (local community engagement, sustainable ecotourism management and sustainable environmental management). According to the author (Hermann, 2015:214) the framework for sustainable management of MNP should start with an adaptive planning process which aids establishing the vision and objectives for the park. Next, the plans should be implemented and adaptive evaluation should be conducted. The evaluation process stems from implementation of the objective set during the planning phase. Hermann (2015:214) further identified gaps in the management of MNP, which includes information and accessibility, leisure facilities, human resources, accommodation and ablutions, professional operations, regulations and marketing, environmental impacts, food and beverage management and conservation and socio-economic impacts. The framework is applicable to the study because various elements of management and sustainability are included and should be adapted for use in marine adventure tourism. The concept of adaptive management is the result of continuous feedback to management regarding improvements, which will ensure the successful management of MNP (Hermann, 2015:214). Figure 4.9 is a visual representation of the sustainable management framework developed by Hermann (2015).

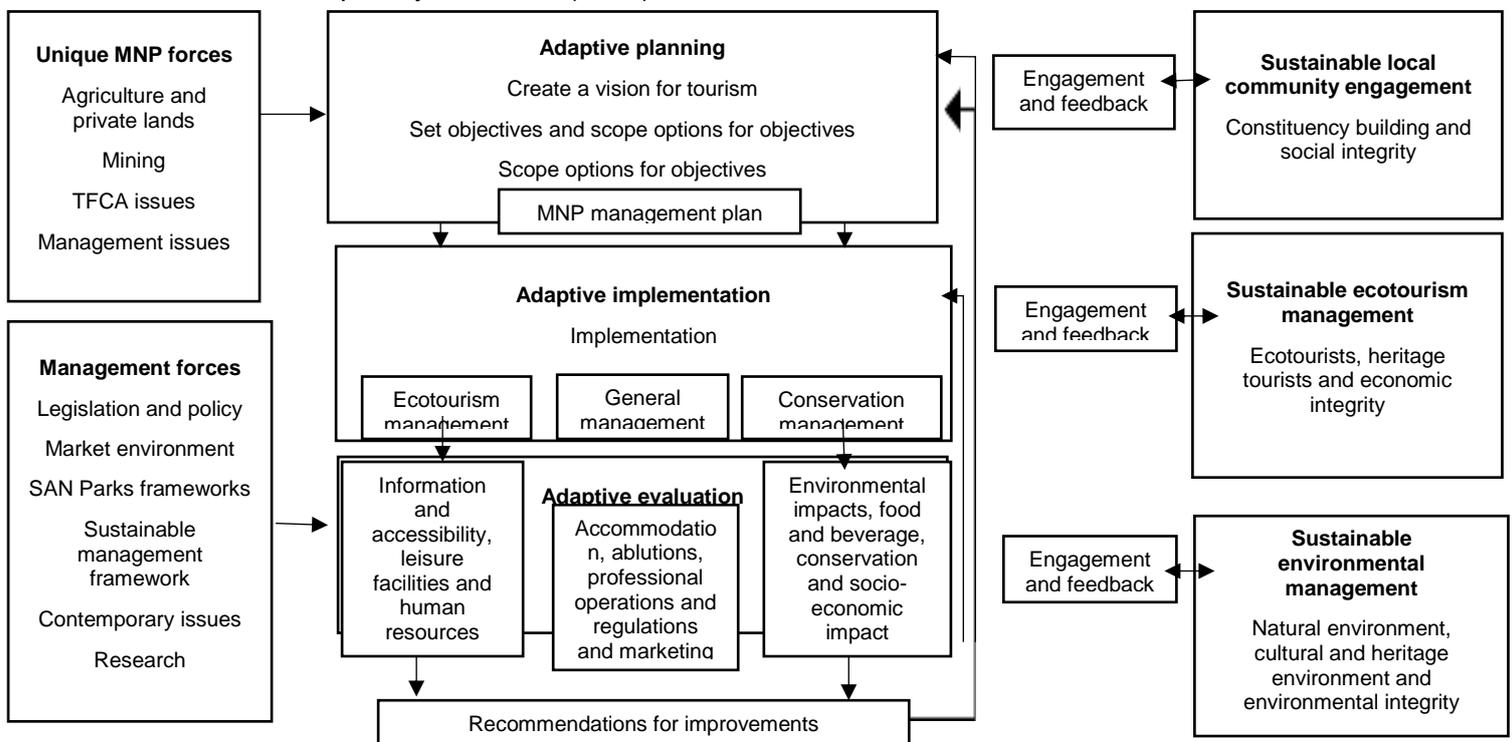


Figure 4.9: A sustainable management framework for Mapungubwe National Park

(Source: Hermann, 2015:213)

³ TFCA is an acronym for Transfrontier Conservation Areas.

From the frameworks discussed above, several key factors for sustainable management can be highlighted. These factors include the inclusion of the local community in tourism activities and operations is important, education and awareness, marketing, management decision-making, visitor satisfaction and regulation in terms of legislation, licensing and permits.

4.8 CONCLUSION

The purpose of this chapter was to analyse the aspect of sustainability in the tourism industry. In order to achieve this goal, the researcher analysed all aspects regarding sustainability, including the economic, environmental and social equity elements along with all underlying aspects.

The first phase of this literature review was to analyse the concept of sustainability. Through assessment and analyses of this concept, full comprehension of sustainability, what it entails and how it contributes to the tourism industry was ensured. Amongst others, the definitions and concept of the term 'sustainability', the positive and negative impacts of sustainability, the difference between sustainable and non-sustainable tourism and interpretations, perspectives and limitations of sustainability were discussed.

The next phase of this review was to analyse each of the elements which make up sustainability, namely economic efficiency, environmental conservation and social equity. In terms of economic efficiency, the economic benefits of tourism and various economic valuation methods were discussed. The knowledge gained through the review of literature regarding the economic efficiency of tourism is valuable because it offers insight into what a tourism activity can offer and monetary benefits which can and should be, derived from tourism.

The discussion on environmental conservation included aspects such as what the terms 'conservation' and 'biodiversity' refer to, along with the differences between renewable and non-renewable resources, the types of conservation found as well as the negative impacts of tourism on the environment. As a result of the concepts analysed for this section of the chapter, valuable knowledge was gained by the researcher in terms of how tourism contributes to the conservation of the environment and the various ways in which conservation can take place.

The last part of this chapter focussed on the discussion on the social equity of tourism. Amongst this discussion, the following concepts were included: an analysis of the term 'culture', an analysis of the host community and the elements of which it comprises, key social-cultural impacts of tourism on the community as well as social impact models and frameworks identified in the literature. The discussion on the various models which describe the complex and variability of a community and social systems, has provided the researcher with a comprehensive understanding of tourism-related elements and factors which may impact the social community where tourism activities are offered.

This chapter focuses on the concept of sustainability, what the literature describes the concept to entail and all underlying factors associated with this concept. This chapter does not, however, discuss the context in which sustainability is to be implemented. For the purpose of this study that

context is marine adventure products. Therefore, the previous chapter focussed on discussing relevant literature pertaining to adventure tourism, while chapter two discussed the concept of marine tourism and management in detail. The next chapter of this study provides a discussion on the empirical results obtained from the qualitative and quantitative surveys.

Chapter 5

Empirical Results

Far and away, the greatest threat to the ocean, and thus to ourselves, is ignorance. But we can do something about that

~Sylvia Earle

5.1 INTRODUCTION

The aim of this thesis was to develop a sustainable management framework for marine adventure tourism products. In order to do so, four objectives were set. The first objective is to analyse existing literature on marine tourism. Through conducting this analysis an understanding of the marine tourism sector can be reached, which can contribute to the establishment of the sustainable management framework for marine adventure tourism products. The results of this analysis were reported on in chapter two. Chapter three ensured that the second objective, which included a literature analysis on adventure tourism, is met, while the third objective, relating to an analysis on sustainable tourism management with the focus on economic efficiency, environmental conservation and social equity, was met in chapter four.

The fourth objective, the empirical results of this research, is met in this chapter. The data is discussed in two sections. Firstly, the qualitative results, which include the data collected from the interviews held with the operators of shark cage diving- and whale watching establishments (Section A). Secondly, the quantitative results are discussed and include the profile of respondents, namely marine adventure participants (shark cage and whale watching) and residents of Hermanus (Section B). Section C discusses the results obtained from the exploratory factor analyses, while section D discusses the results obtained from the cluster analysis and the cross-tabulations. Figure 5.1 below summarises the stages in which the results are discussed.

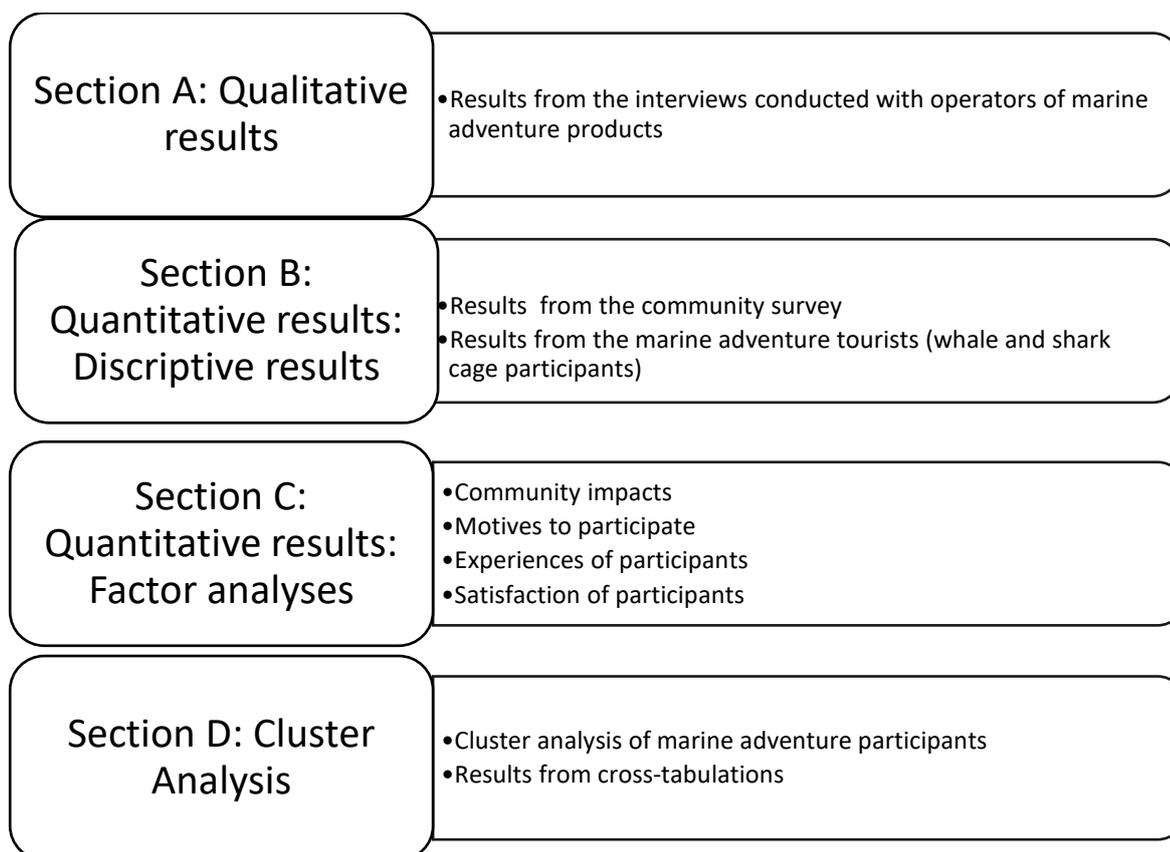


Figure 5.1: Outline of chapter

5.2 SECTION A: QUALITATIVE RESULTS

As discussed in chapter one, the qualitative data was captured by means of personal interviews. These interviews were conducted with four different whale watching- and shark cage diving operators in the Hermanus and Gansbaai area, Western Cape. Eighteen questions were asked during the interview, including the number of years they have been in operation, the target market, marketing tools used and questions pertaining to the sustainability of the industry. The four interviews were recorded by means of a Dictaphone and transcribed by the researcher. The following section discusses the results obtained from the personal interviews.

5.2.1 Number of years in operation

The average number of years which operators have been in operation in this sector is 18 years.

[Operator 1] *We have been in operation for 20 years.*

[Operator 2] *We are in operation from about 1989, so that is 18 years in practice now?*

[Operator 3] *Whale watching since 2000 and shark cage diving since 2005.*

[Operator 4] *1999, so where does that put us? So we are now 17 or 18 years in operation.*

5.2.2 Number of boats owned and in operation

The average number of boats owned by operators is one. According to regulation operators are only allowed to own and operate one boat per operation. One interviewee is the owner and operator of

both a shark cage diving and whale watching operation, but merely one boat is allocated to each activity, according to the Marine Living Resources Act 18 of 1998 (see South Africa, 1998). This Act has been enforced to allocate an optimal number of permits safely and efficiently, as well as to improve the regulation and compliance of operators in the industry (Marine Living Resources Act 18 of 1998). Turpie *et al.* (2005) stated that operators in South Africa make use of one boat and one support vehicle for their operation, which is in accordance with this study.

[Operator 1] *Only one boat per operator. There are 8 boats in Gansbaai, Kleinbaai area and most of us have been in operation between 15 and 20 years.*

[Operator 2] *We are only allowed one boat. We started with small boats, no spares. We bought another boat, it's still laying down there and now we have the cruiser. We extend it as time goes by.*

[Operator 3] *There is one whale watching boat, capacity 50, one shark boat, capacity 40 and one bird watching boat, capacity 12. And there is a dedicated research vessel.*

[Operator 4] *One boat. You are legally only allowed one boat.*

5.2.3 Number of permanent staff and temporary workers

The number of permanent staff members per operation ranges between 18 and 40 staff members, depending on the size of the company. The average number of permanent staff members is calculated at 25.5 members. The number of temporary workers are much lower, due to the seasonal nature of the sectors. This number ranges from 0 to 50, with an average number of 13.5 temporary staff members. The reasons for the difference in numbers of staff members is due to the fact that the one operator owns both a shark cage diving and whale watching operation and a seabird and penguin rehabilitation centre, all of whom are employed under the same umbrella. According to Turpie *et al.* (2005) many operators in South Africa operate with a select number of permanent staff and employ a limited number of temporary workers, such as one or two, during high season.

[Operator 1] *I've got 23 permanent staff, no part-time workers.*

[Operator 2] *We're not all permanent because it's only seasonal. We are all together 16 now.*

[Operator 3] *That is difficult because we combine the restaurant with all the businesses, even though they are all separate entities. We are about 90. This includes the international marine volunteers. Maybe you should say the total amount of people with the two companies [whale watching and shark cage diving] is maybe 40. And this permanent. The other 50 will be the Great White House, the International Marine Volunteers and the African Penguin and Seabird Sanctuary.*

[Operator 4] *I'd have to double check, but I think we have about 21. Temporary workers in South Africa works for less than 24 hours a week and so, we've got seasonal. So that would be, I think we've got about 2 seasonal workers.*

5.2.4 Role in the operation

Operators who formed part of the survey were either owners or managers of the company. Therefore, 50% were owners while 50% were managers.

[Operator 1] *...because I've had my business for 20 years, I've had people that has been with my business for 20 years. A lot of the other operators will have people that come and go, but my people seem to stay. Because I, number one, look after them. When they are happy, I am happy. And they make my people happy at the same time.*

[Operator 2] *I am the manager.*

[Operator 3] *Owner.*

[Operator 4] *We don't give out titles here, but I would probably be general manager.*

5.2.5 Average price per person for a trip

The average amount per tourist per trip for whale watching equals R850, while the average price per tourist per trip for shark cage diving equals R1700. Prices for whale watching trips have been identified from the literature as R650 per person, on average (Turpie *et al.*, 2005:26). This was identified 12 years ago. Thus, new insights are needed in terms of the average price per person per trip. According to the literature shark cage diving operations, on the other hand, are more expensive due to the nature of the product and is measured at R1650 per person per trip (Marine Dynamics, 2017a). According to Orams (2013:439) a slight increase (more or less R250) in the average price per person per trip for marine adventure activities, such as whale watching and shark cage diving, have been identified over the past ten years. This is indicative of a slight growth in the sector for marine adventure tourism.

[Operator 1] *R1650 per person per trip.*

[Operator 2] *R700 per person is the walk-in price. Kids are half-price.*

[Operator 3] *R1750 for the sharks and R1000 for the whales.*

[Operator 4] *Average price per tourist? R700.*

5.2.6 Number of months per year in operation

Shark cage dive operators are in operation for the full 12 months of the year, while whale watching operators operate for more or less 6 months of the year. The reason for whale watching operators only conducting tours for six months is the fact that the whales are only on the coastline of South Africa between June and November of each year. They come to the coastline to mate and calf. Turpie *et al.* (2005) identified that whale watching operators in South Africa are in operation from July to December, during the time when the Southern Right Whales are along the coastline. Furthermore, the authors have identified the average number of days when whale watchers operate are 126.3 days a year. Dicken and Hosking (2009:227) state that shark diving operations in South

Africa operate from January to December each year. From the results obtained it is safe to assume that whale watching is a seasonal activity, while shark cage diving enjoys year-round operations.

[Operator 1] *Full year around. We are obviously much busier in the European winter, our summer here, much more busy. Although winter time here for use us much more sharks, much clearer water because of the winds and surf and direction.*

[Operator 2] *It is actually from mid-June to mid-December. More or less six months.*

[Operator 3] *Twelve months for the sharks. Six months for the whales. For the rest of the year, January until end of May, mainly end of June, we do eco-trips with the whale boat.*

[Operator 4] *We are nine months of the year in operation.*

5.2.7 Training provided for staff members

According to regulation in South Africa, operators should provide training for staff members in multiple areas of the business, which includes the boat crew and office staff. Operators in the Hermanus and Gansbaai areas adhere to these regulations and staff members' training are kept up to date. According to the Marine Living Resources Act (18 of 1998) training should be provided to all staff members in the areas of health and safety, safety out at sea, first aid and skipper training. All respondents have indicated that their staff members have received the appropriate training.

[Operator 1] *Obviously, the office staff do office training. They do all types of computer training. And then I've got two people that I've just employed full time [to] look after my web page... I've got a marketing girl that runs around. As far as the guys on the boat, obviously you can't just take a boat out. You must go through the courses and be a qualified skipper or a dive master. And then with the skipper and dive master comes the safety and the firefighting, life raft drill, all different drills. And you've got to keep up to date with the. I don't give the course, we go to course and radio operators' course. And my boat staff, which is seven of them, are up to date with them.*

[Operator 2] *The type of training you must have is, first of all, you must be a trained tour guide through a certified facility, so we all are trained. We have six trained guides who work here. You must do some modules, because that is the law. You can't do tours if you don't have the certificate. The guides are all adequately trained. And then the people on the boat also need training. So they are all trained to do health and safety and skipper training.*

[Operator 3] *Aside from what they do, the crew receives special training. The captain, or the skipper, is a well-trained person. You have a dive instructor, I also fight against this because we don't really dive, but you have a diving supervisor on the boat and the crew are all trained in three-day fire-fighting, a pre-sea, a three-day medical aid course and a tourism guide course.*

[Operator 4] *Special training, yes. The boat crew, they all have the required training that they all have to undergo. So we provide all of their sea training that is required. And then, for the office, there's not too much training, it's more in-house, but if there is a course that comes up and then we will provide that. For the boat it is your proficiency in life raft, your pre-sea, your medical, your first-aid at sea and then there is another two or three... But we definitely keep up to date with all our training. We have to, it's required.*

5.2.8 Does the company have a website and is it in operation

All the operators who have been interviewed have operational websites. Participants are able to book a trip, whether whale watching or shark cage diving, on the website. Although none of the operators prefer payment over the website visitors can pay in advance. The reasons for not preferring payment beforehand is due to the changeability of weather and the migratory patterns of the whales. If the weather is not suitable for a trip out to sea, the trips arranged should be cancelled or postponed, which can cause logistical issues for the company in terms of paying customers back. According to Pike (2008:271) a total amount of 64 million users research, plan and book trips and activities online in the USA alone. The management impact of this is the fact that operators should ensure that their websites are kept up to date to ensure the market receives sufficient information about the service and to offer additional information on the marine environment and environmental-friendly practices.

[Operator 1] *We've got a website and they book online, they can actually book a place online, morning or afternoon and pay online. People can also pay on arrival and they can pay cash or credit card, they can pay in advance. We don't like to get money in advance. Reason being, because the weather could change and then they go away and you've got to pay them back or you've got to cancel.*

[Operator 2] *We have a website yes and it is in operation. We can make bookings. You see, because we don't take online bookings because of weather permitting. They can make a booking via email, we send a confirmation, weather permitting. They can pay when they arrive. Otherwise you're going to have a lot of problems with a few days you couldn't go out and you must refund people and it can be difficult to refund people.*

[Operator 3] *Yes. I pay on average, along with the Google Ads between R60 000 and R70 000 a month for the website. It is a very good source for us.*

[Operator 4] *It is in operation. We do take bookings through the website. We take details to secure the booking but payment is done on arrival. It helps with the trips being weather permitted.*

5.2.9 Attendance to marketing shows

The majority of operators do attend marketing shows, such as the Tourism Indaba and the World Travel Market exposition in Cape Town (WTM Africa). These shows are used as a marketing tool to increase awareness of the company, educate people on the topic of conservation of marine animals and to attract tourists to participate in the offering. One operator found the shows do not benefit acquisition of participants to his offering though, but has placed emphasis on the fact he did attend such shows in the past. Marketing shows, such as the Tourism Indaba and Getaway, offer operators the chance to meet consumers and reach new target markets. According to Kapoor, Powell and Abbott (2006:45) an average of 36% of tourism is generated through attendance to marketing shows. As indicated by respondents, attendance to marketing shows form a big part of the marketing strategies of whale watching and shark cage diving operations. Through this attendance, operators have an opportunity to reach out to new and different markets regarding the service offered as well as sustainable business practices. Not only is a competitive advantage gained, but operators can identify which actions are taken by competitors in the industry to improve sustainability.

[Operator 1] *I'm not so good at that. I have been to Indaba. I've been to one or two of them. It costs us nothing but I didn't enjoy it and I don't go to them. I didn't find it very beneficial for the business.*

[Operator 2] *We go to Indaba. When you go to Indaba, more or less, you know, your marketing is wide enough because you are fully booked.*

[Operator 3] *We do WTM Africa, WTM London and Indaba is a given. I have been to Indaba for the past 20 years. And then we have a girl, she just came from Cape Town and she will be staying with us for three weeks. She worked for Fairtrade. She does marketing for us in Europe. So she has already done England this year and she attended ITB⁴. And each year we do a roadshow in England, each year. I was in Holland two or three times already. I just came from England where I attended a roadshow and I go to America every second year.*

[Operator 4] *We do more of the tourism trade shows. So we go to WTM Africa that's held in Cape Town. And then Indaba in Durban. Then there are small international shows we go to as and when they come about.*

5.2.10 Marketing tools, such as direct marketing, that are used

According to respondents traditional marketing tools, such as printed material and brochures, are not utilised as much anymore. Social media, such as Facebook, Instagram and blogs and online marketing is a stronger marketing tool and allows a wider reach of potential customers. Operators

⁴ ITB is an acronym for International Travel Trade show Berlin

will make use of printed advertisements, but preference in general lies with social media marketing, as evident from the responses received through the personal interviews.

[Operator 1] *We do advertise every now and again in booklets and books and things like that. You've got brochures printed, 1000's of brochures distributed. And you've got a place called brochure management. And brochure management take your brochure and they tell you if they put it in this hotel, it's going to cost you R300 a month. They put it here at this hotspot, it'll cost you R300, there it's going to cost you R500 and there it's going to cost you R200. And you can spend thirty or forty thousand rand a month on your brochures being distributed in brochure management kiosks all over South Africa. And you know what we did? We put numbers on these brochures and we said if you return this brochure to us you get a 20% discount. You know how much return business we got? Nil. So that twenty and thirty thousand rand I spend was absolutely useless. So we have through trial and error over the 20 years found that brochures distributed all over the place don't help us either. Giving good service and those two girls [social media marketers], whatever they are doing, it's the best way.*

[Operator 2] *We market ourselves in all of this (shows brochures) and the Overberg. We are in some of the Timing of the Overberg. We are here, we are in Table Mountain and Lion's Head, the botanical gardens. And we have nice information about the Overberg, not just that you go to Table Mountain and see nice information about Table Mountain, but you can also get information about the Overberg. Word of mouth is also good. Some experiences are much better, then you can market something very nice and then you come there, it's a shocker. But yes, word of mouth where people go for experience then they go back and take their phones and say "wow!"*

[Operator 3] *We do direct marketing as well. We go and see the people. I drive to Cape Town every Tuesday and [my marketing manager] chooses the most important people I need to see and I go and see them. And they also go and see important people every day. So it's direct marketing, shows and the web, especially and social media.*

[Operator 4] *Brochures, print magazines, print in flyers, also maps, you know, tourism maps. And we do website, banners, through blogging, with bloggers and yes, that's probably about it.*

5.2.11 Target market

The target markets for the various companies stretched across a wide continuum of markets. Depending on the image which the company is trying to sell to the market, target groups will vary as well. In general, target markets included people from all age groups, occupation, nationalities and backgrounds. The majority of the target markets do originate from international countries, such as Germany, Egypt and Japan. The target markets identified by all four respondents are in accordance

with the profile identified by Dicken and Hosking (2009) regarding the industry for tiger shark diving in the Aliwal Shoal marine protected area, South Africa. According to the authors, the majority of respondents originate from Britain and Germany, they were mostly male with an average age of 67 years.

[Operator 1] *I can mention you names, I mean film stars, the King of Jordan, Saudi Arabian Princes, a list of film stars, rock bands, rock stars, you name them. They all come from all over the world to Cape Town, Hermanus, Gansbaai, to look at the sharks. We've had people that come back for 12 consecutive years. I would think up to, most of them, only come once. Because they come to South Africa, they do the Cape Town thing and next year they come and do Kruger Park. But not many people come for a second time.*

[Operator 2] *We have the Japanese, they are lining up and phoning all the time. So this month, the first of October, is the time they break loose and they come here with buses all the time. So we have the Japanese market and then Germany and we have the Dutch market. The Africans, you know, it is 0.1%, is South Africans. Those who travel is the people who are mostly on pension, 50 years of age or older.*

[Operator 3] *We have done a lot to change the profile of shark divers. We absolutely go for the five-star market. Because we have a bigger boat and because we have a lot of crew members we sell shark cage diving. You can bring your baby along if you are happy. You can be 80 or 90 years old. So a big part of the market is over 50 years of age. The shark dive market is a mix of old, very old and very young. They have a spunk in them to get out of their comfort zones. The whale watchers, on the other hand, like seeing sharks, but they would not go and sit on the shark boat for a day. They are different. They are in general a bit older, more your middle-aged group of participants and well-travelled. They will much rather want to see birds, dolphins and they will see the shark, but they are a softer tourist.*

[Operator 4] *Anybody. It's not a defined target market. It is generally more international, however, we have seen an increase in local tourism over the last three to four years. A lot more people are travelling locally, or doing this, should I say, from the South African market. And the target market, we would have a backpacker to old, old people travelling, like their bucket list trip at 75. So there's no real specific target market.*

5.2.12 Relationship to the Hermanus Whale Festival

The operators, in general, have no relationship with the Hermanus Whale Festival. The general feeling is that the festival does not contribute to an increased number of participants, but the festival does not have a negative impact on operations either. It can therefore be assumed that the Hermanus Whale Festival does not contribute to the livelihood of whale watching and shark cage diving operations in Gansbaai and Hermanus.

[Operator 1] *Because, as I said, 98% of my people [participants] are from overseas. They don't know about the Whale Festival. Hermanus people don't benefit at all. Whale watching and shark watching don't benefit at all. I can do without it completely.*

[Operator 2] *In the past we were part of it and it's mostly a local market. We're struggling to get people here to come onto it and we don't really need local people. It's a festival for locals who come down and eat and drink and enjoy themselves and have a good time.*

[Operator 3] *We have a good relationship, we know the people. But do we get business through it? No. It is of value to me to have people see that there are things going on at Gansbaai, that we are different and that we pay attention to the animals? And we worry about our penguins and we put our money where our mouths are. So that is why we are there.*

[Operator 4] *Do we have any relationship to the [Hermanus] Whale Festival? No.*

5.2.13 Attitude towards conservation fees

The overall attitudes of operators towards conservation fees are positive, but the preference amongst respondents were to inform participants about conservation projects to which they can contribute and thus let participants choose whether or not they would like to contribute towards conservation. All respondents are, however, already contributing towards conservation in some form or another. This includes donating money to a certain cause, conducting their own research or empowering the community to help conserve and protect marine animals. According to Cisneros-Montemayor *et al.*, (2013:381) operators of shark cage diving and whale watching activities have contributed extensively towards the protection and conservation of sharks and whales because operators are contributing to research, conservation and protection of these species across the globe. The results obtained from these interviews are therefore in accordance with literature pertaining to these sectors.

[Operator 1] *We contribute to different shark organisations for the conservation of sharks. I give on a monthly basis and I contribute all over the world to shark conservation projects all over the world. Right here, in Hermanus, we have a shark conservancy. We help them, we work with them. We contribute on a monthly basis for the further education of sharks. So the answer is yes, we do and we will and we do all the time.*

[Operator 2] *It would be difficult to tell people to pay. Like, you go to a Kentucky Fried Chicken and add R2 for charity, okay go ahead. It's something you must tell people. You must first test it and say "well, what do you want?" and I would say "are you prepared to pay extra R2 or R10 for conservation?" then yes, it might go. You have to speak to people. It's all about conservation. And it's a privilege to go out and meet the big animals in the water, they come all the way from Antarctica to mate. I tell people it's a privilege, you know. And you must love nature to go on a boat, because nature can change any time.*

[Operator 3] *I give where it is necessary, as much as is necessary. If the penguins need food, then I buy food for them. If the veterinarian needs to be paid, then I pay it. That is how I contribute to conservation. We have a truck, so if we need to go pick up trash at the beach, we go. We try to get conscientious tourists, which is very easy because the tour agents help out. So if people walk through these doors we know they care about nature, they care about people and they care about the planet. And they give quite easily. They will buy a nest for the penguins, or a block of ocean for R300 as a contribution to research.*

[Operator 4] *We don't have any fees in place that we pay for conservation, so then attitude towards paying towards conservation? Positive. We do support a lot of different conservation entities. We've got a partnership with the local company here in Hermanus, the shark conservancy. They've got interns that come on our boat to do additional research to what we are already doing, just so it's an outside entity as well, so yes, we try and do what we can in a short season towards conservation.*

5.2.14 Management advantage of the company

The general feeling towards a management advantage was centred on a unique element offered by each company. Service stood out as an important aspect, as well as attention to detail and experience. By paying attention to details, such as providing water while out at sea or providing warm jackets while on the boat, delivery of a good service and offering a once-in-a-lifetime experience to participants will result in positive word of mouth and the chances of educating participants on the importance of conserving the marine environment is much greater (Cisneros-Montemayor *et al.*, 2013:381).

[Operator 1] *I am not one to go and put posters and fancy things and all the things. Other people do that but they don't look after the people. If they go to sea they send staff. So you see I'm the other way around, I'm not very good at marketing, but I have a marketing manager. My people seem to stay because, number one, I look after them. When they are happy, I am happy.*

[Operator 2] *Our experience, you know. We've got experienced guys on the water and we're growing. People are reading all the time.*

[Operator 3] *I have wonderful people working for me. And attention to detail. It is the small things that make a difference.*

[Operator 4] *I think it's the service. And also, we started off extremely small. Our first boat was an eight-seater. It's actually our tender now, it's what we use to get to our boat if our boat is on the water. So that was our first whale watching boat. So to go from eight people with maybe one trip and the seasons then, due to an unawareness of Whale watching as an industry, were probably around September to November. So you only did it for two months, probably one or two trips a day. And now we are licensed to take up to 70 000 and to do*

multiple trips a day. The beginning philosophy of the company was to get to know the people by name. We don't work on booking ID's. Yes, we might have given a booking ID, or we might give you a booking ID on our website, but you are a person so your name is Anne or Margaret. And I think that does give us an edge that, somebody will come into the office and we'll remember what they did yesterday and we'll chat about that.

5.2.15 What do you think is sustainability?

Respondents understand the concept of sustainability and each offered an opinion which is related to the three pillars of sustainability, namely economic viability, social equity and environmental conservation. Aspects which were highlighted include educating participants and the community on the marine environment, ensuring harm does not come to the animals and ensuring the sectors are operated in such a manner as to ensure that whales and sharks remain active within the area. According to Chen (2011:10) sectors of whale watching and shark cage diving has contributed greatly in areas such as Taiwan to the conservation and protection of sharks and whales, proving that operators do have sufficient knowledge of sustainable practices and therefore substantiating the results obtained from this research.

[Operator 1] We are not hurting the sharks and we are not harming them. We are educating people and we are also watching our waters to see that no one is hurting or harming the sharks in any way. And if we see hurt or harmed sharks or sharks with big hooks in them, then we are aware and we talk to each other. So we are actually our own policemen of our own industry. And we are doing much more good than any harm. If you had to look at the twenty years of data, we are not finding a decline in the number of sharks. I am not seeing a decline. I am not seeing as many big sharks as I saw ten and fifteen years ago. But the general shark population, or from what I am seeing, is that they remain constant, if not slightly up than twenty years ago.

[Operator 2] Sustainability is the fact that we must have enough passion and like we can sustain ourselves now, we only have a boat now that can take 80. And that is impossible to do that. When there is a lot of boat activity taking place, like the one area where the whales mostly used to be there, they're not there anymore. Give the whales enough rest because you can stay for twenty minutes with a group of whales and then you must move away. We tell the people that the whales' tolerance is only twenty minutes, so we move to another group of whales. And then leave them, let them be. Because they are very curious they will come to you, look at you and stuff, but they also need to come and do their thing.

[Operator 3] My sustainability starts with what I can do in my life. And that is the animals in the ocean. And the entire system with it. Because you cannot look at the animals right in front of you and you don't see what the seagulls are doing, or we are not seeing this bird anymore, or those birds are arriving earlier every year. At the restaurant we have our own

garden which make up 80% of our celery and herbs used for the food. I would prefer our curio shop to be made up of beaded jewellery made by the local community. I want the poorest of the poor to benefit from what we are doing. That is really empowerment. And it becomes a way of life. For your people as well, because you cannot pick up a piece of paper here but throw it back onto the street again.

[Operator 4] *With regards to the whales, unfortunately I don't think we know enough long term to see and whaling happened not so long ago and there was hardly nothing. So yes, there is a growth and the growth is healthy. The Southern Right Whale is actually a victory story of conservation. It's actually an animal that was nearly made extinct through human intervention. And now has grown from strength on strength. Where, you know, there is lots of conservation like the rhino or the cats and then there is problems there. And those problems haven't sort of turned around. Where with the Southern Rights, they have turned around and it's actually great. But, with that said, we don't know enough about their movements. Will there be no whales in Hermanus? No, I don't think so. Will there be maybe less? Possibly. But yes, so then it's the unknown that's a bit worrying there, but as far as sustainability, I think whale watching is also highly regulated in the country. You know you've Australia and America with massive boats and in America you've got cocktail bars, you've got a lunch buffet on the boat. But you're there to do whale watching, not sit and eat a buffet. So the big ferries, you are looking at 100 to 200 plus people going out to go and see whales. And you are also looking at a lot of boats. Some areas you find 8 boats in one area. So with South Africa, we are essentially in most harbours, or in most areas where they launch, there is a maximum of two boats. Sometimes one, Kleinbaai's got one. Where, Hermanus, we've got the maximum amount. We've got three boats, but still there's no other traffic. If you look at Cape Town harbour, loads of boats. They've got boats, ferries, ships, tugs, working vessels, fishing vessels, there's a lot of traffic. Hermanus, that's what you see. Yes there's a couple of fishing boats now and again, then there's the three whale boats. I don't think Hermanus, through vessels, will have an issue. I mean it is pretty sustainable.*

5.2.16 What should be done to keep the industry sustainable?

The general feeling amongst respondents were that regulations and permits should be enforced stronger by the government. Poaching and illegal whale watching have been mentioned as a concern and operators feel strongly toward the fact that the government should enforce the regulation surrounding the sectors more. Furthermore, operators also feel that educating people about the animals will contribute towards the sustainability of the industry. According to Johnson and Kock (2006:52) operator compliance to not feed sharks should be enforced more extensively, compliance information sheets should be displayed by operators and priority should be given to issuing operational permits to the sectors (Richards, O'Leary, Roberts, Ormons, Gore & Hawkins,

2015:208). These findings are in accordance with the results obtained by this research and therefore proves the importance of identifying a sustainable management framework for this sector.

[Operator 1] *Fortunately the government has got certain rules and regulations. But all the money has been used on the wrong places. Even when it comes down to patrolling, patrol boats, officials with Land Rovers and rubber ducks, people knock off at four o'clock because there is no over time. So the poachers go wild and do their thing. Now what happens, because Great Whites are protected, there is a demand for them like there is a demand for rhino horns. There is a tremendous demand for Great White teeth and jaws. Because it is protected it can't be caught and it can't be captured. So there is poaching going on. And nothing is being done because there is no money for the patrol boats to come out and patrol.*

[Operator 2] *Scientists have prescribed how you must approach the whale. You approach them to the eye and lay 50 meters from them. Let them come to you and play for five, ten, or fifteen minutes. They will circle the boat, lift its head up and then you go away. Let them go and you also go away. Do the right thing. From there you must go with no great speed for 500 meters. But you can still take photos as you go because they will put their tails up and you know your time with them.*

[Operator 3] *We already do a lot. But we don't necessarily do enough. If you are a member with Fairtrade and you educate people and spend time on all these things, then the industry will be uplifted. If everybody starts doing little things to draw in a conscientious market the industry in the area will be uplifted.*

[Operator 4] *Well, definitely in this harbour, no additional operators. And then, compliance, you know. We've had encounters this season, the first season ever, of illegal whale watching boats. For the industry to be sustainable, why bother with going through the process and abiding with regulation when any Tom, Dick and Harry can go and do it. So I think that the permits should be enforced. You've got the regulations, so what happens if you don't comply? What happens if there is someone who is advertising whale watching who is not a whale watcher? There needs to be a bit more of a compliance sector.*

5.2.17 What is being done to educate people about the sharks and whales?

The general consensus amongst all operators is the fact a decent briefing is given before the trip starts and a de-briefing afterwards that includes a discussion on conservation of the sector. This informs participants about what they are allowed to do on the boat and what not, what they should expect and how to behave in an emergency. These briefings also educate participants about the animals in question and eco-friendly behaviour. Further actions taken to educate people include the use of marine biologists on board the boat whom will answer questions which participants might have, as well as tour guides who can provide further information for participants on the area. These

findings are in accordance with that of Richards *et al.* (2015:202) whom identified operators across the world to educate participants of shark cage diving on shark conservation.

[Operator 1] *All the way along the line, from the morning briefing, to the safety briefing, to the boat briefing and to the educational briefing, we tell people about the environment. We educate people about what is going on.*

[Operator 2] *It's a 15 minute talk before they go out. I explain to them about the whales that come to our area. I explain to them that the weight of the whales are eighty tons. I would also tell them the length is eighteen meters. I give them the explanation of the [clots] on their heads so that they can be aware of what's going on. I will speak in a way to make them aware, to give them a talk on the whales and in the end, they are more informed.*

[Operator 3] *We actually only have a very good, decent briefing. And we tell the people if they want to know anything they can go onto our website as well.*

[Operator 4] *We can start with before they even get here. Our website's got quite a bit of information, so even they are not joining us they can get some information off the website. So there's a bit of creating awareness for somebody who doesn't even come to the door. Then, once they get to the door, we've got these information boards on the way to the door. Plus we have a life-size whale. So then again, even if they are not going onto the boat, this is open to anyone. So everybody within the harbour can read up this information and then empower themselves. Then, what we do is we have a briefing. The briefing is about 15 minutes long and it covers facts on the Southern Right, what they should expect on the trip and the behaviour of the Southern Right. Then, once they are on the boat we have a tour guide with a microphone. He also walks around and mingle so you can ask one-on-one questions. But, as a whole, he gets a question, he will then say that over the PA system. So the trip itself becomes a bit educational. So it's not just watching what they are doing, it is also learning why they are doing what they are doing. And then we've also got, on any given trip, professional crew.*

5.2.18 Measures in place to look after the environment while on a trip

The operators share similar views, even though each operator highlighted different methods for looking after the environment while on a trip. In general, operators act in a conscientious way when approaching the animals and the way in which trips are conducted. By being an example of eco-friendly and sustainable behaviour, operators are contributing towards sustainability of the industry and increasing awareness of the benefits of the industry. Examples of conscientious acts include removing litter from the ocean when spotted, not approaching animals too closely, not feeding the animals and not staying longer in the vicinity than can be tolerated by the animals. It was identified from these interviews that operators in the Gansbaai and Hermanus areas feel that the sector can be managed in a more sustainable manner. This will involve extensive research on behaviour and

migration patterns, while improving compliance by operators to rules and regulations as well. A study conducted in Vava'u, Tonga, determined that operators of whale watching and shark cage diving establishments are concerned with the sustainability of the sector and have emphasised the need for the sector to be managed more carefully (Orams, 2013:497). A particular need for research on sharks and whales, behavioural elements and the sector over all have been emphasised as a way of improving management activities (Orams, 2013:497). It is therefore clear that the industry is in dire need of a clear management framework which will provide knowledge and understanding for the sectors to be managed in a sustainable manner, substantiating the results of these interviews.

[Operator 1] *A lot of people think we feed sharks or we reward them to perform. But we don't. We present and we pull away the bait. We don't feed them. We borrow them out the environment for a short while, show the people the beauty of the animal, not the monster. Everyone expects the shark to attack the boat or attack the cage. We change the mind-set of the person and so we educate people. If he goes to China, or wherever he's going to go and he sees shark fin soup, or a load of sharks being offloaded, he will know that it is not alright. The shark is not the monster and hopefully we are doing something in the world to educate people, to show people the beauty and the gracefulness and that sharks must be left in peace rather than be caught or killed in any way.*

[Operator 2] *Come together and work together, you see. Give the whales enough rest because you can stay for twenty minutes with a group of whales and then you must move away. Because some of them have a total amount of time with the whales for 2 hours.*

[Operator 3] *That is very good. Do not throw papers around. The way in which we chum as well. We do not use big chunks of chum. We spend a lot of time on the way in which we chum. There is a biologist on board who will tell people about our method of chumming. Our toilettes have special machines which will break whatever is flushed out of the toilette into a million tiny pieces. We do not give people bottled water. Just by doing this we save 17 000 or 18 000 bottles a year. We give them tap water out of a cup.*

[Operator 4] *A lot of the boat's design is to assist with being, well obviously it's got fuel and it's got carbon. But to try and punctuate that there are certain things on the boat, for example. Our propellers are recessed. So even if the whale had to come really close to the boat, there's no chance of it getting hurt. With the boat itself, we could have gone with more rigid and harder lines, however there are no hard lines. The boat is smooth curvature. So if the whale had to come up and rub against the side of the boat there's nothing that could hurt them. And also, inside in the engine rooms we do sound proofing as much as we can to make sure that there is not that much vibration coming from the boat. On the boat itself, our engines are set to reduce our emissions. And we are also actually carbon neutral. What it all means is that when a company came and assessed us, they said our emissions are at a certain point and they then helped us in certain avenues to reduce that as far as possible,*

which we've done. Then they came and did a re-assessment and they said what we needed to do is to give back. So we joined up with Reliance Compost and we have bought a lot of compost this year. So it's our way of, at least what we've taken out, we put back.

5.3 SECTION B: QUANTITATIVE RESULTS OF HERMANUS RESIDENTS AND ADVENTURE MARINE TOURISM PARTICIPANTS

Section B discusses the results obtained from the community survey conducted in Hermanus regarding the Hermanus Whale Festival as well as the marine adventure tourism participants.

5.3.1 Hermanus community results

The following section discusses the results obtained from the survey conducted on the residents of Hermanus, as discussed in chapter one. The sample size consisted of 300 sampling units, but a total of 250 completed questionnaires were obtained. This stage in the process is exploratory and quantitative in nature. The analyses conducted included descriptive statistics, in the form of frequency tables, to identify the socio-demographic detail as well as other important and relevant information. Exploratory Factor Analyses (EFA) (Section C) identified the underlying variance and covariance of the data to identify the aspects which have an influence on residents' attitude towards the Hermanus Whale Festival.

5.3.1.1 Socio-demographic information of residents

The following section of this chapter discusses the demographic details pertaining to the residents of Hermanus. The results are substantiated by visual diagrams of the results obtained.

5.3.1.1.1 Gender

The majority of residents were male (73%), while 27% were female, as indicated in Figure 5.2. This is in accordance with the findings of Giddy (2017:6) who identified that the majority of adventure tourism participants are mainly male.

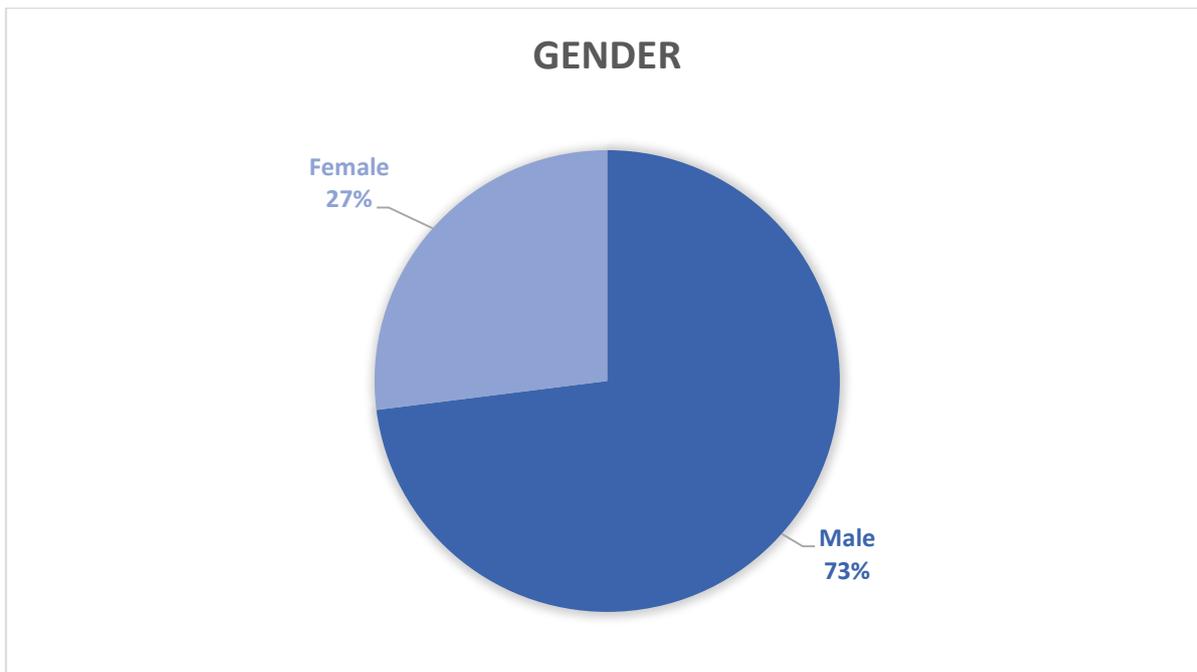


Figure 5.2: Gender of residents of Hermanus

5.3.1.1.2 Age of residents

Residents were asked to indicate their year of birth, from which the average age of respondent was determined. The majority of residents (29%) indicated that they were between the ages of 35 and 49 years, while 26% were between 25 and 34 years of age. The average age of residents in Hermanus was 38.4 years, as indicated by Table 5.1. According to Overstrand Municipality (2010:4), the municipal district in which Hermanus is situated, a large number of residents of the town are between the ages of 15 to 40 years, which corresponds with the result obtained from this research. Therefore, indicating the credibility of the surveys conducted.

Table 5.1: Age of residents of Hermanus

Age Category	Frequency
<19 years	6%
20-24 years	14%
25-34 years	26%
35-49 years	29%
50-64 years	15%
65+ years	10%
Average age	38.4 years

5.3.1.1.3 Occupation

Twenty-seven percent (27%) of residents, as shown in Figure 5.3, indicated that they were sales personnel, while 22% indicated that they were self-employed and 14% said that they were managers. Nine percent (9%) of the residents were working in administration, artists, casual workers, marketers, receptionists, students and writers, 7% were professionally employed, 4% were pensioners, while 2% were employed in the civil service, home duties, or they are unemployed. According to the study conducted by Overstrand Municipality (2010:12), 25% of the community is employed in wholesale and retail, accounting for the largest percentage of residents employed as sales personnel, business owners and managers (Overstrand Municipality, 2010:14). Even though the study is seven years old, the results are still in correspondence with the results obtained from the study in 2010.

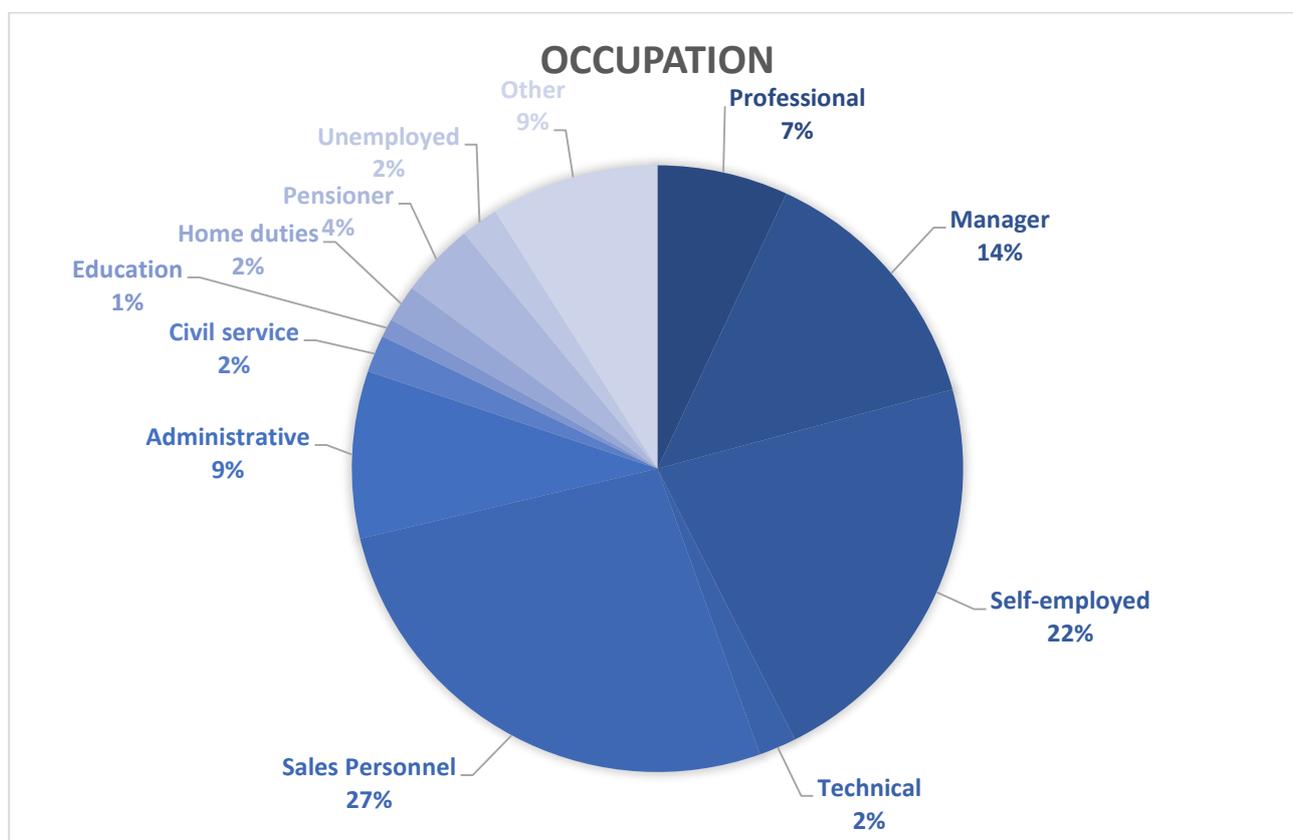


Figure 5.3: Occupation of residents of Hermanus

5.3.1.1.4 Highest level of education

Forty-seven percent (47%) of residents indicated Grade 12 as their highest level of education, while 33% indicated that they had a diploma or degree from a tertiary institute and 8% had other qualifications such as Grade 8, Grade 9, or Grade 10 (Table 5.2). This is once again in correspondence with the results from the impact study conducted on Hermanus (Overstrand Municipality, 2010:16) where the highest percentage (38%) of residents are semi- or unskilled employees, which corresponds with the results obtained from this survey.

Table 5.2: Highest level of education of residents of Hermanus

Level of education	Percentage
No school	3%
Grade 12 (Matric)	47%
Diploma, degree	33%
Post-graduate	5%
Professional	4%
Other (Grade 8, Grade 9, Grade 10)	8%

5.3.1.1.5 Number of years residing in Hermanus

Sixty-six percent (66%) of residents had lived in Hermanus for less than 19 years, while 19% had lived there for 20 to 24 years and 15% had lived in in Hermanus for 25 years or more. The average number of years were calculated as 15 years, as indicated by Table 5.3. No previous results were identified for the number of years residents had been residing in the area, making this the first of its kind.

Table 5.3: Number of years living in Hermanus

Number of years	Percentage
<19 years	66%
20 – 24 years	19%
25> years	15%
Average number of years	15.03 years

5.3.1.1.6 Impact of the Hermanus Whale Festival on residents' personal quality of life

The largest percentage of residents indicated that the festival had mostly no effect on their personal lives (45%), while 27% indicated that the festival had a very positive effect and 19% indicated that the festival has a slightly positive effect on their personal lives (Figure 5.4). It is therefore clear that the festival had neither a positive or negative impact on the quality of life of the residents of Hermanus, as indicated by Figure 5.4. The necessity therefore arises for the festival to have a positive impact on the quality of life of the residents. According to Yolal *et al.*, (2016:12), the community benefits are drawn from festivals having a strong positive relationship to the quality of life

of residents. This indicates that the higher the perceived benefits of the festival are, the more positive the impacts of the festival will be on the quality of life of residents (Yolal *et al.*, 2016:13).

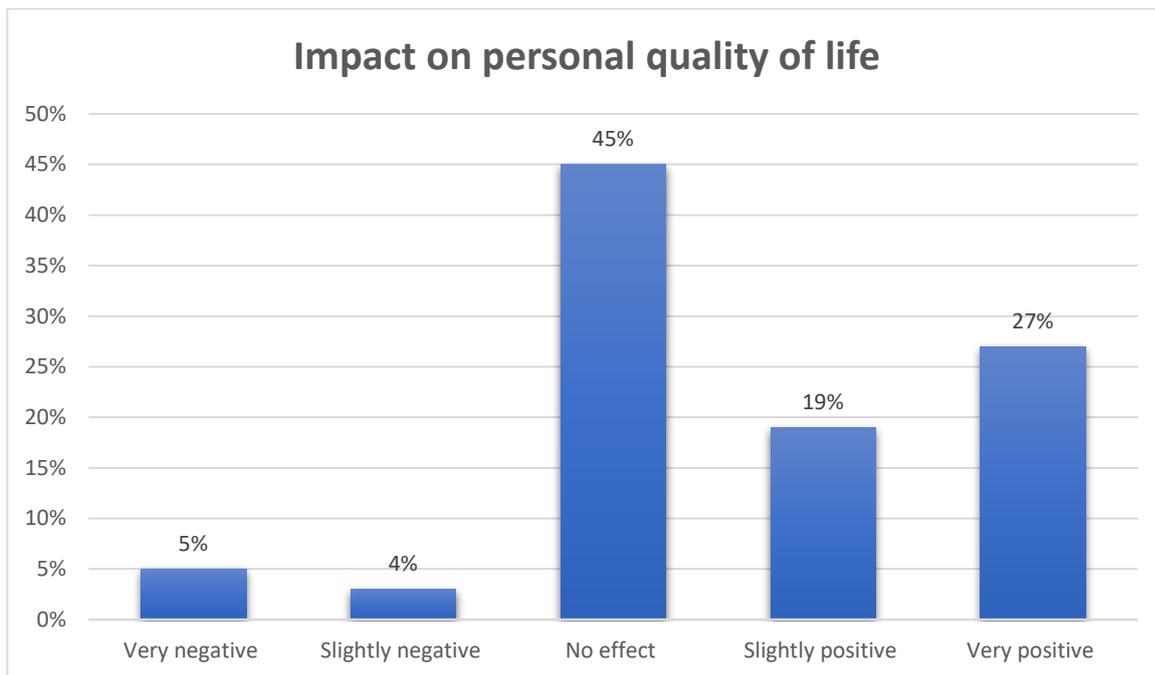


Figure 5.4: Impact of the Hermanus Whale Festival on personal quality of life

5.3.1.1.7 Impact of the Hermanus Whale Festival on the community of Hermanus

The largest number of residents indicated that the festival had a very positive impact on the community of Hermanus (45%), while 26% indicated that it had no effect on the community and 24% indicated that the festival had a slightly positive impact on the community. According to Yolal *et al.* (2016:13), there was a strong positive correlation between benefits offered by the festival and community participation. The more the community is involved with a festival, the more positive the impacts of a festival will be on the community. Such benefits include positivity about the festival, increased income, pride in the town and the community and improved living conditions. It is clear from Figure 5.5 that the community should be more involved with the festival. This can be incorporated during the planning phase of the festival each year, providing more entrepreneurial activities for residents at the festival (such as selling food and crafts and displaying local talent).

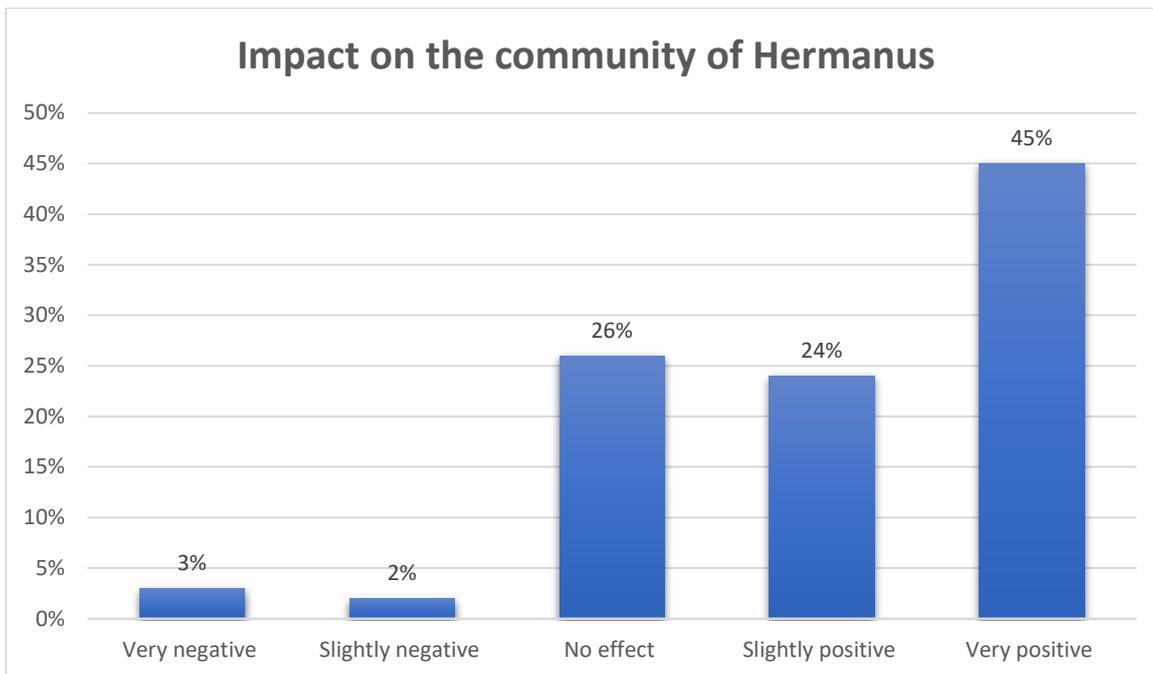


Figure 5.5: Impact of the Hermanus Whale Festival on the community of Hermanus

5.3.1.1.8 Working at the Hermanus Whale Festival

As indicated by Table 5.4, a small percentage (11%) of the residents indicated that they worked at the festival, while 89% indicated that they did not work at the festival. Those working at the festival were mostly owners, managers or employees in the hospitality industry, such as restaurants, take away shops and accommodation establishments. The organisers of the festival should try to involve more residents with the operations of the festival. This can be done by offering residents the opportunity to sell food, arts, crafts, or to perform. The number of local residents working at the festival should be increased to maximise the benefits which the festival has on the community. According to Saayman, Saayman and Joubert (2013:443), the Wacky Wine Festival held annually in Robertson, Western Cape, created a total of 5 additional job opportunities per wine farm involved in the event. This amounted to a total of 240 job opportunities for local residents at 48 different wine farms (Saayman *et al.*, 2013:443). The Hermanus Whale Festival (89 694 visitors in 2015) is smaller than the Wacky Wine Festival (16 076 visitors in 2009), therefore the number of job opportunities will be less (Van der Riet-Neethling, 2015; Saayman *et al.*, 2013:443).

Table 5.4: Working at the Hermanus Whale Festival

Working at the Hermanus Whale Festival	Percentage
Yes	11%
No	89%

5.3.1.1.9 Level of interest in the Hermanus Whale Festival

Forty-six percent (46%) of residents indicated that they were indeed interested in the festival and attended whenever possible, while 26% indicated that they had no interest in the festival, but would attend it for the sake of friends and family. Sixteen percent (16%) indicated that they were avid fans of the festival and attended it as many times as possible, as evident from Table 5.5 below. Even though the majority of the residents indicated a positive interest towards the festival, it is important to keep raising awareness for the festival and increase attendance. According to Doxey (1975), residents will move through various stages of irritation regarding tourism to a destination. The same is evident with festivals, where the longer the festival has been running, the more annoyed, antagonistic, or resigned residents will become (Doxey, 1975). The Hermanus Whale Festival celebrated its 26th year of existence in 2017, which, if related with the results obtained from the qualitative interviews (c.f. 5.2.12), suggests that residents' loyalty towards the festival has diminished over time. One way of enhancing attendance is to offer residents opportunities to have fun at the festival, which includes spreading the locations for the programme activities out across town, to have public transport available which will eliminate the need for more parking availability and to offer residents discounts on entrance to areas such as the Coke Music Tent. Another way to enhance this is by changing the programme of the festival to include new products and services, such as more educational programmes on the whales. In terms of the product life cycle of the festival, a change in the programme can help to revive the festival and therefore draw in more visitors, before it reaches the decline stage (George, 2015:78).

Table 5.5: Level of interest in the Hermanus Whale Festival

Level of interest	Percentage
I am avid fan of this festival and try to attend as many as possible	16%
I am interested in this festival and attend when I can	46%
I am not interested in this festival, but I sometimes attended it because friends and family are interested	26%
I have absolutely no interest in this festival and do not wish to attend it	12%

5.3.1.2 Evaluation, importance and impacts

The following section discusses the factors of evaluation according to the residents of Hermanus, the aspects of importance of the festival and impacts of shark cage diving and whale watching on the community.

5.3.1.2.1 Residents' evaluation of the Hermanus Whale Festival

Residents were asked to evaluate the following statements according to a five-point Likert scale, where '1' = *totally disagree* and '5' = *totally agree*. Residents had to evaluate the extent to which certain aspects had an influence on their experience of the festival, as indicated in Table 5.6. The following aspects were identified as having the highest mean scores:

- The exposure to the region is excellent (4.05)
- The area fits the purpose of the festival (3.87)
- The festival is well marketed (3.75)
- The festival is accessible to residents (3.73)
- Information is readily available (3.66)
- The festival is well organised (3.61).

Residents' evaluation of the festival was positive, in general. This indicates that residents do feel that the festival is beneficial for the community and the town. Festival organisers should aim to further increase residents' evaluation of the festival by means of increasing the benefits which residents draw, such as providing more information on events hosted at the festival, making it more accessible for the community and improving marketing efforts (Yolal *et al.*, 2016:12). By increasing the benefits residents' positive attitude towards the festival will increase further and be maintained over the long term.

Table 5.6: Residents' evaluation of the Hermanus Whale Festival

Hermanus Whale Festival	Mean	Level of Agreement
The festival is accessible to residents	3.73	Agree
The festival is well marketed	3.75	Agree
Information is readily available	3.66	Agree
The festival is well organised	3.61	Agree
The area fits the purpose of the festival	3.87	Agree

The exposure to the region is excellent	4.05	Agree
---	------	-------

5.3.1.2.2 Importance of the events at the Hermanus Whale Festival for participation

Residents were asked to rate the importance of the following events for spectators/participants at the festival. The events were rated according to a five-point Likert scale, where '1' = *not at all important* and '5' = *extremely important*, as indicated by Table 5.7. The following events were identified as having the highest mean values, making these the most important events to participants:

- The Total Whale Marathon (3.53)
- Eco-marine village (3.5)
- Whale and Wheels Classic Car Show (3.44)
- Berg and Beach trail run (3.41)
- Street parade (3.38)
- Go Rally: Cape to Hermanus (3.29)
- Coke music stand (3.24)
- Whale Festival sporting events at Benguela Cove (3.21)
- Watershed Live (3.12)
- Civil show (3.09).

The most important events were identified as The Total Whale Marathon (mean value of 3.53) and the Eco-Marine Village (mean value of 3.5), as indicated in Table 5.7. The Hermanus Whale Festival is known as the “only eco-marine festival in South Africa” which explains the importance of the eco-village, as this is one of the elements on which the festival is founded. It is therefore clear that residents are positively inclined towards receiving a learning experience on the marine environment and the whales, which is a pillar of sustainability. From the results it is however clear that the community perceives all events hosted at the festival as important. This is due to the enhanced business opportunities created by the programme, resulting in increased economic benefits, improved quality of life and increased awareness for environmental conservation (Daly *et al.*, 2015:35).

Table 5.7: Importance of the events at the Hermanus Whale Festival for participation

Events	Mean	Level of agreement
Watershed Live	3.12	Important
Eco-marine village	3.5	Very important

Coke music stand	3.24	Important
Petzl Wolf trails	3.07	Important
Whale Festival sporting events at Benguela Cove	3.21	Important
Whale and Wheels Classic Car Show	3.44	Important
The Total Whale Marathon	3.53	Very important
Berg and Beach trail run	3.41	Important
Go Rally: Cape Hermanus	3.29	Important
Civil show	3.09	Important
Street parade	3.38	Important
Treasure hunt	3.03	Important
Chris Chameleon	3.08	Important

5.3.1.2.3 The impact of shark cage diving and whale watching on the community

Respondents were given the opportunity to indicate the extent to which certain aspects of shark cage diving and whale watching tourism have an impact on the community of Hermanus. Thirty-two aspects were measured according to a six-point Likert scale, where 1 = *strongly disagree* and 6 = *strongly agree*. According to Table 5.8, residents indicated the strongest agreement with the following statements:

- The image of the city/town has improved (4.88)
- Opportunities for shopping have increased (4.79)
- More people are aware of Hermanus as destination (4.69)
- Prices of some goods and services have increased (4.65)
- The overall cost of living has increased (4.38).

In general, residents indicated that these two marine adventure activities had a moderate impact on the community. This implies that residents' awareness of the positive impacts offered by whale watching and shark cage diving in the vicinity can still be enhanced, even though they did recognise a positive impact on the community. Residents should be educated further on the benefits which these activities have, such as economic benefits, increased tourism to the area and improved image of the town. Operators can thus increase awareness amongst the community by distributing information on the benefits offered, growth in the sector and opportunities for residents to become part of the activity (Dobson, 2008:55; Parsons, 2012:2). A lack of literature in South Africa on the

impacts of shark cage diving and whale watching operations on the community suggests that this result is the first of its kind.

Table 5.8: The impact of shark cage diving and whale watching on the community

Impacts	Mean	Level of agreement
The image of the city/town has improved	4.88	Moderately agree
More tourists visit the area	4.01	Somewhat agree
More people are aware of Hermanus as a destination	4.69	Moderately agree
The overall appearance of the area has improved	4.08	Somewhat agree
There are opportunities for people to have fun	4.32	Somewhat agree
The economy of the area has improved	3.65	Somewhat agree
There are more opportunities for entrepreneurs	4.19	Somewhat agree
The maintenance of public facilities has improved	3.84	Somewhat agree
Trading in the area has increased	3.80	Somewhat agree
The living standards of locals have improved	4.36	Somewhat agree
Infrastructure in the area have improved	4.79	Moderately agree
Residents have more pride in their community	4.14	Somewhat agree
Interactions between locals and visitors have increased	4.65	Moderately agree
Friends visit me	4.04	Somewhat agree
Opportunities for shopping have increased	4.79	Moderately agree
Damage to the environment has increased	3.86	Somewhat agree
Excessive drinking and/or drug use has increased	4.15	Somewhat agree
Disruptive behaviour has increased	4.01	Somewhat agree
Incidents of crime have increased	4.25	Somewhat agree
Noise levels in the area have increased	4.25	Somewhat agree
Prices of some goods and services have increased	4.65	Somewhat agree
The overall cost of living has increased	4.38	Somewhat agree

Traffic congestion in the area has increased	3.91	Somewhat disagree
Residents get irritated with the number of people attending	3.97	Somewhat agree
The rights of local residents have increased	3.34	Somewhat disagree
Litter in the area has decreased	3.34	Somewhat disagree
Parking availability in the area has increased	4.09	Somewhat agree
Public funding for community activities has increased	3.68	Somewhat agree
Employment opportunities in the area have increased	3.65	Somewhat agree
Opportunities for local businesses have increased	3.87	Somewhat agree
Entertainment opportunities have increased	3.98	Somewhat agree
The turnover for local businesses has increased	2.59	Somewhat disagree

5.3.2 Results on marine adventure tourism (whale watching and shark cage diving)

The following section discusses the results obtained from the survey on marine adventure participants. The profiles of the respondents are analysed and travel behaviour (consisting of travel motives, experiences and satisfaction) is discussed, as well as the willingness to pay for marine wildlife such as the conservation of sharks and whales.

5.3.2.1 Socio-demographic information of marine adventure participants

This section of the chapter discusses the demographic details of the participants of shark cage diving and whale watching. A total of 301 participants were included in the survey, which includes both whale watching participants and shark cage diving participants. The results are discussed and substantiated by means of visual diagrams.

5.3.2.1.1 Gender

Respondents were mostly female (53%), while 47% indicated they were male, as indicated in Figure 5.6. Catlin and Jones (2010:389) found similar results from a study on whale shark tourism at Ningaloo Marine Park, Australia. The study also indicated a higher percentage of female participants (53%) to male participants (47%). Interestingly however, literature states that, in recent times, gender participation in adventure activities have migrated from mostly men, to equal distribution amongst men and women, as seen in Figure 5.6 (Giddy, 2017:6; Giddy & Webb, 2016:356).

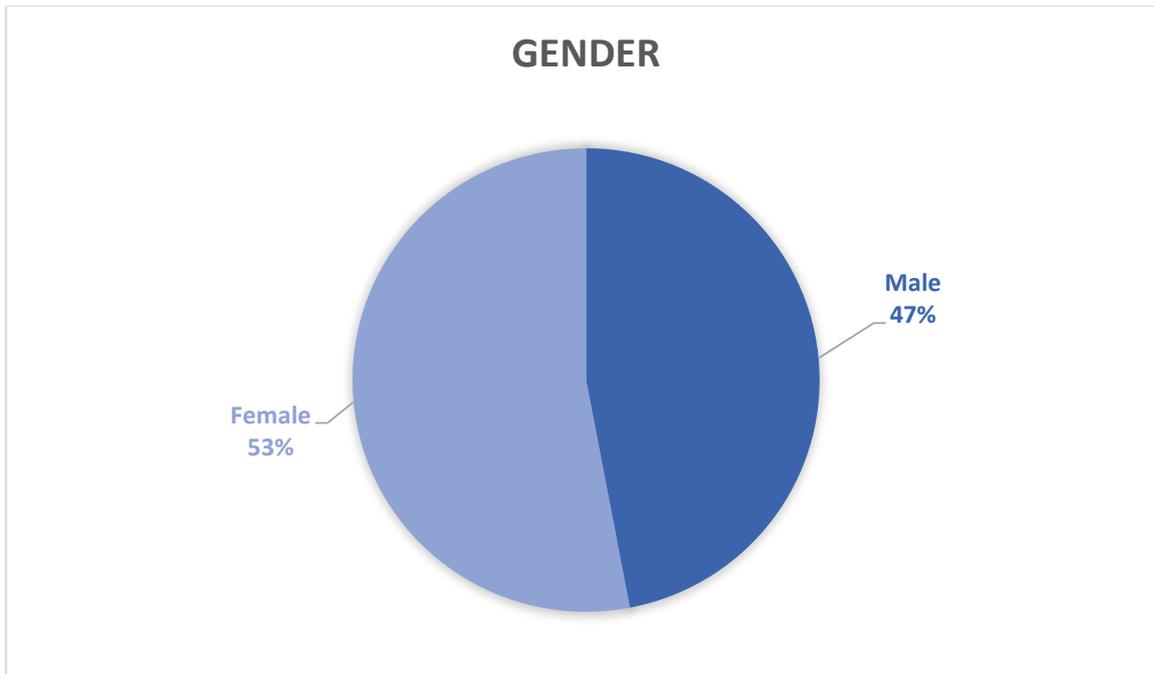


Figure 5.6: Gender of marine adventure participants

5.3.2.1.2 Average age of participants

Table 5.9 indicates that the majority of participants (26%) were between the ages of 36 and 45 years of age, while 22% were aged between 26 and 35 years and 18% were aged between 46 and 55 years. The average age of adventure participants, in general, have been identified by various authors as between 30 and 40 years (Giddy, 2017:6; Zaltzman, 2010:1; Pomfret & Bramwell, 2014:5), while this result indicates that marine adventure participants is 38.33 years of age. This finding is also in accordance with that of Wongthong and Harvey (2014:342) who identified that the average age of scuba divers in Thailand is under the age of 40 years.

Table 5.9: Age of marine adventure participants

Age	Percentage
>25	24%
26-35 years	10%
36-45 years	26%
46-55 years	18%
56-65 years	15%
65+ years	7%
Average age	38.33 years

5.3.2.1.3 Home language

The majority of participants indicated that their home language was English (54%), while 35% indicated other languages, such as German, French and Swedish (Figure 5.7). This is in correspondence with the results obtained from the Department of Home Affairs in 2015 which indicated that Germany and France are amongst the top five leading countries for overseas tourists to South Africa (Lombard, 2016). The reason for the higher number of international visitors participating in the activities is the fact that shark cage diving or whale watching is seen as a bucket list attraction for those visiting Cape Town, as identified by the results obtained from the qualitative interviews (c.f. 5.2.11). This implies that international visitors only visit the Cape Town area once and they therefore participate in activities which the region is famous for, while domestic visitors are able to participate in the future (c.f. 5.2.11). Furthermore, the conditions for viewing whales and sharks in South Africa are considered as premier conditions due to the natural occurrence of great numbers of whales and sharks (Dicken & Hosking, 2009:227).

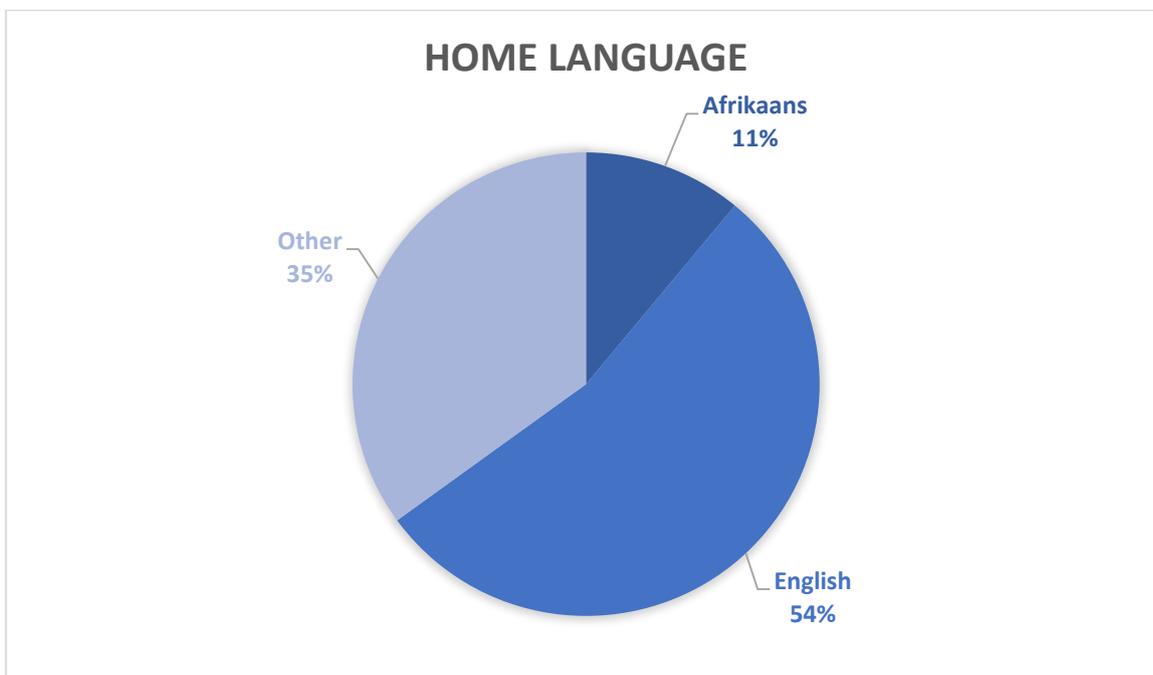


Figure 5.7: Home language of marine adventure participants

5.3.2.1.4 Highest level of education

The largest number of education of participants had a diploma or degree from a tertiary institute (37%), followed by a professional qualification (23%) or a post-graduate qualification (20%). This is indicated in Figure 5.8. According to a study conducted on the demand for whale watching in Loreto Bay National Park, Mexico, (Avila-Foucat, Gendron, Revello-Fernandes, Popoca & Ramirez, 2017:40), the level of education of respondents participating in whale watching activities are mainly well-educated. This result is therefore in correspondence with the results obtained by Avila-Foucat *et al.* (2017:40).

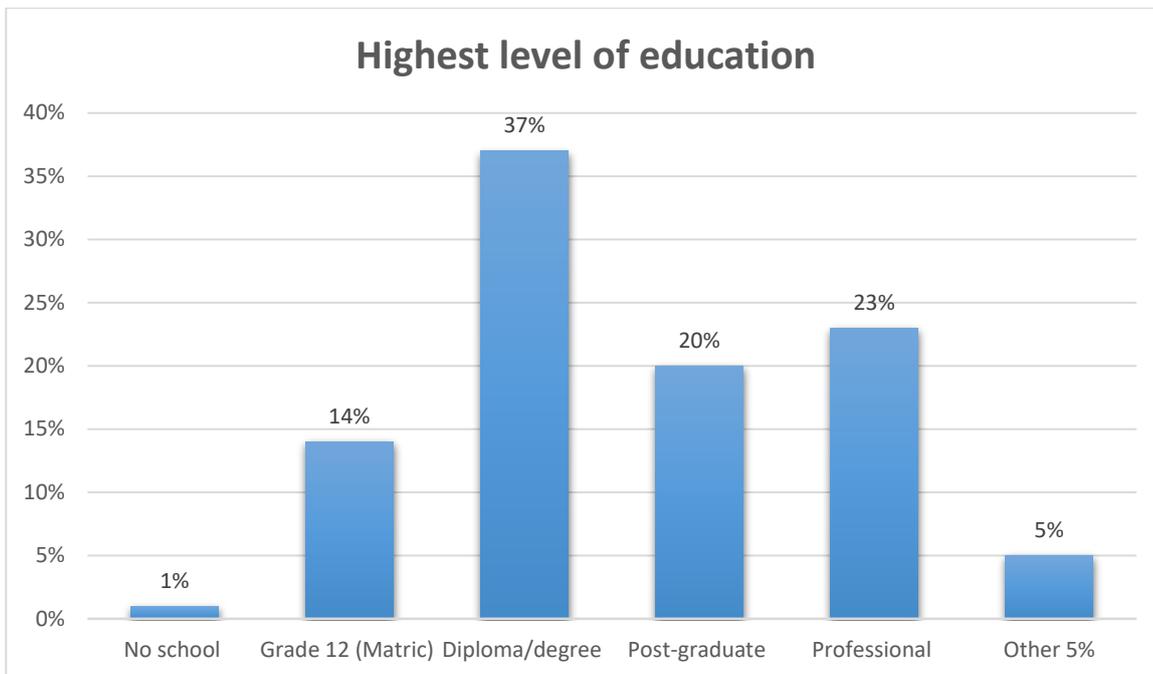


Figure 5.8: Highest level of education of marine adventure participants

5.3.2.1.5 Country of origin

The majority of respondents indicated that they did not reside in South Africa (64%), but originated mostly from countries such as the United Kingdom, United States of America, Germany, Sweden, France and Switzerland (c.f 5.2.11) (Dicken & Hosking, 2009:227). Those who did originate from South Africa (25%) resided mostly in Gauteng and the Western Cape (16%) respectively (Table 5.10). According to the results obtained on the impact of tourism to Hermanus (Overstrand Municipality, 2010:3), 55% of visitors were of international origin in 2010. Therefore, this result is in correspondence with the findings obtained from Overstrand Municipality (2010:3), that Hermanus does attract a large percentage of foreign tourists. But an increase in the number of international visitors can be identified.

Table 5.10: Province of residence of marine adventure participants

Province of residence	Percentage
Gauteng	16%
Free State	1%
Limpopo	1%
Mpumalanga	0.33%
North West	0.33%
Northern Cape	0.33%
Eastern Cape	1%

Western Cape	16%
Outside RSA borders	64%

5.3.2.1.6 Type of visitor

As evident by Figure 5.9, the majority of participants indicated that they were day visitors to the area (51%), while 46% indicated that they were overnight visitors. Overnight visitors tended to stay in the area for an average of two nights. International tourists often participated in tour programmes which incorporated a number of destinations and activities, often leaving the tourist little time to stay in one location. Tourists want to do and see as much as possible in a limited period of time, therefore shark cage divers and whale watchers will participate in the activity and move on to the next location or activity.

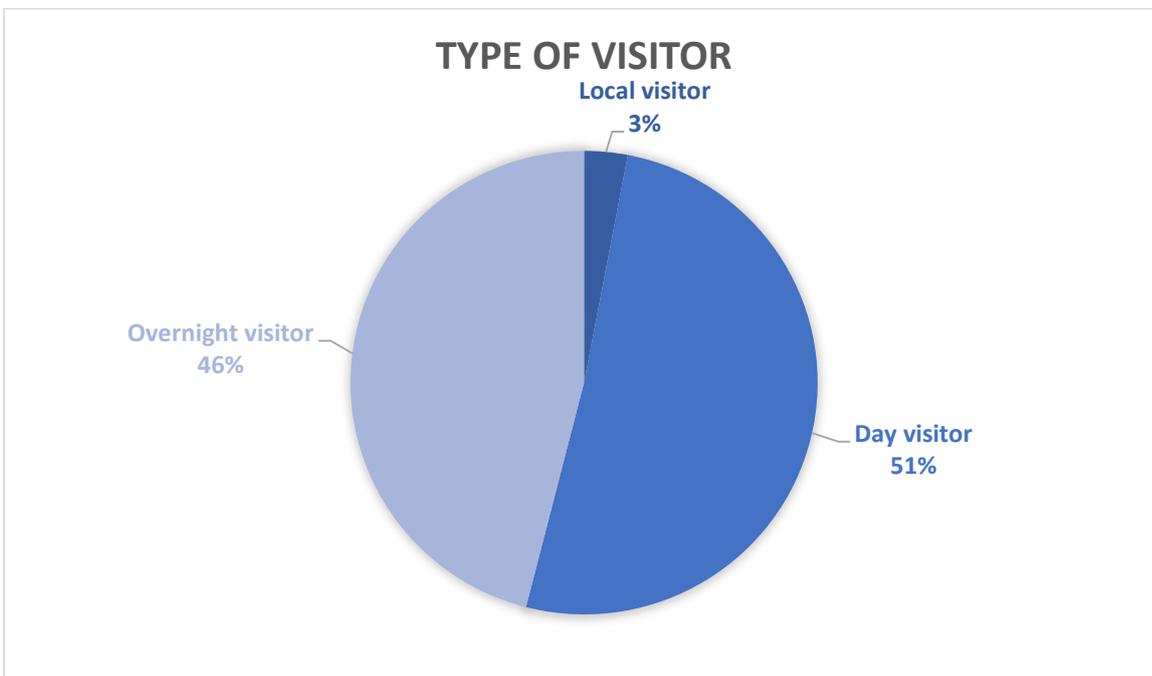


Figure 5.9: Type of marine adventure participant visitors

5.3.2.1.7 Annual gross income

Thirty-three percent (33%) of participants indicated that they had an annual gross income of more than R672 001, while 12% indicated that they earned less than R20 000 per annum and 11% indicated that they earned between R221 001 and R305 000 per annum (Table 5.11).

Table 5.11: Annual gross income of marine adventure participants

Gross income	Percentage
<R20 000	12%
R20 001 – R140 000	6%
R140 001 – R221 000	10%

R221 001 – R305 000	11%
R305 000 – R431 000	9%
R431 001 – R552 000	10%
R552 001 – R672 000	9%
>R672 001	33%

5.3.2.1.8 Heard about the operator

Forty percent (40%) of participants suggested that they had heard about the operator via the operator's website, while 33% indicated other forms of communication, such as travel agencies, and 19% indicated word-of-mouth (c.f 5.2.10) (Table 5.12). This quantifies the fact that online marketing plays a big role in raising awareness for the operator (c.f. 5.2.10). Operators should thus ensure that they have an updated, user-friendly website where potential participants can find information pertaining to the activity, pricing and location, amongst others.

Table 5.12: Where marine adventure participants heard about the operator

Where participants heard about the operator	Percentage
Television	1%
Website	40%
Email	1%
Newsletter	1%
Magazines	2%
Word-of-mouth	19%
Office signage	3%
Other (Travel agencies)	33%

5.3.2.2 Participation

This section discusses aspects pertaining to participation, previous participation and future participation in whale watching and shark cage diving.

5.3.2.2.1 Participation in other marine activities

Participants had to indicate the frequency at which they participated in other marine activities according to a five-point Likert scale, where 1 = *never* and 5 = *always*. Participants indicated the highest frequency of participation in the following activities, as indicated by Table 5.13:

- Snorkelling (2.2)
- Scuba diving (1.7)
- Sea kayaking (1.5)
- Wave rider (1.5).

The activities listed in Table 5.13 were identified as popular marine activities in South Africa (Giddy, 2017:8), even though the data indicates that few participants were interested in other marine activities. This begs the question of whether the market for whale watching and shark cage diving differs from markets for other marine adventure activities. Giddy (2017:8) identified novelty and status as major influencing factors amongst participants of adventure activities in the Garden Route, Western Cape, which relates to this finding because the results indicate that participants were not dedicated marine adventure participants and one can conclude that in this case, it was about the two species that they wanted to see and experience. Therefore, shark cage and whale watching in this case attracted different markets than other marine adventure activities.

Table 5.13: Participation in other marine activities

Marine activities	Mean	Level of agreement
Surfing	1.4	Never
Scuba diving	1.7	Never
Sea kayaking	1.5	Rarely
Wave rider	1.5	Rarely
Snorkelling	2.2	Rarely
Deep sea fishing	1.4	Never

5.3.2.2.2 Previous participation in marine activities

The majority of participants (41%) indicated that they had not participated in whale watching or shark cage diving previously, while 10% indicated once before and 8% indicated more than three times before. Table 5.14 is indicative of the responses to this question. This result implies that whale watching and shark cage diving are perceived as once-in-a-lifetime activities, or bucket list activities which participants experienced once in their lifetime on average.

Table 5.14: Previous participation in marine adventure activities

Number of previous participation	Percentage
None	61%
1 time	15%
2 times	11%
3 times	5%
4+ times	8%

5.3.2.2.3 Future participation in marine activities

In addition to the question above, participants were asked whether they would participate in the activity again in the future. Eighty-seven percent (87%) of participants said they would definitely do it again, while 13% they would not (Figure 5.10). Interestingly, the majority of respondents had not participated in these activities before, while the majority also indicated that they would participate again in future. This result corresponds with that of Giddy (2017:8) who identified that the majority of adventure participants will participate in similar adventure activities again in the future. Giddy (2017:8) does mention, however, that participants of activities such as skydiving, bungee jumping and scuba diving had participated in similar activities between one and four times previously.

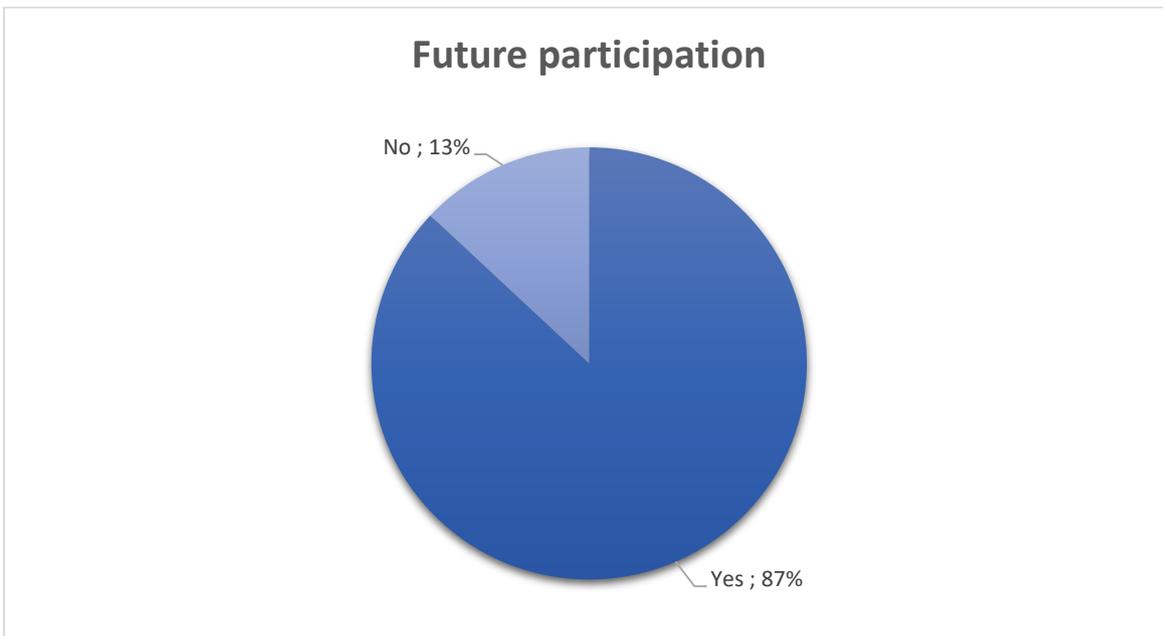


Figure 5.10: Future participation in marine adventure activities

5.3.2.3. Motives to participate and experiences

The motives to participate and the factors which influence the experience for participants are identified and discussed below.

5.3.2.3.1 Aspects influencing the motives to participate in shark cage diving and whale watching

Participants were asked to indicate the importance of motives to participate in the particular activity based on a five-point Likert scale, where 1 = *not at all important* and 5 = *extremely important*. From the results, the following aspects were identified as the most important reasons why participants decided to participate in shark cage diving or whale watching:

6. Whales excite me (4.24)
7. Sharks excite me (4.23)
8. Dolphins excite me (4.18)
9. For new experiences (4.14)
10. To experience thrill and excitement (3.73).

From Table 5.15, it is clear that the prospects of seeing marine animals, such as whales, sharks and dolphins, had a big influence on the participation motives of marine adventure participants. This indicates that operators should use the prospects of viewing other animals during the trip in marketing material to attract more participants. Furthermore, Giddy and Webb (2016:353) identified similar results where participants of adventure activities in the Garden Route rated thrill as an important motivating aspect.

Table 5.15: Motives of shark cage divers and whale watchers to participate in the activity

Motives to participate	Mean	Level of importance
Primarily for educational reasons	3.04	Important
To photograph marine life	3.11	Important
It is a spiritual experience	2.22	Slightly important
It is value for money	2.30	Slightly important
It is part of my lifestyle	2.48	Slightly important
For my well-being	2.45	Slightly important
To overcome risks	2.06	Slightly important
For new experiences	4.14	Very important
To overcome a fear for whales/sharks	1.81	Not at all important

The feeling of success after the activity is over	2.60	Slightly important
To experience thrill and excitement	3.73	Important
Because it is challenging	2.62	Slightly important
The following excite me:		
Sharks	4.23	Very important
Whales	4.24	Very important
Dolphins	4.18	Very important
Seals	3.55	Important
Penguins	3.62	Important

5.3.2.3.2 Aspects influencing the experience of shark cage divers and whale watchers

Participants were asked to indicate the level of influence which certain aspects had on their total experiences. The aspects were rated on a five-point Likert scale, where 1 = *no influence at all* and 5 = *great influence*. The following aspects were identified as having the greatest influence on the experience derived by marine adventure participants (Table 5.16) (c.f. 5.2.14):

- To be in close proximity to the animal (4.18)
- Experiencing a closeness to nature (3.94)
- Helpful and knowledgeable guides (3.93)
- Professionalism of the staff/guides (3.91)
- Variety of animals (3.88).

The results clearly identify the fact that participants derived a memorable experience from the animals and staff. Operators cannot control nature (weather and animals), but they can improve the level of knowledge and helpfulness of the staff through training and constant improvement. Operators should thus ensure that guides and staff can answer a wide range of questions and deliver high quality service (Moscardo & Ballantyne, 2008:244).

Table 5.16: Aspects influencing the experience of shark cage divers and whale watchers

Aspects influencing experiences	Mean	Level of importance
Variety of animals	3.88	Big influence
Ease of accessibility of the operator	3.38	Some influence
To learn more about the animal	3.77	Big influence

To learn more about the viewing process	3.22	Some influence
To be in close proximity to the animal	4.18	Big influence
The comfort of the boat	3.01	Some influence
Friendliness of the staff	3.77	Big influence
The behaviour of the whales or sharks	3.82	Big influence
Calm conditions of the sea	2.93	Some influence
Seasickness	2.63	Some influence
Location of the operator	2.92	Some influence
Price of the trip	3.17	Some influence
Atmosphere on land and on board	3.21	Some influence
Internal appearance of the boat	2.91	Some influence
Helpful and knowledgeable guides	3.93	Big influence
Knowledge and skills of the skipper	3.81	Big influence
Quality of the environment (pollution)	3.76	Big influence
The people who I share the experience with	3.41	Some influence
Reputation of the operator	3.49	Some influence
Being able to purchase photographs/videos of my experience	2.56	Some influence
Being familiar with the animal	3.31	Some influence
Experiencing a closeness to nature	3.94	Big influence
Professionalism of the staff/guides	3.91	Big influence
Prompt service and response	3.68	Big influence
Individual attention	3.26	Some influence
Extras received on the trip (lunch/coffee)	3.06	Some influence

5.4 SECTION C: RESULTS PERTAINING TO THE FACTOR ANALYSES

This section discusses the results obtained from the factor analyses of the impacts of whale watching and shark cage diving on the community of Hermanus, the motives to participate and experiences

of marine adventure participants. The results obtained group important aspects together that are needed to develop a sustainable management framework for marine adventure products. Furthermore, in order to draw conclusions and make recommendations on the marine adventure tourism sector (objective 5, section 1.4.2), it is necessary to identify the aspects, such as the motives to participate and experiences, of the market as these are important to know for sustainability manage marine adventure tourism products. The results obtained regarding the aspects contributing to the satisfaction of marine adventure participants are also discussed in this section.

5.4.1 Factor analysis on the impact of shark cage diving and whale watching on the community

In order to determine the factors which have an impact on the community of Hermanus, an Exploratory Factor Analysis (EFA) was conducted. The factor analysis was conducted by means of a Principal Component Analysis with Oblimin-Kaiser normalisation. Three factors were identified on a total of 33 variables, as indicated in Table 5.17, which explained 60% of the variance and were labelled as follows; factor 1 -*awareness*, factor 2- *negative aspects* and factor 3 - *community benefits*. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.892, which is highly acceptable and the Bartlett's test of Sphericity was significant ($p < 0.001$) (Field, 2009:643). The Cronbach's alpha (α) for each of these factors ranged between 0.880 and 0.960, indicating that all three factors have above average construct reliability ($\alpha > 0.6$) (Hair, Anderson, Tatham, & Black, 1995). The inter-item correlations range from 3.629 to 4.280 and the mean values range from 0.473 to 0.634. Therefore, all factors are statistically acceptable.

Factor one, which is labelled *awareness*, has a mean value of 4.13 and a Cronbach's alpha of 0.960, making this the second most important factor impacting on the community of Hermanus. The factor is made up of underlying concepts such as *the image of the city or town has improved, more tourists visit the area, more people are aware of Hermanus as a destination, the overall appearance of the area has improved, there are opportunities for people to have fun, the economy of the area has improved, there are more opportunities for entrepreneurs, the maintenance of public facilities has improved, trading in the area has increased, the living standards of locals have improved, infrastructure in the area have improved, interactions between locals and visitors have increased, friends visit me, and opportunities for shopping have increased.*

According to Bennett and Dearden (2014:111) aspects such as job creation and improvement of infrastructure, were important perceived community impacts resulting from a marine protected area in Thailand. The same was identified by Daldeniz and Hampton (2013:507) who state that employment and business opportunities and differing economic linkages have increased considerably in Malaysia due to scuba diving activities in the area. Research conducted in South Africa by Scholtz (2014:126) identified economic improvement as an impacting factor of three communities in South Africa, namely Soweto, Jeffrey's Bay and Clarens. This factor comprised of

aspects such as *more jobs are created, more business opportunities are created and the community earns more money.*

The second factor is labelled *negative aspects* and consist of underlying aspects such as *damage to the environment has increased, excessive drinking and/or drug use increased, disruptive behaviour has increased, incidents of crime have increased, noise levels in the area have increased, prices of some goods and services have increased, the overall costs of living have increased, traffic congestion in the area has increased and residents get irritated with the number of people attending.* This factor was rated as the most important factor with a mean value of 4.28 and a Cronbach's alpha of 0.889. According to Bennett and Dearden (2014:111) factors such as natural capital, social capital, physical capital, financial capital and cultural capital were negatively impacted by the emergence of a national marine park in Thailand. The authors state that the local community perceived these impacts to be negative impacts on the livelihood and suggest that necessary policy improvements should be implemented in order to salvage the relationship between the community, management of the park and the government. In the same context, Scholtz (2014:126) identified *environmental degradation and increased costs of living* to be an impacting factor of tourism on the community, Jeffrey's Bay, a well-known surfing hot spot in South Africa.

Thirdly, the factor labelled *community benefits* has a mean value of 3.63 and a Cronbach's alpha of 0.920, making this the least important influencing factor. *Community benefits* consist of aspects such as *the rights of local residents have increased, litter in the area has decreased, parking availability in the area have increased, public funding for community activities has increased, employment opportunities in the area have increased, opportunities for local businesses have increased, entertainment opportunities have increased and the turnover for local businesses have increased.*

This indicates a general negative attitude amongst residents of Hermanus towards shark- and whale tourism in the area and suggest that residents do not experience the desired level of benefits from the sector. Operators should increase awareness of the benefits of shark cage diving and whale watching for community members by arranging workshops, information sessions and attracting the local market to participate in the activity. According to Doxey's Irridex, local residents become irritated with tourists as tourism in the area increase. Doxey states that tourists will move through five various stages, from euphoria (visitors are welcomed), apathy (contact between residents and tourists become formal), annoyance (residents start to have misgivings about tourism), to the final stage called antagonism (residents openly express their irritation with visitors) (Doxey, 1975). Scholtz (2014:126) identified that *community upliftment and pride* and *community protection and education* are important impacting factors of tourism on three communities in South Africa (Soweto, Jeffrey's Bay and Clarens). These factors comprise aspects such as *improved lifestyles, educational opportunities, learning about other cultures, residents are part of tourism planning, the community is*

well-known, community pride, positive community image and respect between tourists and local residents. This finding is in correspondence with that of Scholtz (2014:126).

Table 5.17: Community impacts of shark cage diving and whale watching

ASPECTS	Factor 1: Awareness	Factor 2: Negative aspects	Factor 3: Community benefits
The image of the city/town has improved	0.900		
More tourists visit the area	0.878		
More people are aware of Hermanus as a destination	0.860		
The overall appearance of the area has improved	0.840		
There are opportunities for people to have fun	0.741		
The economy of the area has improved	0.728		
There are more opportunities for entrepreneurs	0.685		
The maintenance of public facilities has improved	0.666		
Trading in the area has increased	0.611		
The living standards of locals have improved	0.597		
Infrastructure in the area have improved	0.561		
Residents have more pride in their community	0.557		
Interactions between locals and visitors have increased	0.543		
Friends visit me	0.531		
Opportunities for shopping have increased	0.487		
Damage to the environment has increased		0.912	
Excessive drinking and/or drug use has increased		0.854	
Disruptive behaviour has increased		0.821	
Incidents of crime have increased		0.795	

Noise levels in the area have increased		0.602	
Prices of some goods and services have increased		0.565	
The overall cost of living has increased		0.541	
Traffic congestion in the area has increased		0.519	
Residents get irritated with the number of people attending		0.478	
The rights of local residents have increased			0.801
Litter in the area has decreased			0.762
Parking availability in the area has increased			0.704
Public funding for community activities has increased			0.650
Employment opportunities in the area have increased			0.576
Opportunities for local businesses have increased			0.548
Entertainment opportunities have increased			0.512
The turnover for local businesses has increased			0.423
Cronbach's Alpha	0.960	0.889	0.920
Mean	4.13	4.28	3.63
Inter-item correlation	0.571	0.473	0.634

*Extraction method: Principal component analysis with Oblimin-Kaiser normalisation

**Total variance explained: 60.16%

5.4.2 Factor analysis on the motives of adventure participants in marine adventure activities

In order to determine the travel motives of marine adventure participants, a principal component factor analysis was conducted, with Oblimin-Kaiser normalisation. Four factors were identified from 16 concepts, labelled *experiences*, *marine species*, *lifestyle* and *personal achievement*. The factors identified explained a total variance of 64%. The Bartlett's test of was significant ($p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.784, which is highly acceptable (Field, 2009). The Cronbach's Alpha coefficient (α) for the factors range from 0.600 to 0.849, indicating that all four factors have above adequate construct reliability ($\alpha > 0.6$) (Hair *et al.*, 1995).

The inter-item correlations range from 0.345 to 0.536 and mean values range from 2.34 to 3.95. Therefore, all factors are statistically acceptable, as indicated in Table 5.18.

Factor one was labelled *experiences* and included two aspects, namely *for new experiences* and *to experience thrill and excitement*. With a mean value of 3.93, this factor is ranked as the second most important factor for marine adventure participants. This factor has been identified as a significant travel motive amongst many adventure participants, including water-based, marine-based and land-based adventure activities (Terblanche, 2011:92; Geldenhuys *et al.*, 2014:99; Buckley, McDonald, Duan, Sun & Chen, 2014:10; Bosch, 2015:118). It can be assumed that this market is driven by new experiences and discovery and they will try new adventure activities for the sake of the experience.

The second factor, labelled as *marine species*, has a mean value of 3.95 and is therefore ranked as the most important factor for participation in whale watching and shark cage diving. The underlying aspects of this factor include the possible sighting of *sharks, seals, penguins, dolphins* and *whales*. This has been confirmed as a factor of motivation by Geldenhuys *et al.* (2014:99) as well as Tiedt (2011:69) who identified the variety of marine species as an attraction for marine tourists and scuba divers. In terms of whale watching and shark cage diving participants this factor can be determined as a first of its kind. Participants therefore participate in shark cage diving and whale watching purely for the chance of being close to one of these animals.

The third factor is labelled as *lifestyle* and consists of aspects such as *for my well-being, it is part of my lifestyle, it is a spiritual experience, it is value for money* and *primarily for educational reasons*. The mean value of this factor is 2.53, ranking it as the third most important factor for participants. It has been confirmed by Jeong (2014:02), Petrick and Durko (2015) and Mehmetoglu and Normann (2013) as a motive of marine tourists and adventure tourists alike. Although this factor is ranked as third, it is still a significant motive because adventure participants are often devoted to chasing a thrill and being part of new and exciting activities. Accordingly, Tiedt (2011:69) identified the factor *education/knowledge seeking* as an important travel motive for marine tourists to marine parks in South Africa (Addo Elephant National park and Tsitsikamma National Park). Furthermore, one of constructs identified as an important element for sustainable tourism management is offering an educational element with the service (Saayman, 2009:8). Therefore, this finding is important for the establishment of the sustainable management framework for marine adventure tourism.

Lastly, the factor labelled as *personal achievement* is ranked as the least important factor seeing as the mean value is 2.34. This factor consists of underlying aspects such as *the feeling of success after completing the activity, to overcome risks, to overcome a fear* and *because it is challenging*. This proves that participants in general do not regard whale watching or shark cage diving as too challenging an activity, thus confirming the classification of these activities as mentioned in Chapter 2 (c.f. 3.2.1). Geldenhuys *et al.* (2014:99) identified a similar aspect, namely personal challenge, to be of least motivation to scuba divers at Sodwana Bay, South Africa, as well. It can therefore be

assumed that marine adventure participants do not participate in such activities for the purpose of personal achievement.

Table 5.18: Motives to participate of marine adventure participants

ASPECTS	Factor 1: Experiences	Factor 2: Marine species (Whales, sharks, dolphins, sea birds)	Factor 3: Lifestyle	Factor 4: Personal achievement
For new experiences	0.791			
To experience thrill and excitement	0.764			
Sharks		0.535		
Seals		0.873		
Penguins		0.839		
Dolphins		0.821		
Whales		0.747		
For my well-being			0.869	
It is part of my lifestyle			0.839	
It is a spiritual experience			0.630	
It is value for money			0.545	
Primarily for educational reasons			0.488	
The feeling of success after completing the activity				0.780
To overcome risks				0.778
To overcome a fear				0.754
Because it is challenging				0.711

Cronbach's Alpha	0.600	0.849	0.729	0.770
Mean	3.93	3.95	2.53	2.34
Inter-item correlation	0.443	0.536	0.345	0.453

*Extraction method: Principal Component Analysis with Oblimin-Kaiser Normalisation

**Total variance explained: 64.17%

5.4.3 Factor analysis on the experiences of marine adventure participants

To identify the experiences of participants of whale watching and shark cage diving an Exploratory Factor Analysis was conducted by means of principal component analysis with Oblimin-Kaiser Normalisation. The factors identified (Table 5.19) explained 59% of the variance and were labelled as *client service*, *sea conditions*, *educations* and *add-ons*. The Bartlett's test of Sphericity was significant ($p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.883. Twenty-six aspects were measured to yield the five factors, with Cronbach's alpha coefficients (α) ranging from 0.714 to 0.855. According to Field (2009), these values are highly acceptable. Indicated in Table 5.13, the mean values of the five factors range from 2.94 to 3.84, while the inter-item correlations range from 0.357 to 0.468, making these values just as reliable. The values achieved from this factor analysis is statistically and theoretically acceptable.

The first factor, labelled as *client service*, consists of underlying aspects such as *helpful and knowledgeable guides*, *knowledge and skills of the skipper*, *professionalism of the staff or guides*, *quality of the environment*, *reputation of the operator*, *prompt service and response* and *price of the trip*. With a mean value of 3.68, this factor is ranked as the second most important aspect contributing to a valuable experience of whale watching or shark cage diving. Similar factors have been rated very highly by participants of whale shark diving (Dicken & Hosking, 2009:229). These participants identified the overall quality of the operator and the dive as very important to their overall experience (Dicken & Hosking, 2009:229).

Secondly, the factor labelled *sea conditions* consist of aspects such as *calm conditions of the sea*, *seasickness*, *location of the operator* and *atmosphere on land and on-board*. This factor is ranked as least important to the experience of participants due to a mean value of 2.94. Although the conditions of the sea were not favourable at all times, participants still ranked these aspects as least important. This factor has not been identified as an influencer from previous research, making this finding unique.

The third factor, *education*, consist of aspects such as *to learn more about the animal*, *to learn more about the viewing process*, *friendliness of staff*, *ease of accessibility of the operator*, *the comfort of the boat* and *variety of animals*. The mean value of this factor is measured at 3.51, therefore ranking it as the third most important factor for a valuable experience. An educational experience has been identified as important for tiger shark divers in the Aliwal Shoal, South Africa (Dicken & Hosking,

2009:230), as well as for scuba divers in Sodwana Bay, South Africa (Geldenhuis *et al.*, 2014:99). Furthermore, Saayman (2017a) state that educational programmes and opportunities are important for visitors to Blue Flag beaches in South Africa, implying that marine tourists in general are no longer satisfied with passive activities, but being actively involved in the service delivery process, such as through educational activities, are strong indicators of a good experience.

Fourthly, *closeness proximity to marine nature* is ranked as the most important factor that can enhance an experience for marine adventure participants. This factor consists of aspects such as *being familiar with the animal, experiencing a closeness to nature, to be in close proximity to the animal and the behaviour of whales and sharks*. This factor has a Cronbach's alpha coefficient of 0.714 and a mean value of 3.83, which are both highly acceptable values. Furthermore, Pearce, Strickland-Munro and Moore (2017:369) state that the presence of marine megafauna, such as whales and sharks, contributed greatly towards the creation of an awe-inspiring experience for whale watching participants in Australia. Evidence therefore indicates that being able to see the animal in its natural habitat and being close to the animal is a determining factor for a great experience. Kruger and Saayman (2017:609) also identified similar results from a study conducted on the aspects influencing the experiences of nature tourists in Canada. The authors (Kruger & Saayman, 2017:609) identified that being close to nature and animals had a great influence on the experiences of these tourists.

The last factor, *add-ons*, has a Cronbach's alpha coefficient of 0.789 and a mean value of 3.05, ranking this factor as the fourth most important factor for marine adventure participants. The underlying aspects for this factor include *being able to purchase photographs and videos of my experience, extras received on the trip (such as coffee and lunch), individual attention, internal appearance of the boat and the people who I share the experience with*. Add-ons, such as lunch and purchasing photos and videos of the trip, is not as important for marine adventure participants, but it does contribute to the overall experience of the trip. In contrast to this result, Neuhofer *et al.* (2014) explains that technological tools, such as photographs and videos, have a great influence on the experience of tourists in general. This, therefore enhances the fact that marine adventure tourists are not conventional tourists, seeing as additional add-ons to the experience has little influence on their overall experience.

Table 5.19: Experiences of marine adventure participants

ASPECTS	Factor 1: Client service	Factor 2: Sea conditions	Factor 3: Education	Factor 4: Proximity to marine nature	Factor 5: Add-ons
Helpful and knowledgeable guides	0.805				

Knowledge and skills of the skipper	0.694				
Professionalism of the staff/guides	0.668				
Quality of the environment	0.652				
Reputation of the operator	0.640				
Prompt service and response	0.597				
Price of the trip	0.509				
Seasickness		0.778			
Calm conditions of the sea		0.776			
Location of the operator		0.565			
Atmosphere on land and on-board		0.431			
To learn more about the animal			0.814		
To learn more about the viewing process			0.711		
Friendliness of the staff			0.537		
Ease of accessibility of the operator			0.509		
The comfort of the boat			0.488		
Variety of animals			0.453		
Being familiar with the animal				0.590	
Experiencing a closeness to nature				0.588	
To be in close proximity to the animal				0.503	
The behaviour of the whales/sharks				0.493	

Being able to purchase photographs/videos of my experience					0.792
Extras received on the trip (lunch/coffee)					0.752
Individual attention					0.702
Internal appearance of the boat					0.410
The people who I share the experience with					0.316
Cronbach's Alpha	0.855	0.724	0.767	0.714	0.789
Mean	3.68	2.94	3.51	3.83	3.05
Inter-item correlation	0.468	0.403	0.357	0.392	0.430

*Extraction method: Principal Component Analysis with Oblimin-Kaiser Normalisation

**Total variance explained: 59.64%

5.4.4 Aspects contributing to the satisfaction of marine adventure participants

Respondents were asked to indicate the level of influence which nine aspects, as indicated by Table 5.20, have on their overall experience with the activity according a five-point Likert scale (1 = *no influence at all* and 5 = *great influence*). In order to determine the factors contributing towards a satisfying experience for marine adventure participants, an exploratory factor analysis was conducted which yielded only one factor. The Cronbach's alpha coefficient (α) (0.958) and the inter-item correlation (0.716) were both highly acceptable, while the Kaiser-Meyer-Olkin measure of sampling adequacy was measured as 0.930. The Bartlett's test of Sphericity was significant ($p < 0.001$). The factor yielded explained 74.25% of the total variance. Furthermore, descriptive statistics were used to identify the aspects which were ranked as most important and least important for a satisfying experience. Nine aspects were measured, amongst which *friendliness of the staff* was ranked as the most important aspect (mean value of 4.28). Respondents are in direct contact with staff members, such as guides and marine biologists, during the trip. Therefore, the friendliness and welcoming attitude of staff toward participants have a great influence on the overall level of satisfaction. In accordance with the findings of to Lück (2015:29), *professionalism and friendliness of staff* was ranked as an important factor contributing to the satisfaction of visitors on marine mammal tours in New Zealand.

Secondly, the *knowledge of the operator and staff* and *clear briefing and instructions* were ranked as the second most important aspects influencing marine participants' experience (mean value of 4.20). This finding corresponds well with that of Lück (2015:30), who identified the knowledge of the operator, staff and guides as important aspects to the overall experience of marine visitors. Kruger and Saayman (2017:609) identified the factor *primary and secondary interpretation* as an important factor for a satisfactory experience of tourists to national parks in Canada. This factor included aspects such as *interactive field guides* and *well-informed naturalists and fisheries personnel to answer questions*. It is therefore in accordance with the results from this research.

Thirdly, the *operator's view on whale and shark conservation management* is also an aspect of importance to the overall level of satisfaction (mean value of 4.17) and the operator's view on marine conservation aspects (mean value of 4.16). Lück (2015:30) highlights the finding stating that tourists on educational marine mammal trips in New Zealand have strongly disagreed with receiving less information about conservation opportunities available to them or how the operator contributes to conservation. This is in accordance with the results from this study and suggests that operators should place emphasis on conservation of whales and sharks on such trips and provide information on ways in which participants can become involved with conservation activities.

Other aspects which were measured included *standard of the equipment used* (4.14), *information and interpretation regarding marine animals* (4.11), *service delivered by the operator* (4.11) and *environmental friendly practices implemented* (4.07). As indicated in Table 5.6, all mean values range between 4.07 and 4.28, suggesting a relatively small variance between the aspects, suggesting that all aspects are of equal importance to participants and attention should be given to such aspects of the trip as environmental friendly practices, maintenance of equipment and information on marine animals as well as those aspects rated as having the greatest influence on participants' level of satisfaction.

Table 5.20: Aspects influencing the level of satisfaction of marine adventure participants

ASPECTS	MEAN	ST. DEVIATION
Friendliness of the staff	4.28	0.863
Knowledge of the operator and staff	4.20	0.940
Clear briefing and instructions	4.20	0.904
Operators' view on whale and shark conservation management	4.17	0.942
Operators' view on marine conservation aspects	4.16	0.925
Standard of the equipment used	4.14	0.886
Information and interpretation regarding marine animals	4.11	0.938
Service delivered by the operator	4.11	0.961

Environmentally friendly practices implemented	4.07	0.978
--	------	-------

5.5 SECTION D: RESULTS OBTAINED FROM THE CLUSTER ANALYSIS AND CROSS-TABULATIONS

This section discusses the results obtained from the cluster analysis and the cross tabulations pertaining to participants of whale watching and shark cage diving. In order to fully understand the marine adventure tourism sector in South Africa, it is necessary to gain in-depth knowledge on the market it serves. The results obtained from this cluster analysis therefore contributes to achieving objective five, which aims to draw conclusions and make recommendations on the sector for marine adventure tourism.

5.5.1 Results of the cluster analysis

A one-way ANOVA was conducted on the motivational factors of marine adventure tourism participants. A hierarchical cluster analysis using Ward’s method of Euclidian distances and Tukey’s honest significance test was performed. A six-cluster solution was selected as the most discriminatory, as indicated in Figure 5.11. The results of the multivariate analysis were used to identify the six clusters, with the significant differences between them ($p < 0.05$).

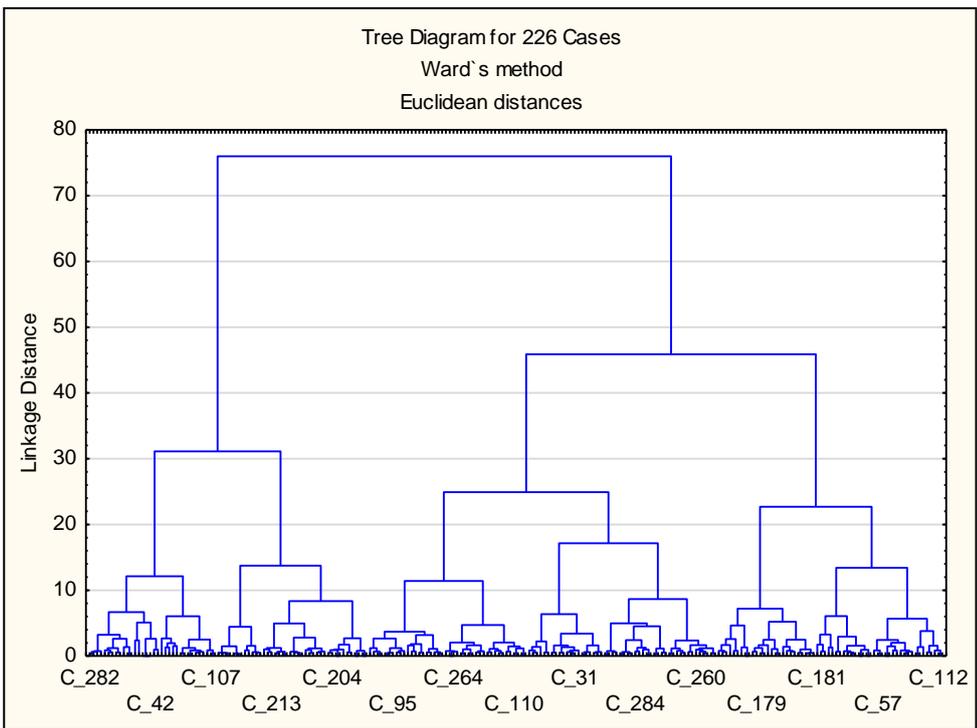


Figure 5.11: Six-cluster solution: Ward’s method with euclidian distance measures

5.5.2 Identification of clusters

As indicated by Table 5.21, the ANOVA test indicate that all motivational factors contributed to the differentiation between the six clusters ($p < 0.05$). The results indicate that *experiences* and *marine species* are the two most important motives for participation in shark cage diving and whale watching amongst all clusters. The taxonomy of the clusters is T²RACE, indicating the different clusters,

namely Thrill seekers, Thalassophiles, Risk takers, Adventure junkies, Consorts and Experience seekers. The results from the Cross-tabulation with Ward method (Table 5.22) and one-way ANOVA with Tukey's post hoc test (Table 5.23) is in correspondence with the results obtained from the personal interviews relating to the target market of marine adventure participants, as discussed in section 5.2.11. Each cluster is discussed with reference to all three tables below (Tables 5.21; 5.22 and 5.23).

Table 5.21: ANOVA and Tukey's post hoc multiple comparison results for marine adventure participants

Motives to Participate	Thrill seekers	Risk takers	Thalassophiles	Consorts	Experience seekers	Adventure junkies	F-Ratio	Sig. Level
Experiences	4.06 ^d	4.56 ^b	3.54 ^e	2.54 ^f	4.09 ^c	4.67 ^a	50.34	<0.05
Marine species	4.34 ^c	4.16 ^d	4.42 ^b	2.91 ^f	3.52 ^e	4.62 ^a	36.78	<0.05
Lifestyle	2.32 ^c	3.09 ^b	1.98 ^f	2.06 ^d	2.01 ^e	3.96 ^a	53.93	<0.05
Personal achievement	3.55 ^b	2.11 ^c	1.11 ^f	1.67 ^e	2.05 ^d	3.73 ^a	95.85	<0.05

The first cluster, namely *thrill seekers*, rated the motivational factor *marine species* as most important for participating in shark cage diving and whale watching, as indicated in Table 5.21. *Lifestyle* was rated as the lowest motivational factor, indicating that this is not a usual activity for this group. The opportunists consist mostly of female participants (70%) with an average age of 31.67 years, as indicated in Table 5.22, they are mostly international visitors (56%) and they are day visitor (56%). They earn between R140 001 and R221 000 per annum (11%), and spent an average of R3 656.44 during the trip. This cluster has not participated in similar activities previously because they indicated the lowest score (0.31), according to Table 5.23, but indicated that they will participate in the activity again (79%) and will indeed contribute towards whale (75%) and shark (72%) conservation (Table 5.22). The thrill seekers indicated that being satisfied with the operator (4.35), being close to marine nature (4.08) and being educated about the marine environment (3.49) as the most important influencing factors for a good experience (Table 5.22). Because this cluster rated *marine species* and *experiences* with a high score, the most important aspect of motivation for these participants to engage in an activity which is out of the ordinary, such as whale watching and shark cage diving.

The second cluster, the *risk takers*, once again indicated that the experience derived from the activity is the most important motivational factor for participation (Table 5.21). *Marine species* was rated as the second most important factor, while *lifestyle* was ranked as the third important factor. As indicated in Table 5.22 and Table 5.23, the risk takers have an average age of 36.65 years and are

mostly male (61%), they also originate mostly from international destinations (69%) and they have indicated that they are day visitors (52%). They earn between R221 001 and R305 000 (14%) and spent the highest average amount on services and products during the trip (R5232.71), according to Table 5.22. Almost all risk takers indicated that they will participate in this activity again in the future (95%) and they have strong inclinations towards contributing towards shark- (90%) and whale (90%) conservation (Table 5.22). The risk takers were thus named because of the high value they place on experiences gained, marine species and the contribution that is made towards their lifestyle. This indicates that they will participate in such activities on a regular basis. This cluster rated *satisfaction with the operator* (4.45) the highest influencing factor, while they felt *sea conditions* (2.79) to be the lowest influencing factor to the overall experience (Table 5.8). The risk takers participate the most in other activities such as sea kayaking (1.54) and snorkelling (2.48).

The cluster named the *thalassophiles* indicated *marine species* to be the most important motivational factor, while *personal achievement* was ranked as the lowest factor, according to Table 5.21. The *thalassophiles* have an equal amount of male and female participants (50% each), with an average age of 34.32 years, they are mostly from international destinations and earn amongst the highest income bracket, being between R305 001 and R431 000 (17%) (Table 5.20). These visitors tend to stay overnight (55%), but they have the lowest score of all clusters for participating again in the activity in the future (64%), which suggests that they enjoy participating in marine adventure activities. Such as shark cage diving and whale watching. They have, however, indicated a positive inclination towards conservation of whales (79%) and sharks (78%), as indicated in Table 5.22. The *thalassophiles* rated *satisfaction with the operator* (4.13) most important for having a good experience, while *sea conditions* were rated as least important (2.79). The *thalassophiles* participate in other marine activities such as snorkelling (2.18), sea kayaking (1.64) and surfing (1.45) as well (Table 5.23). This cluster feels comfortable on a boat and in the marine environment. This cluster enjoys participating in various activities, rather than focussing on one or two single activities.

The fourth cluster, named the *consorts*, indicated the lowest scores for all factors, suggesting that this cluster comprises of people who are either acting as a companion or are neutral about the activity. Table 5.22 identifies this cluster as having the most members per group participating in the activity (5.21) and members of this cluster pay for an average of 2.04 people, which serves as evidence for the fact that they are merely companions. This cluster ranked *marine species* as highest, while *personal achievement* was ranked as the lowest. This contributes to the idea that they value the activity itself as less important and are therefore there on behalf of their companions. The average age of the *consorts* are 42.74 years, which indicates that they are the oldest participating cluster (Table 5.20). The majority of participants are female (56%), from international countries, they earn between R221 001 and R305 000 per annum (19%), but they spent the least on extra services and products while on the trip (R2122.00) and they are either day visitors or overnight visitors (50% each) (Table 5.23). The *consorts* have indicated they will, indeed, participate

in the activity again in the future (97%), even though the motivational scores indicated otherwise. They scored participation in snorkelling (2.0) and wave rider activities (1.48) highest, while surfing (1.21) and fishing (1.25) have been scored lowest. Consorts tend to participate in activities rated as soft adventure, rather than hard adventure activities. They have also indicated a positive inclination towards conservation of whales (83%) and sharks (80%) (Table 5.22). They rated aspects such as *satisfaction with the operator*, *client service delivered* and *closeness to nature* lower than all other clusters, but as important to having a good experience. This serves as further evidence of the fact that they were not participating in the activity because of their own will (Table 5.23). The fact that the consorts have the lowest motivational scores, but indicated a positive attitude towards participating again and contributing to conservation, suggests that their participation in the activity has had a positive effect on the attitudes and potentially the behaviour, of this cluster.

The fifth cluster, *experience seekers*, ranked the motivational factor *experiences* as the most important factor, while *lifestyle* was ranked as lowest. This cluster places high value on gaining experiences from activities such as whale watching and shark cage diving. The majority of the experience seekers are 37.58 years of age (Table 5.22), female (55%), originating from international destinations (73%), they earn between R221 001 and R305 000 per annum (12%) and spent an average of R4169.36 on additional services and products during the trip (Table 5.20). They are day visitors (68%) with a strong inclination to participate in the activity again in the future (95%). The experience seekers will also contribute towards the conservation of whales (82%) and sharks (80%), as indicated in Table 5.22. Furthermore, they participate in other marine activities, such as snorkelling (2.07) and scuba diving (1.60). This cluster indicated that *satisfaction with the operator* (4.19) and *being close to nature* (3.66) are the most important aspects for a good experience (Table 5.23).

The last cluster, *adventure junkies*, ranked all motivational factors with the highest scores amongst all other cluster, suggesting their excitement and eagerness to participate in the activity is high. The two factors that stood out as most important motivational factors are *experiences* and *marine species*. This cluster is devoted to participating in activities involving marine species such as whales and sharks. They are also the people who will return for another activity in the future (88%), according to Table 5.22. The adventure junkies have an average age of 35.27 years, they are mostly female (58%), with international origins, earning between R305 001 and R431 000 per annum (17%) and they are mostly day visitors (56%). This cluster spent an average amount of R3558.43 during the trip and will contribute towards the conservation of whales (74%) and sharks (73%), even though they represent the lowest scores from all clusters (Table 5.22). This cluster rated *client service delivered*, *sea conditions*, *being educated on the marine environment*, *experiencing closeness to nature* and *add-ons on the trip* as having a big influence on the overall experience of the trip (Table 5.23). Furthermore, they participate in other marine activities as well, such as *surfing* (1.74), *scuba diving* (1.91), *wave rider* (1.68) and *fishing* (1.82) (Table 5.23). The adventure junkies are thus highly

motivated to participate in activities such as shark cage diving and whale watching for the adventure and experience derived from it, but are less inclined to contribute to the conservation of the species on which these activities focus.

Marine adventure activity operators can use this information to determine the needs and wants of the market. This information can be used to attract more specific markets, which will affect the growth of the industry, the social community and the economy positively. By having more people participating in activities such as shark cage diving and whale watching operators can have a positive effect on educating the public on conservation and protection of these species and the marine environment, thereby influencing changed behaviour amongst participants.

Table 5.22: Cross-tabulation with Ward's Method results for marine adventure participants

	Cluster 1: Thrill Seekers	Cluster 2: Risk takers	Cluster 3: Thalassophiles	Cluster 4: Consorts	Cluster 5: Experience seekers	Cluster 6: Adventure junkies	Chi- square
Gender	Female * (70.06%)	Male (60.8%)	Male/Female** (50%)	Female (55.9%)	Female (55%)	Female (57.7%)	0,083
Language	English (64.7%)	English (56%)	Other (50%)	English** (42.5%)	English* (72.5%)	English (62.5%)	0,094
Origin	International (79.4%)	International** (68.6%)	International* (80%)	International (73.5%)	International (75.6%)	International (65.4%)	0,382
Education	Diploma/degree (55.9%)	Diploma/degree * (40%)	Diploma/Degree ** (33.3%)	Diploma/degree (41.2%)	Diploma/deg ree/post- graduate (33.3%)	Diploma/ degree (50%)	0,593
Type of visitor	Day visitor (55.9%)	Day visitor (52%)	Overnight visitor (55%)	Day visitor/ overnight visitor ** (50%)	Day visitor* (67.5%)	Day visitor (56%)	0,009~
Heard about the operator	Office signage (48.5%)	Website (36.2%)**	Website (50%)*	Website (42.4%)	Office signage (39.5%)	Website (44%)	0,735
Participate again	Yes (79.3%)	Yes (95.1%)	Yes** (64.3%)	Yes (96.8%)	Yes * (95.2%)	Yes (88.4%)	0,000~
Conservation of whales	Yes (75%)	Yes (90.2%)*	Yes (78.9%)	Yes (83.3%)	Yes (82.1%)	Yes** (73.9%)	0,466
Conservation of sharks	Yes (71.9%)	Yes* (90%)	Yes (78.4%)	Yes (80%)	Yes (79.5%)	Yes** (72.7%)	0,387

* Indicates that the group differs significantly from the group where ** is indicated in the row

Table 5.23: One-way ANOVA with Tukey's post hoc test results for marine adventure participants

	Cluster 1: Thrill Seekers	Cluster 2: Risk takers	Cluster 3: Thalassophiles	Cluster 4: Consorts	Cluster 5: Experience seekers	Cluster 6: Adventure junkies	F-Ratio	Sig. Level
Age	31.67**	36.65	34.32	42.74*	37.58	35.27	2.39	<0.05
Spending	R3656.44	R5232.71*	R3531.18	R2122.00**	R4169.36	R3558.43	1.21	<0.05
Size of the travelling group	4.58	5.08*	2.8.**	5.21	2.93	4.19	1.19	<0.05
Previously participated in the activity	0.31**	1.36	1.13	0.96	0.55	1.85*	1.79	<0.05
Satisfaction with the operator	4.35	4.45*	4.13	3.38**	4.19	4.35	9.66	<0.05
Client service	3.67	3.93	3.60	3.16**	3.64	4.01*	5.69	<0.05
Sea conditions	3.29	2.79	2.81	2.70**	2.75	3.36*	3.52	<0.05
Education	3.49	3.66	3.31	3.12**	3.48	4.10*	7.70	<0.05
Closeness to nature	4.08	3.99	3.72	3.27**	3.66	4.43*	9.65	<0.05
Add-ons	3.43	3.06	2.60	2.57**	3.02	3.64*	7.74	<0.05
Surfing	1.19**	1.60	1.45	1.21	1.32	1.74*	2.13	<0.05
Scuba diving	1.53	1.84	1.35	1.39**	1.60	1.91*	2.35	<0.05
Sea kayaking	1.34	1.54*	1.64	1.39	1.33**	1.36	1.37	<0.05

Wave rider	1.45	1.48	1.34**	1.48	1.34**	1.68*	0.75	<0.05
Snorkel	2.00**	2.48*	2.18	2.00**	2.07	2.26	1.34	<0.05
Fishing	1.28	1.48	1.21**	1.25	1.34	1.82*	2.20	<0.05

* Indicates that the group differs significantly from the group where ** is indicated in the row

5.6 CONCLUSION

The focus of this chapter was to analyse the results obtained from the qualitative and quantitative surveys conducted. Firstly, in terms of the qualitative data collection, personal interviews were conducted with four operators of whale watching and shark cage diving. Other operators were also contacted for the opportunity to conduct an interview with them, but these operators were either unavailable or unwilling to participate, therefore the low number of personal interviews. The results from the interviews suggest that operators feel strongly about stronger regulations of the sector in terms of feeding the animals, poaching and illegal operations. It also indicates that operators value the element of educating their participants on the animals, marine environment and conservation highly and therefore emphasised this during the interviews. It is further identified that social media and online marketing, such as websites, are preferred above traditional marketing tools, such as pamphlets. The reason for this is that it is cheaper to run social media marketing, for example, than it is to print and distribute 100 brochures.

The quantitative results identified the demographic profile of both the community of Hermanus and the participants. The social community of Hermanus has an average age of 38 years, they are mostly employed as sales personnel, with Grade 12 (matric) as the highest level of education and they have been residing in Hermanus for 15 years on average. The residents have a positive attitude towards the Hermanus Whale Festival and feel that the festival and similar operations have a positive impact on their quality of life. The most important impact of the festival and whale watching activities in Hermanus was measured as negative aspects, such as increased crime, disruptive behaviour, excessive drinking and drug abuse and increased noise levels. The second impacting factor is awareness of Hermanus as a tourist destination, which results in improved conditions for residents, such as improved appearance of the area, more opportunities, increased employment and improved living standards and infrastructure. Even though the factor *negative aspects* was identified as having the highest impact, residents are still positive and cope with the increase in negative impacts for the duration of the festival.

The profile of marine adventure participants was identified as female, aged 38 and originating from international countries, such as America, Germany and Sweden. Furthermore, they have high levels of education, such as a diploma or degree from a tertiary institute and earn an annual income of more than R672 001 per annum. The most important motive for participation in the activity was measured as the opportunity to see marine species, while personal achievement was ranked as the least important motive for participation. Additionally, being close to nature was identified as the most important factor contributing to a valuable experience, while conditions of the sea was identified as the factor which influences the experience of participants the least. In terms of aspects contributing to the satisfaction of participants, friendliness of the staff was the most important factor.

Furthermore, six clusters for participants were identified, namely Thrill seekers, Risk takers, Adventure junkies, Consorts and Thalassophiles (T²RACE). The ANOVA results suggest statistically

significant differences ($p < 5$) between the clusters based on the demographic details, motives for participation and factors of satisfaction.

In conclusion, the results obtained from both surveys can be used by marketers and operators to improve their service offering and sustainable practices, but it will also be used for the development of the sustainable management framework for marine adventure tourism products. This relates to the goal of this study and can be used by operators to improve the sustainability of the sector.

Chapter 6

Conclusions and Recommendations

Sharks are beautiful animals, and if you're lucky enough to see lots of them, that means that you're in a healthy ocean. You should be afraid if you are in the ocean and don't see sharks.

~Sylvia Earle

6.1 INTRODUCTION

Chapter 6 aims to discuss the results of this study according to the aims and objectives set in Chapter 1. By discussing the results, the conclusions and recommendations would be formulated and the sustainable management framework for marine adventure tourism products established.

The goal of this study was to develop a sustainable management framework for marine adventure tourism products. The focus of this research was placed on shark cage diving and boat-based whale watching in Hermanus and Gansbaai, Western Cape, South Africa. In order to achieve this, the following objectives were set in Chapter 1.

- Objective one, two and three: these objectives were aimed at conducting in-depth literature analyses on relevant topics, namely marine tourism management, adventure tourism and sustainable tourism. Important aspects were discussed such as the management aspects pertaining to marine tourism, the concept of adventure tourism with important theories, as well as three pillars of sustainability. Relevant literature was identified and discussed to formulate a clear understanding of these concepts and the industry of marine adventure tourism. These objectives were met in Chapters 2, 3 and 4 of this thesis.
- Objective four: in order to collect primary data for this research, three surveys were conducted. Firstly, personal interviews were conducted with whale watching and shark cage diving operators to gain insight into the operations of the sector and operators' general attitude towards sustainability. Secondly, the residents of Hermanus were approached and asked to complete a questionnaire pertaining to their attitude on whale watching and shark cage diving. Thirdly, the participants of shark cage diving and whale watching were asked to complete a questionnaire pertaining to their attitudes towards conservation and sustainability of the sector, experiences and motivations. This objective was met in Chapter 5 of this thesis, where the results are analysed and discussed.
- Objective five: the fifth and final objective is to draw conclusions, establish the management framework and to make recommendations pertaining to the literature review,

the empirical results and to identify any comparisons or differences between the literature and results. Furthermore, the contributions of this research are indicated, along with the limitations of this research and future research opportunities. This objective is met in this chapter and the sustainable management framework is established and discussed as well.

6.1.1 Personal journey as a PhD student

Appreciation for natural beauty comes in all shapes and sizes. Natural beauty does not only refer to landscapes and the ocean, but to man-made buildings and wondrous opportunities as well. I am an avid supporter of nature conservation in all its forms, but my true passion has always been for the ocean and marine life. From my earliest memory the ocean has played a big role in my life. As a child my parents often took me to the beach for daily excursions or for holiday. I would spend hours at the beach, swimming in the ocean and snorkelling with my parents. As the time passed and I grew up, this did not change. I continued to develop a fondness for the ocean, with the spectacular beauty and its calming effect. It is these memories and the passion for the ocean that was instilled in me since an early age that made me choose the path I walked with this thesis.

Having had the opportunity to grow up with the ocean instilled both a fear and an appreciation for its beauty and power. Being a surfer and scuba diver myself, I spend much of my free time in the water, which has made me realise the extreme importance of our oceans. Not only is it home to many species of marine animals and plants, but man cannot survive without it. It is a source of food, pleasure and provides for transportation, to name a few. As humans, we have an immense responsibility of taking care of our oceans to ensure that future generations can enjoy the resources it provides as we are enjoying it today. Humans have come with many ways to enjoy the ocean both for pleasure and for financial gain. Marine adventure tourism is one such way. Scuba diving, surfing, shark cage diving, whale watching, sea kayaking and many other activities, have been established over the years as leisure activities for people to enjoy. With this enjoyment however, we have caused more damage than good.

The Great Barrier Reef in Australia has declined and we see reefs in South Africa decline as well. Sharks have been said to be conditioned as a result of shark cage diving activities, and the number of whales found along our coast have seemingly decreased as well. Whether or not the decline in numbers is due to tourism activities cannot be said. My years studying at university have equipped me with the skills and capabilities necessary to identify problem areas within both management and tourism and to be able to identify solutions to these problems.

Therefore, it soon became apparent to me that humans' influence on our oceans are having dire consequences on the environment and marine life. It was this combination of passion for

the oceans, education and the realisation of unsustainable practices that made me decide to base my PhD thesis on the sustainable management of marine adventure tourism products. I believe that activities such as shark cage diving and whale watching are necessary to enhance an appreciation of our oceans, but it should be managed appropriately to ensure that as low a human impact as possible is left behind.

Throughout this journey, I was taught many life lessons along with the valuable knowledge I gained from this research. Life will never be without struggles, but the key to survival is the way in which we approach these struggles. A positive attitude and being open to the opinions of others can help you to see things in a new perspective, which is often necessary. Aside from this, I learnt that criticism and feedback should be taken in a positive light as well, as this is a valuable way of learning and improving yourself. As a PhD student, I was faced with multiple challenges that each made me a stronger individual. One lesson I will take with me is to make time for reflection. We live busy lives and often do not find the time to identify ways in which we can improve our lives to improve our environment. From an academic perspective, I do believe that education is a valuable gift. Even though this research has been extensive, I believe there is still much more to learn about marine adventure tourism.

The purpose of this chapter is, therefore, to draw conclusions on the literature discussed and the empirical results, as well as to establish the sustainable management framework for marine adventure tourism products in South Africa. The contents of this chapter are discussed in the order indicated by Figure 6.1 below.

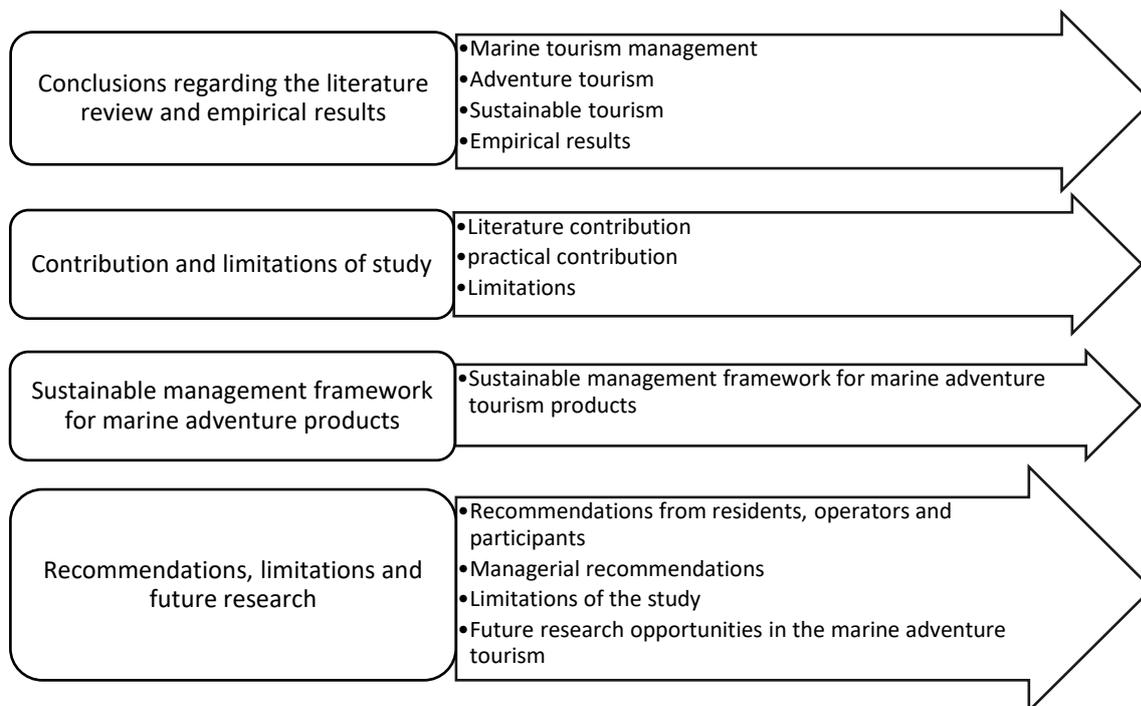


Figure 6.1: Outline of chapter

6.2 CONCLUSIONS REGARDING THE RESEARCH

The following section discusses conclusions which can be drawn from the literature review and empirical results conducted. First, conclusions are drawn from the analyses on sustainable tourism management, adventure tourism and marine tourism and second of empirical results.

6.2.1 Conclusions regarding the literature analysis on marine tourism

This section highlights the most important conclusions drawn from the literature analysis on marine tourism, as discussed on Chapter 2.

- Marine tourism is not a new phenomenon but is growing in interest. The industry started with the establishment of the three 'S's' tourism; sun sea and sand (c.f. 2.2.1).
- Marine tourism is defined as all recreational activities which involve travelling away from one's normal place of residence to a destination where the focus is placed on the marine environment (c.f. 2.2.2). The marine environment is, in turn, defined as waters which are saline and tide-affected (c.f. 2.2.2).
- Four sub-sectors of marine tourism can be identified, including cruise tourism, nautical tourism, coastal tourism and marine event and festival tourism (c.f. 2.2.3). Shark cage diving and boat-based whale watching are categorised as nautical tourism (c.f. 2.2.3). Nautical tourism involves boat-based activities, or navigational tools and takes on any body of water (c.f. 2.2.3).
- The spectrum of marine recreation opportunities was developed by Clark and Stankey (1979) (c.f. 2.2.4) and identifies five classes of remoteness, characterised by experiences, the environment, locations and examples. As the degree of remoteness increase, the degree of human impacts will decrease (c.f. 2.2.4).
- Shark cage diving is therefore classified as *nautical tourism*, forms part of the activity group *motorised water-based activities* and is categorised as *semi-remote*. Boat-based whale watching is classified as *nautical tourism*, *motorised water-based activities* and *semi-remote* (c.f. 2.2.4).
- Wildlife tourism is defined as people's encounters with non-domesticated animals in the animal's natural habitat. The tourist will be able to photograph the animal, practice hunting, view and feed the animal (c.f. 2.3).
- Marine wildlife tourism is therefore defined as people's encounters with marine animals, such as whales, sharks and dolphins, in the ocean (natural habitat) for the purposes of viewing and photographing the animals (c.f. 2.3).
- Duffus and Dearden (1990) identified the core components of non-consumptive wildlife tourism as the wildlife user, the historical relationship and species and habitat (c.f. 2.3).

- Experiences of marine wildlife tourism is influenced by social and physiological aspects, psychological aspects, educational and conservational benefits (c.f. 2.3.1).
- Factors have been identified which can either enhance or decrease the tourists' experiences, including quality of the encounter with the animal, the knowledge and experience of the crew, proximity of the animals to the boat, size of the group, the duration of the trip, construction of the boat for viewing, positioning of the boat and issues of sea-sickness (c.f. 2.3.1).
- Marine wildlife tourists desire interaction with marine animals where the experience incorporates a learning aspect and well-structured interpretive programmes are focussed on conservation aspects and environmental-friendly practices (c.f. 2.3.1). Whale watching participants have the best experiences when the whale is close to the boat.
- Marine tourism experiences should be entertaining and educational in nature (c.f. 2.3.1).
- The type of animal encountered, the authenticity of the experience and the authenticity of the marine environment is important for a quality marine wildlife experience (c.f. 2.3.1).
- Marine wildlife tourism envelopes a component of marine ecotourism because the activity takes place in a natural environment, it is managed and developed sustainably, it benefits the community and provides resources for conservation (c.f. 2.3.2).
- The characteristics of marine ecotourism offerings can be divided into two groups, namely specialist operators (who focus on a specific species such as whales) and opportunists (who integrate marine species sighted on a trip into the offering based on opportunity) (c.f. 2.3.2).
- Important factors for the management of tourism, in general, include planning, organising, leading, control and functional areas of management, such as financial management, marketing management, operational management, and human resources management (c.f. 2.4.1).
- Effective management can only take place if all parties work together, objectives are specified, effectiveness versus efficiency is practiced and processes are implemented for the management of a changing environment (c.f. 2.4.1).
- Management of marine tourism activities includes accurate and effective planning (c.f. 2.4.1.1), an accurate and effective organisational structure (c.f.2.4.1.2), a good leader with the ability to achieve goals (c.f. 2.4.1.3), applicable control processes (c.f. 2.4.1.4) and the implementation of appropriate functional management processes (c.f. 2.4.1.5).
- Three areas of marine tourism which should be managed include natural systems, socio-cultural systems and management systems. The natural system includes the ocean, animals and plants, for example, the migratory patterns of the whales that should be kept in mind when planning activities. The socio-cultural system includes the human element

of a community and the interaction between the natural system and humans. Lastly, the management system includes the government, policies, regulations, programs and non-government organisations (c.f. 2.4.2).

- Orams (1999) suggests that four strategies influence the effective management of marine tourism, namely regulatory management strategies, physical management, economic strategies and educational strategies (c.f. 2.4.2.1).
- Management techniques include prohibition, manage and ignore (c.f. 2.4.2.1).
- Management of marine wildlife tourism involves the management of tour leaders, conservation management, management of educational and interpretation programs, implementation of policies, accurate planning, effective marketing and financial management and management of stakeholder needs (c.f. 2.4.2.2).
- Studies suggest that there is a need for a proper sustainable management framework for marine tourism operators which considers education, conservation, environmental impacts, economic growth, resource management, government involvement, sustainable development and future-oriented approach (c.f. 2.4.2.2).
- A management framework for successful marine tourism management comprises of planning (economic, conservation, community, stakeholders, benefits and impacts), organising (management structures, organisational structure, goals and objectives, communication, line of authority), leading (educational programmes, interpretation, guides, interaction, conservation, preservation), control (permits and licenses, regulation, conservation, preservation, impacts, human interaction, physical management), financial management (profitability, growth, income for conservation, increased fees), marketing management (perceptions, profile, communication, awareness, understanding), operations management (policies, codes of conduct, implementation of planning strategies) and human resource management (hiring correct staff, employee satisfaction, training, hiring local residents) (c.f. 2.4.2.3).
- Aspects of importance for the effective, sustainable management of the shark cage diving and whale watching sector is a limited daily bait allowance, monitor compliance with regulations, the creation of awareness and limited areas for operational purposes to ensure resources (sharks and whales) are not abused (c.f. 2.4.2.5).
- A code of conduct representing the regulations for shark cage diving in the Azores (Bentz *et al.*, 2013) identified five areas with which operators should comply, namely activity preparation, human safety, wellbeing of the animal, operator's attitude and miscellaneous (c.f. 2.4.2.5).

6.2.2 Conclusions regarding the literature analysis on adventure tourism

The following conclusions are drawn from the literature review on adventure tourism and can be seen as the most important conclusions. These conclusions are drawn from Chapter 3:

- Adventure tourism is defined as a leisure activity which takes place in an unusual, sometimes exotic and remote wilderness setting. These activities are characterised by high levels of risk, excitement, tranquillity and personal challenge. The outcome of adventure tourism experiences is often unknown and will vary according to the level of the participant's experience and skills (c.f. 3.2).
- The characteristics of adventure tourists are unique and include more travel experience, higher inclination towards fun and adventure while on holiday, more independence, higher flexibility, changed values, changed lifestyles and changed demographics (c.f. 3.2).
- Adventure tourism is subdivided into soft and hard adventure categories. Soft adventure tourism is characterised by low-risk activities; participants need little prior experience and tourists can participate in multiple activities per trip, such as whale watching. Hard adventure activities are characterised by high levels of risk and danger and tourists participate in one such activity per trip, such as scuba diving (c.f. 3.2.1).
- A second method for subdividing adventure tourism activities is that of Adventure Quadrants. Activities are classified according to the level of challenge each poses and the level of independence each involves. The consistent variable amongst these two activities is the fact that each proposes that adventure tourism activities vary according to the level of risk offered, skills and experience needed by participants (c.f. 3.2.1).
- The lifestyle of tourists has a great impact on whether or not they will be interested in adventure tourism activities. Therefore, the profile of adventure tourists has been identified as people in their mid-forties or – fifties, educated and are active thrill seekers. They are willing to spend significant amounts of money on adventure-related activities (c.f. 3.2.2).
- Adventure tourists are motivated by their expectations, the level of service received, the want to visit a particular destination, status, the need to experience thrill, fear and risk and unexpected outcomes (c.f. 3.3).
- Theories, such as Maslow's hierarchy of needs, Iso-Ahola's seeking and escaping dimensions and the push and pull theory, and sunlust and wanderlust have been developed with the aim of understanding the motives of tourists. These theories focus on tourism in general and can be used to identify the motives of tourist sectors, such as marine tourism. These theories have two aspects in common, namely inner and external motives which drive tourists to participate in a tourism activity. Both of these motivations

can be realised by means of effective and efficient management of tourism activities, which will influence tourists' choice to participate in the activity (c.f. 3.3).

- Social and physiological aspects, psychological aspects, educational benefits and conservation benefits can be derived by participation in adventure activities (c.f. 3.4).
- Factors influencing the experience of adventure tourists include emotions, previous experiences, demographic detail, expectations, personal opinions and level of skills (c.f. 3.4).
- In order to explain the levels of experience derived from adventure tourism activities, three theories have been discussed in the literature review. The stages of adventure (c.f. 3.4.1) identify four levels, namely play, adventure, frontier adventure and misadventure, measured according to the level of risk versus competence. Secondly, the adventure experience paradigm (c.f. 3.4.2) states that adventure experiences are derived from the perceived level of risk versus competence and adds the following categories to the stages of adventure; exploration and experimentation, peak adventure and devastation and disaster. Thirdly, the adventure activity scale (c.f. 3.4.3) measures experiences according to the level of difficulty versus volume.
- The common variable amongst these theories is the fact that adventure tourism experiences are largely derived from the level of risk, competence or skills of tourists and perceptions of tourists. These theories further state that the lower the level of competence required from the participant, the lower the level of risk and the higher the volume of activities which tourists can participate in during a single trip.
- Marine adventure tourists' experiences are influenced by social and physiological aspects (benefits sought and escape), psychological aspects (excitement, novelty, intensity, and uniqueness), educational aspects (learning about wildlife) and conservation benefits (environmental awareness, supporting nature conservation and protecting endangered species) (c.f. 3.5; 5.5).
- Factors that can either enhance or decline the experience of participants to whale watching and shark cage diving include quality of the trip, knowledge and friendliness of the crew, proximity of the animals, number of passengers on boards, duration of the trip, the boat itself, position of the boat to the animals and sea-sickness (c.f. 3.5).

6.2.3 Conclusions regarding the literature analysis on sustainable tourism management

The following can be seen as the main conclusions regarding sustainable tourism management, as discussed in Chapter 4):

- Sustainability can be defined as development which meets the needs of the present while not compromising the ability of future generations to meet their needs. This further refers to the long-term survival of the product, service, economy, community, or environment (c.f. 4.2).
- Sustainable tourism leads to the management of resources which ensures that economic, social and aesthetic needs are met while also ensuring that cultural integrity, biodiversity and life support systems are maintained (c.f. 4.2).
- Sustainability consists of three pillars, namely economic viability, social equity and environmental efficiency (c.f. 4.2). An interrelationship between these three pillars can be identified, which ensures the effective and long-term viable management of tourism products (c.f. 4.2).
- Sustainable tourism development can be characterised by various general concepts (slow and long-term development and local control), development strategies (planning, concern for landscapes, local employment and local developers and vernacular architecture), as well as tourism behavioural concepts (mental preparation, quiet behaviour, tactful and sensitive and repeat visitation) (c.f. 4.2).
- Many advantages of sustainability can be identified, such as employment opportunities, respect for cultural and natural heritage, improvement of the quality of life and maintenance and improvement of heritage. Disadvantages, however, include overcrowding, traffic congestion, development and conflict between local community members and tourists (c.f. 4.2.1).
- Various interpretations amongst academics and industry experts exist which hinders the identification of applicable strategies for sustainable management (c.f. 4.2.2).
- The first leg of sustainability includes economic efficiency and states that all stakeholders' opinions and needs should be taken into account. This includes the even distribution of socio-economic benefits amongst those with stable employment (c.f. 4.3).
- Economy benefits include a contribution to foreign exchange, to government revenue, generation of employment opportunities and the creation of business opportunities (c.f. 4.3.1).
- Three economic valuation models have been identified in the literature, namely the travel cost method, the choice modelling experiment and the contingency valuation method. The travel cost method allows the estimation of the monetary value of goods and services in the country. Secondly, the choice modelling experiment is used to measure the willingness to pay of visitors for the provision of tourism service and activities. Thirdly, the contingency valuation method is used to estimate the value which individuals place on non-market goods (c.f. 4.3.2).

- Environmental conservation is seen as the conservation of natural resources, such as landscapes, fauna, flora, water, soil and minerals (c.f. 4.4).
- The definition of the term 'environment' is given as the external surroundings in which an organism lives. This is made up of biodiversity, the spatial environment and the social environment (c.f. 4.4).
- Various types of conservation can be identified, including marine conservation, conservation of forests, conservation of grazing lands, wildlife conservation, soil conservation and carrying capacity conservation (c.f. 4.4).
- Tourism causes many negative impacts on the environment, including exploitation of natural resources, draining of wetlands, the introduction of harmful species, pollution and litter and poaching (c.f. 4.4.1).
- A unique interaction is identified between tourists and members of the host community. This relationship leads to certain social impacts relating to the change in value systems, behaviour, social relationships, lifestyles and community structures (c.f. 4.5).
- A culture is the essence of a community and refers to a way of life of a particular group of people relating to their behavioural patterns, values and perceptions (c.f. 4.5.1).
- Three elements are identified which make up the host community, namely the economic system, the residents, and the community infrastructures and services (c.f. 4.5.2).
- Key socio-cultural impacts of tourism can be identified to have an effect on the host community, such as gambling, prostitution, crime, rural and urban migration, health issues, the demonstration effect, language barriers, commoditisation and staged authenticity (c.f. 4.5.3).
- Positive impacts can also be identified through, such as preservation of culture and heritage, cultural pride, cross-cultural peace and understanding, improved infrastructure and provision of community facilities and public services (c.f. 4.5.3).
- Various models have been developed which aids understanding and management of social impacts, namely Doxey's Irridex Model, Butler's Lifecycle Model, Dogan's Framework and The Social Exchange Theory (c.f. 4.5.4). The common variable between these models is the fact that as tourism to an area increases the number of undesirable activities increase as well and management of resources need to be effective and efficient. These models follow a general approach and are therefore not focussed on specific tourism communities. The management method of resources will vary from resource to resource and should be customised to ensure the sustainable management of the resources aimed to be conserved. A gap in the literature has therefore been identified for the development and implementation of a sustainable management framework focussed on marine adventure tourism resources specifically.

- Three sustainability management frameworks have been identified from the literature and the following key concepts have been identified as important in all three frameworks. Firstly, the local community should be involved in decision-making, operations and tourism activities to ensure positive attitudes are harboured regarding the tourism industry. Secondly, education and awareness raising are important concepts to ensure that community members and the public are educated on the importance of the marine environment. Thirdly, management functions such as marketing and adherence to legislation are important to ensure successful management of the business. Lastly, management should be able to make informed decisions regarding the economic efficiency of the operation, environmental conservation and social equity (c.f. 4.7).
- A clear need for a sustainable management framework is identified which should be focussed on all three of the pillars of sustainability, namely economic efficiency, environmental conservation and social equity. If these three pillars are not appropriately managed the sustainability of the specific tourism industry cannot be ensured in the long-term.

6.2.4 Conclusions regarding the empirical results of this research

The following conclusions can be drawn from the empirical results of this study. These conclusions can be seen as the most important information derived from the primary information collected for this research. Conclusions from both the qualitative and quantitative results are discussed.

6.2.4.1 Conclusions regarding the results from the personal interviews with the operators (qualitative results)

The following conclusions are drawn from the qualitative results of this research:

- Number of years in operation, number of boats owned, number of staff and role in the operation: operators have been in operation for an average of 18 years (c.f. 5.2.1), each operator owns one boat per operation (c.f. 5.2.2) and they have an average amount of 25 permanent staff members and 13 temporary staff members (c.f. 5.2.3). It should be noted that temporary staff members include marine and research volunteers. Respondents assumed the role of either the owner or the manager in charge of the operation (c.f. 5.2.4).
- The average price per person per trip and number of months in operation: the average price per person per trip for whale watching equals R850, while the average amount for shark cage diving per person per trip equals R1650 (c.f. 5.2.5). Whale watching operations run for an average of 6 months per year, from June to December, while shark cage diving operations run for 12 months of the year (c.f. 5.2.6).

- Training provided: all staff members have trained appropriately at each operation, this includes health and safety training, safety at sea, skipper training, first-aid training and administrative training (c.f. 5.2.7).
- Does the company have a website: regarding marketing, all companies have a fully operational website on which tourists can book and pay for their trips (c.f. 5.2.8). It is emphasised, however, that operators prefer participants to pay on the day as this excludes the risk of having to postpone or cancel the trips due to unruly weather conditions.
- Attendance to marketing shows, other marketing tools used and identification of the target market: operators do attend marketing shows such as the Tourism Indaba and the World Travel Market exposition (c.f. 5.2.9). These shows prove to benefit operators through raising awareness, educating the public and offering opportunities to identify new competitors in the market. Other marketing tools used include social media, such as Facebook, online marketing and blogs and printed advertisements such as pamphlets and brochures (c.f. 5.2.10). All operators have identified their target markets as largely comprising of international tourists, mostly from Germany, Egypt, Japan and Britain (c.f. 5.2.11).
- Relationship to the Hermanus Whale Festival and attitudes towards conservation: operators have reported no relationship with the Hermanus Whale Festival, as this festival does not benefit operators in terms of revenue generation, raising awareness or acquiring participants (c.f. 5.2.12). Operators are, however, positive towards the idea of contributing to conservation, but preference is given to supporting conservation projects as a company and informing participants about these projects. Operators do feel that participants should be given a choice as to whether or not they want to contribute towards conservation projects (c.f. 5.2.13).
- Management advantage and understanding the concept of sustainability: the management advantage identified by each operator is centred on a unique element of the company, such as attention to detail, service excellence and experience in the sector (c.f. 5.2.14). Furthermore, operators do understand the concept of sustainability and strive towards the implementation of sustainable practices in multiple areas of the company, including recycling, community participation and conserving natural resources (c.f. 5.2.15).
- What should be done to keep the industry sustainable and what is being done regarding education: when asked what should be done to keep the industry sustainable, operators identified the need for stronger regulation of rules and permits and increased security against poaching (c.f. 5.2.16). All operators aim to educate participants by briefing them on the environment, animals and safety precautions before the group boards the boat, while at sea, marine biologists and/or tour guides are on board to answer questions and

elaborate on certain concepts and a debriefing is conducted afterwards where participants are informed about the importance of conservation of the environment. Operators reach out toward the local community by arranging beach clean-ups and offering educational programs for school groups (c.f. 5.2.17).

- Measures in place to look after the environment while on a trip: at the moment operators implement sustainability measures in the form of approaching the animals responsibly, behaving sustainably, contributing towards conservation, employing local community members and training them and behaving conscientiously towards the environment and community (c.f. 5.2.18).

6.2.4.2 Conclusions regarding the results from the residents of Hermanus (quantitative results)

The following conclusions can be drawn from the quantitative results of this research. The quantitative conclusions are divided into two sections, namely the conclusions drawn from the survey on the Hermanus community and the conclusions that can be drawn from the survey on marine adventure participants. The conclusions regarding the community survey of Hermanus is first:

- Residents of Hermanus are mostly male with an average age of 38 years. They are sales personnel with a Grade 12, or matric, qualification who have been living in Hermanus for an average of 15 years (c.f. 5.3.1).
- While few of them are directly involved with the festival, the majority does attend the festival whenever possible. The residents, therefore, do not display high levels of attachment to the festival, but perceive it as a valuable form of entertainment (c.f.5.3.1).
- Whale watching and shark cage diving has a positive impact on the community of Hermanus in terms of the awareness raised of Hermanus as a tourism destination, the appearance of the town, opportunities for entertainment, an improved economy, improved infrastructure, shopping opportunities, increased entrepreneurial opportunities and improved living standards. It also has a negative impact on the community in terms of increased noise and crime, excessive alcohol and drug abuse, disruptive behaviour, increased prices and cost of living, traffic congestion and general irritation amongst residents (c.f. 5.3.1.2).
- Regarding the impact of the festival on personal quality of life, residents felt like there was no real impact, either positive or negative (c.f. 5.3.1.7).
- Residents harbour positive attitudes towards the Hermanus Whale Festival and suggest that the festival has impacted their community and personal lives in a positive manner.

Benefits indicated as a result of the festival include increased income, improved living standards and increased community pride (c.f. 5.3.1.8).

- The minority of residents work at the festival. They are mostly shop owners, managers, or employees in the hospitality industry. It is also clear that residents are interested in the festival and attends when they can (c.f. 5.3.1.9).
- Hermanus residents are interested in the festival, but awareness should be raised continuously to increase the level of interest shown by the local community. This can be done by means of offering residents opportunities and changing the programme of the festival to include new products and service, such as educational programmes (c.f. 5.3.1.10).
- Residents evaluated the festival as excellent exposure for the community, the area is suitable for the purpose for the festival, the festival is well-marketed and accessible and the festival is well-organised. This further indicates positive attitudes displayed regarding the Hermanus Whale Festival, but festival organisers should aim to improve residents' attitudes even further by providing more opportunities for residents to be part of the festival (c.f. 5.3.1.11).
- Residents indicated that the most important events at the festival were The Eco-Marine Village and the Total Whale Marathon. This further enhances the idea of residents wanting more educational programmes and information on the whales and the marine environment (c.f.5.3.1.12).
- The most important impacts from the Hermanus Whale Festival on the community include the fact that the image of the town has improved, more opportunities for shopping have arisen, awareness of Hermanus as a tourist destination has increased, but the overall cost of living in the area has increased as well. This is in partial due to increased tourism activities in the area. Where the demand for tourism activities increase, the cost of living will increase as well (c.f. 5.3.1.13). Therefore, the factor analysis identified three important factors, namely awareness, negative aspects and community benefits. The most important factor was identified to be awareness, while community benefits were identified as the least important (c.f. 5.4.1). This suggests that shark cage diving and whale watching contribute more towards raising awareness for the importance of the marine environment and the animals (whales and sharks) while community benefits derived from the activities should be enhanced, such as employment opportunities and purchasing locally.

6.2.4.3 Conclusions from the participants of marine adventure tourism products (quantitative results)

- Marine adventure participants are female with an average age of 38 years, they are English speaking and originate from international countries, such as Germany, America

and Sweden. They have a diploma or degree from a tertiary institute and mostly earn more than R600 000 per annum (c.f. 5.3.2).

- Participants are day visitors to the area who heard about the operator by means of a website or travel agent. Participants earn an annual gross income of R672 001 (c.f. 5.3.2).
- They rarely participate in other marine adventure activities, such as snorkelling and scuba diving and have not participated in either whale watching or shark cage diving beforehand (c.f. 5.3.2.11) but would participate in it again in the future (c.f. 5.3.2.12). Other marine activities in which marine adventure participants often participate include scuba diving, surfing, sea kayaking and wave rider (c.f. 5.3.2.10).
- The aspects which influence participants' motives for participation in whale watching and shark cage diving is because animals such as whales and sharks excite them, because it holds new experiences and for the thrill and excitement which is offered by the experience (c.f.5.3.2.13).
- The factor analysis, therefore, identified four important motives for participation in shark cage diving and whale watching activities. These factors include experiences, marine species, lifestyle and personal achievement. The most important motive being marine species, while personal achievement ranked as the least important motive (c.f.5.4.2).
- Aspects influencing the experience of shark cage divers and whale watchers include being in proximity to whales and sharks, being close to nature, the knowledge and helpfulness of staff and the variety of animals seen on the trip (c.f. 5.3.2.14). These aspects should be focussed on when offering an experience in marine adventure tourism.
- Therefore, the factor analysis on factors of importance for a valuable experience identified being close to nature and the level of client service which is offered by the operator as very important (c.f. 5.4.3).
- The satisfaction of participants is mostly influenced by the friendliness of the staff, knowledge of the staff and operators and clear briefings and instructions pertaining to the trip. Although these factors were identified as the most important for ensuring satisfaction, all aspects tested are of importance, such as quality of the equipment, educating participants, views on conservation and environmentally friendly practice implemented (c.f. 5.4.4).
- Six clusters were identified, namely thrill seekers, risk takers, thalassophiles, adventure junkies, consorts and experience seekers (T²RACE). Statistically significant differences were identified between all six clusters. Each cluster has a unique element on which operators can focus on attracting a more specific market and to ensure more satisfied participants (c.f. 5.4.5). Similarities were identified between each of the clusters, such as the factors for *experiences* and *marine species* ranking most important across all clusters.

Differences, however, was identified from the fact that not all clusters valued *experiences* and *marine species* equally high. *Adventure junkies* are the most enthusiastic cluster, while *consorts* are merely along in support of a friend or family.

6.3 CONTRIBUTIONS AND LIMITATIONS OF THE STUDY

The aim of the study was to develop a framework for the sustainable management of marine adventure tourism activities in South Africa, namely whale watching and shark cage diving. A thesis submitted in the fulfilment of a *Philosophiae Doctor* should make one or more contributions to the field of study. This can be either a literature contribution, methodological contribution and/or a practical contribution. The contribution of this study is two-fold, seeing as literature and practical contributions are made.

Literature contribution

Firstly, with regards to the literary contribution, this study offers insight into marine tourism management, marine adventure tourism and sustainable tourism. The sector is put into perspective for operators of marine adventure tourism activities as well as researchers in the field. The following literature contributions are made:

- The study identified the various areas of marine tourism management, adventure tourism management and sustainable tourism management. The important managerial aspects of marine tourism have been identified and a model has been established from existing literature (See page 47). This has also been used in the sustainable management framework for marine adventure tourism products in this study.
- A model was created to explain sustainability of tourism offerings as part of ecotourism. The model identifies where the three areas of sustainability fit in with the pillars of ecotourism.
- The impacts of shark cage diving and whale watching on the local community have been identified by means of primary research. This makes a contribution pertaining to literature on community impacts. These aspects have also been used in the framework for sustainable management of marine adventure products (see section 6.4) established in this thesis.
- The impact factors of marine adventure tourism practices, specifically whale watching and shark cage diving, on the community have been identified. The factors aid the identification of which positive impacts should be enhanced, such as education and job creation, while negative impacts, such as pollution and rowdy behaviour, should be minimised.

- The interviews with the operators helped to identify what the industry should be doing to become more sustainable, such as more research conducted on shark- and whale behaviour and educational programmes. The interviews identified the fact that stronger government regulations should be implemented to eliminate illegal operations in the sector.
- The market for marine adventure tourists was described by identifying the profile, the taxonomy of market clusters (T²RACE), motives to participate, factors influencing satisfaction and factors influencing the experience of participants. This contributes to deeper understanding of the demand side of marine adventure tourists.

Practical contribution

In terms of the practical contribution, this thesis developed a sustainable management framework for marine adventure tourism products. This framework was established through utilising existing literature as well as the empirical results obtained in this study. The framework's contribution lies in the fact that it is combining the internal and external environments, the supply and demand side as well as the inputs to produce a comprehensive sustainable management framework (outputs) which can be implemented to ensure sustainable management of the marine adventure operation.

Limitations to the study

The following limitations have been identified pertaining to the study. Recommendations are made accordingly for future research.

- Due to an unavailability of a list of population members, non-probability with convenience sampling was used. Future research should make use of probability sampling with simple random sampling methods. This will ensure validity and reliability of the data.
- A limited number of community members were willing to participate in the survey. The implementation of probability with simple random sampling will minimise this problem. Furthermore, an extended period of time is necessary to ensure a higher number of participants are included in the survey.
- Merely four operators were willing to participate in the qualitative survey. The inclusion of more operators in the survey will provide more comprehensive results.
- The study was conducted within the borders of South Africa, therefore the findings are not applicable to other destinations. This can, however, be tested by conducting similar studies at other destinations offering shark cage diving and whale watching.
- This study focussed on two marine adventure activities, namely shark cage diving and whale watching. Other activities, such as stand-up paddle boarding, scuba diving and

wave rider, should be researched to provide a more holistic view of sustainability on the marine adventure tourism sector of South Africa.

6.4 A SUSTAINABLE MANAGEMENT FRAMEWORK FOR MARINE ADVENTURE PRODUCTS

The primary goal of this study was to develop a sustainable management framework for marine adventure tourism products. In order to do so, a literature analysis was conducted along with primary data collection, of which the findings have been utilised to establish this sustainable management framework. The framework consists of the external environment (political, legislative, technological, climatic and cultural), the internal environment (managerial functions and the functional environment) and the demand and supply side as well as the inputs and outputs. In the end the framework establishes the guidelines for sustainable management of marine adventure products in the form of the outputs. Figure 6.2 is a visual representation of the framework.

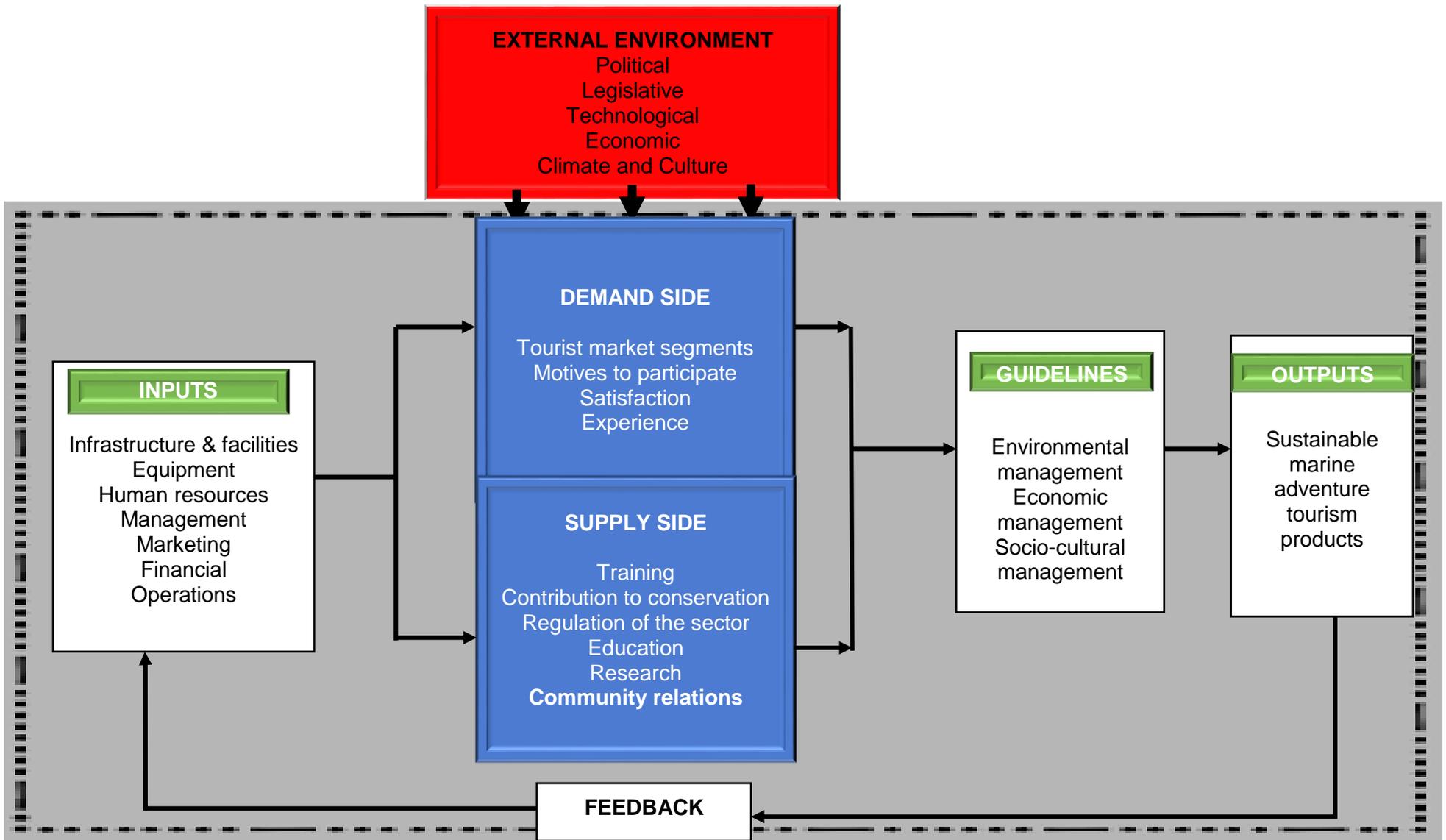


Figure 6.2: A sustainable management framework for marine adventure products

6.4.1 External environment

The external environment consists of the political environment, the legislative environment, the technological environment, the economic environment, the climate and the cultural environment. These environments influence the inputs of the operation, which consists of the managerial functions (planning, organising, leading and control), the functional environment (financial management, marketing management, operations management and human resource management), infrastructure and facilities and equipment. As the inputs change, the demand and supply sides of the operation will change. In turn, the demand and supply side have an influence on the guidelines which should be followed to ensure that the sector is managed sustainably (outputs). Therefore, operators should take notice of both the demand (market segmentation, motives, factors influencing the experience and satisfaction) and supply side aspects (what operators offer) to ensure proper sustainable management of the sector. The following external environmental aspects are discussed.

6.4.1.1 Political environment

The political environment refers to the political status of the country and can influence travel patterns and create new opportunities for operators. Furthermore, changes in the political environment, such as political instability and strikes will have a great influence on the tourism industry of a country. Tourists want to feel safe when travelling to a new country and they will not want to visit a country where their safety is compromised.

6.4.1.2 Legislative environment

Legislation by government is seen as external as new legislation can have a positive or a negative effect on their operations. Governments implementing new policies or establishing new trade relations with other countries can greatly influence the travel patterns of visitors. For example, South Africa government introduced a new law for child trafficking, namely the Prevention and Combatting of trafficking in Persons Act no 7 of 2013 (South Africa, 2013) which aimed at decreasing child trafficking. But in turn it led to immense decreases in international tourism numbers. This is a typical example on an external aspect that the operator has no control over. The changes in laws can therefore have an impact on the tourism industry, as experienced in South Africa.

The legislative environment further includes all the laws and regulations with which operators should adhere. The following laws should be adhered to:

- White Shark Cage Diving Policy and Regulations under the Marine Living Resources Act no 18 of 1998 (South Africa, 1998a)
- The Marine Living Resources Act No. 18 of 1998 (South Africa, 1998a)
- The National Environment Management Act No 107 of 1998 (South Africa, 1998b)
- The National Biodiversity Act No 10 of 2004 (South Africa, 2004)
- The National Protected Areas Act No 57 of 2003 (South Africa, 2003)

- The Sea Birds and Seals Protection Act No 46 of 1973 (South Africa, 1973)
- The International Convention for the Preservation of Pollution from Ships Act No 2 of 1986 (South Africa, 1986)

Furthermore, operators should also be in possession of the correct permits to operate. Whale watching and shark cage diving operators should possess a permit to operate within a specific area of the marine environment. For example, operators in Gansbaai should have a permit to operate within the Dyer Island marine protected area. The following regulations should therefore be adhered to (Marine Living Resources Act no 18 of 1998):

- Permits should be applied for annually
- The operator should have a permit to operate, as well as a license for the vessel used for the activity
- Each operator is allowed one boat and fees payable for the license will depend on the size of the vessel
- Shark cage diving and whale watching activities are only permitted in certain areas in South Africa, including Dyer Island, Seal Island in False Bay, Quoin Rock, Seal Island in Mossel Bay and Algoa Bay
- The vessel should be registered with SAMSA (South African Maritime Safety Authority)
- One or more tour guides should be employed
- Operators should keep a logbook of every trip with details of the trip
- Operators should have an operational plan and managerial plan in place when applying for the permit.

Any drastically changes in the above-mentioned legislation will have an impact on the operator as operations will need to be adapted accordingly.

6.4.1.3 Technological environment

The technological environment is continuously changing. The internet, for example, has changed the tourism industry in the past decade as tourists are able to research their trips on the internet, which provides convenience and a wealth of information. Operators need to ensure that they are aware of the latest trends in the technological environment to improve their offering. For example, have a function on the website which allows potential participants to book the trip via the website. This ensures convenience and ease of access.

Furthermore, the availability of tourist information on the destination and the offering (whale watching or shark cage diving activity) is becoming more important as the sophistication of travellers improve. Tourists are well-educated on offerings and the destinations they want to visit through the availability of the internet. Operators should therefore ensure that the information they communicate is up to date.

With the impact of the internet comes the impact of social media. Participants can easily damage the reputation of the operator with negative “word of mouth” on social media sites such as Facebook and Twitter.

Another aspect of the technological environment that should be kept in mind is the establishment of new and improved booking systems. Operators can implement new booking systems as a means of simplifying the process and providing improved efficiency and effectiveness.

Furthermore, new developments in the technology of boats, engines and equipment should be identified and implemented, such as low carbon emission boat engines and engines with reduced noise. New equipment, such as new designs for shark cages, new lifejackets and new diving equipment should be purchased when necessary to improve the experience for participants.

6.4.1.4 Economic environment

The economic environment of a country will have an influence on the number and type of visitors received, but also on local operations. The South African economy is largely based on market principles and products and services are exchanged according to demand and supply factors. Furthermore, an economic recession can influence the spending patterns of the market negatively and less money will be available to spend on leisure activities such as shark cage diving and whale watching. Operators of marine adventure activities should take note of the economic situation of the country to determine the spending patterns of the market and to ensure that participant numbers will continue to increase.

International participants often have more spending money available due to the strength of their local currency against the rand. At the time of this research, the Rand was R16,45 per Euro, indicating a weak Rand. Therefore European visitors will be able to spend more on leisure activities than South Africans will be able to due to the weak Rand. If the rand strength increase, it will impact on visitors in South Africa.

6.4.1.5 Weather / Climate change

Weather conditions should be acknowledged as the chance of bad or stormy weather conditions can impact on operations. Bad weather conditions, as is often experienced in the Western Cape, will compromise business operations because the operator will not be able to take participants out on sea. In certain cases, stormy weather, strong winds and rain can last for multiple days, which means that operations will have to shut down for the duration of the bad conditions.

Climate change, or global warming, has an impact on the ocean and its species. For example, whales come to the South African coastline every year from June to November. In recent years it was discovered that the whales are starting to arrive later each year (Findlay & Best, 2016:250). Therefore, this can impact on operations.

6.4.1.6 Cultural environment

There are two sides regarding the cultural environment that are of importance, namely the local cultural environment and the culture of the international tourists.

The local culture has a strong influence on tourism activities at a destination. Negative attitudes and perceptions can be brought very easily and will negatively impact the operation. The local culture should be supported and should benefit from the operation to ensure that positive attitudes and perceptions are harboured regarding the operation. Positive attitudes can be influenced by the following:

- Contribute to economic well-being of the community by referring business to local businessman, such as restaurants, shops and accommodation.
- Contribute to infrastructural improvements, such as better parking facilities in busy areas and road signage.
- Arrange regular clean-up excursions to remove litter and to improve the image of the destination.

The market for whale watching and shark cage diving is extremely diverse in culture and nationality. This means that a variety of people with differing cultural backgrounds will participate in the activity. Barriers can arise regarding communication and understanding between differing cultures. In terms of such barriers, the operator can implement the following:

- A guide that can speak an additional language, such as Mandarin, German, French, or isiXhosa, is an advantage as this guide can translate necessary information where necessary.
- In case of food being supplied as part of the activity, the operator determined food specifications of his tourists, for example Halaal food for Indians.

The external environment has an influence on the inputs of the operation, the internal environment, as well as the demand and supply sides. The concepts indicate above (external environment) should therefore be kept in mind for the following section of this discussion, which includes the inputs of the operation.

6.4.2 Inputs

The operator should have certain aspects in place to ensure the success of the operation. These aspects include appropriate infrastructure, proper equipment, appropriate facilities, the managerial functions (planning, organising, leading and control) and the functional environment (marketing, operational management, financial management and human resource management). Each aspect is discussed below.

6.4.2.1 Infrastructure and facilities

The following aspects are important regarding infrastructure and facilities from a supply side:

- Parking

- Signage
- Boat
- Storage
- Meeting facilities
- Audio visual equipment
- Enough seating for all participants
- Bathroom, dressing room and showers

Parking: Infrastructural elements include the availability of parking for participants and signage. There should be enough parking available at the facility to ensure that participant's vehicles are safe and out of the way. This also suggests that vehicles should be able to enter and exit the parking area without causing traffic congestion, therefore separate entrances and exits should be planned for.

Signage: Proper signage should also be supplied which can direct participants to the operator's facility. This includes road signage and office signage to indicate where the facility is.

Infrastructure on the boat: This includes storage space as well as a harbour and launch area. The harbour area should be located a distance away from the bathing area. Easy boarding for participants should be ensured by a ramp which connects the land with the boat. This will ensure safe embarkation and disembarkation for participants.

A storage area: A storage area is needed to store equipment, such as lifejackets, wind jackets and diving equipment. The storage area should be neat and clean and should be large enough to store all the equipment easily. Equipment used for the activity and that with which participants will be in direct contact with, should be stored away from any chemicals and harmful products to ensure the safety of participants. Chemicals and harmful products, such as cleaning chemicals, should be stored in a safe place where members of the public cannot come into contact with it and should not be disposed of in the ocean.

The facilities offered to participants are important as this can contribute to satisfaction. The facility is where participants will most likely meet the operator for the first time. These first impressions can contribute either positively or negatively towards the experience. Facilities will be used for the briefing and debriefing sessions, photographs and videos will be sold here, meals will be provided at the facilities and any questions which participants might still have will be raised here. The following should be kept in mind regarding the facilities of the operation:

- Provide signage to indicate where the facilities are located (as mentioned previously)
- The meeting area should be big enough to accommodate a maximum number of 30 people (participants and guides)
- Audio visual equipment should be installed to show the photos and videos of the trip, as well as any other material necessary, such as safety information

- Enough seating should be available for all participants to avoid people standing around or being uncomfortable
- Bathrooms for male and female participants should be provided and it should be clean
- An area where participants can get dressed should be provided
- Showers should be available for participants of shark cage diving, if enough space is available

The availability and implementation of these aspects will influence the internal environment of the operation, which is discussed below.

6.4.2.2 Equipment

The following equipment will have an impact on management of the operation:

- Lifejackets
- Wind jackets
- Towels (if provided) and blankets for the boat
- Navigational equipment
- Boat
- Diving equipment, such as wetsuits, masks and boots
- The cage for shark cage diving

Sound equipment on the boat to ensure that all participants can hear from all areas of the boat. Equipment used should be appropriate for the activity and should be in a good working condition. This includes the fact that equipment should be suitable for a variety of people, weights and sizes. Children and adults alike should be equipped with lifejackets while in transit on the boat, a windbreaker and, in the case of shark cage diving, a wetsuit, dive boots and a mask. Crew members should ensure that the equipment fits each participant and it should not be broken, torn or disintegrated. Operators should therefore ensure that the equipment used is in excellent condition and should not compromise the safety of participants.

The cage used for shark cage diving should be made of strong material to withhold any attacks from sharks. The cage should also be large enough to ensure the safe and convenient immersion of participants. Lastly, the cage should be secured to the boat in such a way that the cage cannot loosen or disengage from the boat during the activity. The boat should also be equipped with enough seating areas for participants during transit from the shore to the site of the activity. Participants can easily fall overboard if not seated. Furthermore, the navigational equipment used by the skipper should be up to date and in excellent working condition to ensure safe transit of passengers and crew members on board. Sound equipment should also be installed on the boat which can be used by the guides or marine biologists to address participants on-board.

6.4.2.3. Management

Management consist of aspects such as planning, organising, leading and control, will have an impact on the sustainable management of the operation. These management functions are discussed below.

6.4.2.3.1 Planning

Planning refers to the operation establishing a strategy for eco-friendly practices, such as recycling, proper waste management and regulation strategies pertaining to participant and crew behaviour on-board. The areas of planning are divided between the three levels of management, namely strategic (top management) planning, tactical (middle management) planning and functional (lower management) planning.

- **Strategic planning:** These plans are executed by the owners or operator of the company and they should formulate the goal and objectives of the operation and the mission statement. These managers are in charge of long-term planning and making strategic decisions for the long-term survival of the operation. Part of strategic planning is implementing a future-oriented view for sustainable purposes, meaning that the operation should use resources effectively and sparingly to ensure that the same resources will be available for future use. Planning strategies should also be implemented for proper conservation management, community involvement, stakeholder involvement, participant benefits as well as tourism impacts. Top management is also responsible for stakeholder involvement. This includes the identification of all stakeholders, such as the government, community members, competitors, suppliers (equipment and food) and tourists.
- **Tactical planning:** Middle managers are responsible for tactical planning and include the managers of the various departments of the operation, such as marketing, operational, financial and human resources. Middle level managers should be able to plan the budget for the following year, ensure community involvement, implement the strategies as formulated by top management and ensure conservation planning is implemented as well. Planning involves the adherence to the Environmental Conservation Act 73 of 1989 (South Africa, 1989) and the Marine Living Resources Act 18 of 1998 (South Africa, 1998a). Community involvement refers to plans that should be established for involvement of the community in decision-making and participation. For example, general meetings should be held once a year to inform the community about the industry.
- **Functional planning:** Lower level management is responsible for functional planning and include general managers, the captain and crew leaders. These managers are responsible for participant benefits and minimising any negative impacts. Tourists should receive benefits relating to excellent service delivery, knowledgeable and friendly staff, feeling close to nature while participating in the activity and being close to the animals. Impacts, such as noise, litter and pollution, should be minimised. These concepts are planned for by middle management, in

accordance with the policies and strategies developed by top management and will be executed by functional management as the daily operations of the company.

6.4.2.3.2 Organising

Organising sees the establishment of a proper organisational structure which identifies the hierarchy of the operation and lines of communication. This will ensure that all employees are aware of their role in the operation and what their duties and responsibilities are. Employees who are aware of their role in the operation are much more motivated, productive and positive about their job, which will result in satisfied participants. This can be done by means of the following:

- Establishing an organisational structure (organogram) of the operation where all positions in the company are indicated.
- Each employee should receive a clear and comprehensive job description, as well as a code of conduct and a code of ethics. These codes should explain how employees are expected to behave and what they are not allowed to do according to government regulation as well as company rules.
- Through establishing the organisational structure, the lines of communication will also be indicated and all employees will be aware of who they should approach with issues or ideas.
- Training should be provided to all employees of the operation, including the skipper, on-board crew and office staff. Each employee should receive training which is applicable to their position in the operation, which will further enhance the effectivity of daily operations. General training requirements should also be met for all employees working on-board, such as health and safety training, first-aid, safety at sea and firefighting.
- Client services should be optimised by focussing the use of all resources on the objectives set during planning. By ensuring resources are used effectively and client service is optimised, a memorable experience can be created and satisfaction can be ensured.

6.4.2.3.3 Leading

Leading refers to setting goals, objectives and a clear vision and mission statement, which has been mentioned above as part of strategic planning. This will further serve to guide all employees in their work, while leading an example of sustainable practices to the public.

- The goal and objectives of the operation should include the concept of sustainability to ensure that this concept is taken into account. The goals and objectives of the operation should be clear and it should be communicated to all employees. For example, the goal of a shark cage diving operation could be to provide a once-in-a-lifetime opportunity for tourists while incorporating a sustainable approach.
- A management advantage can be established by identifying the unique element which sets the operation apart from others, for example attention to detail during service delivery or additional

extras offered to participants which they were not expecting. This management advantage should be communicated to all employees and should be implemented across the operation.

- Leading also refers to complying with industry regulations and policies, such as maximum approach distance from whales, not dumping waste in the ocean, anti-chumming regulations and not feeding animals.
- Leadership in the form of tour guides or marine biologists. They act as leaders on the trip and should ensure that an educational element is added to the experience.

6.4.2.3.4 Control

Control incorporates the elements of monitoring compliance with government regulations, conducting research on the industry, monitoring daily operations, giving feedback to employees, measuring performance of the operation in terms of goals, objectives and the mission statement and implementing findings to ensure better performance, improved sustainable practices and effective management.

- Permits and licenses should be maintained according to the government regulations as stipulated above.
- Furthermore, control measures should be implemented for human interaction with the animals, such as no touching animals, no feeding of animals, vessels are not allowed to approach seal colonies closer than 10 meters (South Africa, 1973), vessels are not allowed to approach whales closer than 50 meters (South Africa, 1998a) and no swimming with the animals.
- Physical management strategies can also be implemented as a means of control, such as a boardwalk on which participants can walk safely to the vessel.
- Tour guides and marine biologists should ensure that proper behaviour is practiced, such as not touching whales or sharks, but they should also provide participants with information relating to the animals and the marine environment. These guides will ensure that the interaction between participants and animals is controlled but still providing a satisfactory experience.

6.4.2.5 Human resources

Human resources refer to the employees working for the operator. Employees deliver the service and the operator should ensure that the correct people are employed in the appropriate positions. Skills needed for each position should be identified and training needs should be identified accordingly. Positions for whale watching and shark cage diving operations include:

- Skipper for the boat
- Crew members working on-board
- Photographer or videographer (if applicable)
- Marine biologists or tour guides
- Receptionist or secretary

- Marketers
- Accountant or financial executive
- Operational staff
- Human resource manager

These categories/positions can differ from operation to operation, depending on the size and the objectives of the operations. The following factors have been identified as important for human resource management within marine adventure tourism:

- Crew members on-board shark cage diving and whale watching boats should receive training in order to know how to attract sharks without feeding them, how to set up the cage to ensure participants are safe and where participants can move around on the boat to ensure they do not fall overboard in come into harm.
- Training needs should be identified by the human resources department and implemented to ensure that all employees' training is up to date. This include first-aid training and health and safety training when current qualifications expire.
- Staff should be satisfied with their jobs to ensure high levels of service delivery. This can be ensured by paying employees appropriate wages and salaries for their positions and ensuring they are taken care off.
- Regular meetings should be held to ensure that staff members are aware of the latest developments in the operation and to communicate important happenings.
- Good communication should be facilitated throughout the operation. In other words, all staff members across the hierarchy should receive regular communication and all staff members should be aware of the lines of communication within the operation.
- Contracts should be signed by each employee which states the conditions of employment, the employee's job description, working hours, leave days, family responsibility leave and maternity leave.
- Rules and regulations regarding leave days for employees should be predetermined and should be captured in the contract signed by employees (South Africa, 1997).

6.4.2.6 Marketing management

Marketing management includes conducting effective marketing research on the target market of the sector, their wants and needs and how these wants and needs can be satisfied.

- Marketing should be primarily online marketing by means of a social media presence, a well-established website and attendance to marketing shows such as WTM Africa, the Tourism Indaba and the Getaway show.
- Proper social media marketing should be conducted, along with online advertising. A proper website should also be established which allows participants to book online, gather information and read up on the sector.

- Further education can be ensured through the use of a website or other online platforms such as blogging and newsletters. Continuous marketing research should be conducted on the market for whale and shark tourism. It is important that operators know who their market is, what they want and how they can be satisfied. This will ensure long term profitability and continuous support from the market.
- During off-peak seasons, such as the case of whale watching during summer months, the operator should come up with new and innovative ways of attracting tourists. Ecotours can be hosted where participants are taken on a trip on the ocean to identify and learn about other marine species and the marine environment. Events can also be hosted, such as sundowner cruises or birthday parties, where the operator will take a group of people on a cruise while they enjoy drinks and snacks on-board.

6.4.2.7 Financial management

Firstly, financial management should contribute to establishing competitive pricing and should monitor income generation for the operation and conservation contributions.

- A budget should be set up for the year ahead, which incorporates the budgets for all the departments, including financial, marketing, operations and human resources. This budget will indicate the total expenses of the operation, the expected income and the anticipated profit. The operator should ensure that the budget is adhered to throughout the year.
- The price of the activity is important and should be set according to the resources used and expenses of the operation, anticipated profit and what the market expects. If the price is too high tourists will not want to participate, if the price is too low on the other hand, it will indicate a low-quality experience and participants will be hesitant. The average price for whale watching is identified as R850, while the average price for shark cage diving is R1700. This is calculated as the price per person per trip.
- Whale watching is very seasonal, therefore operators should ensure to market the activity well during the months of June to December, because this is the time when whale watching operations will receive most of their income. Therefore, proper marketing will result in an increased number of participants, which will cause an increased income for the operation.
- Lastly, some contribution should be made to environmental conservation. This can include conducting research on the behaviour of species or migration patterns, or operators can donate money to a specific research cause. Contributions can also be derived from the participants or a specific cause, such as shark research.

6.4.2.8 Operations management

Operations management should ensure that daily operations are conducted in such a manner that the goals and objectives of the operation are met.

- Service delivery should be monitored, improved and kept up to standard by monitoring the delivery process, staff productivity and participant satisfaction. This can be done by means of internal research, such as identifying gaps in the process and areas requiring improvement.
- If new services are being implemented, operations management should ensure that the transformation or implementation of the service is as smooth as possible by ensuring all employees are well aware of their roles and responsibilities.
- Controlling bookings and check-ins should be done correctly and attention should be paid to avoid overbooking. A proper booking system is therefore very important and frontline employees should understand the program and know how to work it properly. Therefore, training for these employees should be conducted.
- The boat should be clean and ready when the participants arrive for the activity.
- Briefings before the activity should be managed and participants should receive clear and comprehensive instructions regarding the activity, behaviour on-board and safety regulations. Upon completion of the activity, participants should receive a debriefing session where they are educated on the animals, the marine environment and conservation opportunities.
- Operations should ensure that the photographs and videos (if applicable) is ready for purchase upon completion of the activity to ensure efficient service.
- The meal (if supplied) should be ready and available upon the arrival of participants after the activity is completed.

6.4.3 Demand side factors

The demand side factors include those factors that make up the market, including market segmentation (or profile), motives of participation, aspects influencing satisfaction and aspects influencing the experience of participants. The following demand side aspects are important

- Profile
- Clusters
- Motives
- Experiences

The profile of marine adventure participants has been identified as English-speaking males, aged 36 to 45 years, with a diploma or degree from a tertiary institution. They originate mostly from international countries, such as United Kingdom, United States of America, Germany and Sweden (c.f. 5.3.2.1.5).

This market can be divided into six clusters, as identified by the primary data collection of this research. In order to conduct effective marketing and to ensure a satisfactory experience, operators should be aware of the six clusters and their needs. These clusters include the thrill seekers, risk takers, thalassophiles, consorts, experience seekers and adventure junkies. Each of these clusters have different characteristics (c.f. 5.5.2).

- For example, **thrill seekers** place high value on personal growth, the experience derived, achieving personal goals and overcoming a fear.
- The **risk takers**, on the other hand, place high value on the overall experience that is derived and are motivated by the positive contribution which participation in the activity will make towards their lifestyles.
- **Thalassophiles** are highly motivated by marine species such as whales, sharks, dolphins and penguins. Their main motive for participation in these activities are the prospects of seeing marine animals.
- **Consorts** are seen as the companions in the group. These are the participants who are mostly accompanying family members or friends.
- **Experience seekers** place high value on being satisfied with the operator and the service, therefore operators should ensure that an excellent service is delivered. This can be accomplished by being helpful, friendly and knowledgeable.
- **Adventure junkies** are therefore participating in the activity because it is something out of the ordinary for them and offers a once-in-a-lifetime experience.

In order to ensure that all six clusters are satisfied with the service, marine adventure operators can use the following as a guideline:

- Indicate the close proximity of animals to the vessel by means of photographs and videos
- Allow participants to comment on their experience with the operator on the website where potential participants can read it
- Ensure staff members are well-trained and knowledgeable by providing them regular training opportunities in the field
- Indicate the variety and types of animals that have been spotted in the area previously
- Explain the viewing process clearly by briefing participants beforehand on the importance of safety, the process to be followed and what to expect
- Pay attention to detail while delivering the service, such as comfort of participants, providing snacks on-board and providing a meal after the activity is completed

Part of knowing the target market is understanding the reasons why participants participate in the marine adventure activities. The results obtained from this research clearly indicate participants' motives to participate in shark cage diving and whale watching activities. Operators should keep these motives in mind when conducting marketing, as this will ensure the correct market is attracted. Four key motives have been identified, namely experiences, marine species, lifestyle and personal achievement. Firstly, the factor named experiences refer to the fact that participants want to have new and thrilling experiences. The operator should therefore make the activity as thrilling and unique as possible, by enhancing the experience with good service and new approaches.

In terms of the second factor, *marine species*, operators should keep the following aspects in mind:

- Make use of photographs and videos to showcase the animals that can be seen on the trip, such as whales, sharks, penguins and seals.
- Allow participants to take their own photographs during the trip.
- Monitor the species in the area and where they can be found to be able to take participants to those areas in the hope of spotting the animals. For example, seals colonise on Dyer Island in the Gansbaai area and operators can take participants to the area to show them the seals.

Thirdly, *lifestyle* refers to the fact that participants take part in marine adventure activities on a regular basis and that these activities form part of their lifestyle. The following should be kept in mind:

- These participants have knowledge on the marine environment and have participated in similar activities previously. Operators should therefore ensure that these participants are kept entertained by providing information (include an educational element in the trip) on aspects of the marine environment and the animals specific to the area.
- Participants value marine adventure activities highly and operators should ensure a quality experience is offered.

Lastly, *personal achievement* refers to the concept of overcoming a fear, challenging oneself and feeling successful upon completion of the activity. This is a personal element and one which operators have little influence over, but operators should take note of the following:

- Personalise the experience by giving each participant a certificate of completion with the names on. This certificate can also double as an information leaflet which specifies details of great white sharks or whales found in the area, along with details for contributions to conservation of marine species.
- Provide participants the opportunity to move around while the boat is anchored or drifting to allow them to see the animals from various perspectives.
- Crew members and tour guides on board should explain to participants why whales and sharks are necessary for marine ecosystems, thereby giving them an opportunity to overcome a fear for these animals.

Five factors have been identified which should be kept in mind when managing the experiences of participants:

- **Client service** is an important aspect which includes the fact that staff should be helpful and knowledgeable, all staff should be professional at all times, the quality of the environment should be kept high (for example, cleanliness and hygienic facilities) and the price of the trip should be affordable to participants.
- **The conditions** of the ocean should be taken into account before embarking on the trip. Rough seas will result in seasickness and will comprise the experience of participants.

- **Education** should include informing participants about the local marine environment, marine animals found in the area and informing participants about the viewing process.
- **Closeness to the marine environment**, giving them an opportunity to view whales and sharks as close as it is allowed.
- **Add-ons**, such as opportunities to purchase photographs and videos of the trip, meals received and individual attention from guides or marine biologists are important. To ensure participants are met with a great experience, the following guidelines can be followed:
 - Be welcoming, professional and helpful at all times
 - Have a briefing session where participants are informed about the trip, what they can expect and how they should behave on-board the vessel and in the presence of the animals
 - Ensure that participants are comfortable on-board by providing jackets and blankets if necessary
 - Tour guides or marine biologists should point out and explain interesting animals or occurrences while on-board and inform participants about it
 - Provide opportunities for participants to ask questions about the animals, the viewing process, or the environment
 - Ensure participants' safety on-board by providing life jackets and informing them about safety regulations on-board the vessel and in the cage

Lastly, the aspects which contribute to the satisfaction of participants can be highlighted as follows:

- Staff members should be friendly and welcoming
- Operators should ensure that all staff members have the necessary knowledge to conduct their work effectively and to interact with participants
- A clear briefing session should be conducted before commencement of the trip to ensure all necessary information is communicated, such as safety information and procedures
- After the trip is completed have a debriefing session where participants can look at the photographs of the trip, the video, have an opportunity to purchase the photographs or video, provide an opportunity for questions, inform participants about conservation practices and how they can get involved
- Operators should ensure to highlight their view on conservation, as well as identify any conservation opportunities with which participants can become involved
- Equipment should be of a good quality and should not compromise the safety or comfort of participants
- Information should be given to participants about the marine species and the environment
- Environmental friendly practices, such as recycling, should be implemented.

6.4.4 Supply side factors

The supply side factors include the aspects which operators should be doing to improve the sustainability of the sector. According to the data collected from the qualitative interviews, these aspects include training and education for staff, contribution to conservation, educational programmes for the community and participants and further research on the animals and the sector. These aspects are discussed below:

6.4.4.1 Training

The qualifications and quality of training of staff are important from a supply side. The following should be taken into account (c.f.5.2.7):

- Training for frontline and office employees on how to interact with customers and how to operate the booking system.
- Training for crew members on on-board health and safety.
- First aid training for crew members.
- The skipper should have the required training and permit to operate.
- The crew should have training on operational elements of the boat, such as how to correctly set up the cage for shark cage diving, moving around the boat and health and safety
- Tour guides should have the necessary training on the marine environment and should be a registered tour guide with the FGASA (Field Guides Association South Africa) or the association of the particular province, such as the Cape Tourist Guides Association (CTGA).
- Training should also be provided to ground staff on environmental-friendly practices, such as recycling and proper waste removal.

6.4.4.2. Contribution to conservation

Operators can contribute to conservation in various ways, such as making a financial contribution to African Conservation Experience, ORCA Foundation (Oceans Research Conservation Africa), the Baywatch Project, SANCCOB (the South African foundation for the Conservation of Coastal Birds), beach and reef clean-ups, or South African Shark Conservancy. Operators can also choose to create their own methods of conservation, such as a research unit for whale- and shark research or a seabird conservation unit. Various ways in which money can be gathered for conservation purposes include:

- Financial contribution from participants of whale watching and shark cage diving
- A percentage of the cost per trip can be allocated for conservation purposes
- In-kind donations from donors and the community
- Fundraiser initiatives, such as a festival or donating all proceeds from one day's activities to a conservation of choice

- Information should be distributed on the website pertaining to the various marine conservation initiatives and how people can contribute to it
- A marine volunteer programme can be established that allows people to volunteer their time as a means of contributing to conservation activities, such as beach clean-up days.
- A boat engine with decreased carbon emissions should be installed to minimise pollution from the boat

6.4.4.3 Products offered

Products offered by the operator should be customised to suit the needs of the market. This means that various types of packages can be offered, depending on what participants want. For example, whale watching, shark cage diving, marine ecotours and sundowner cruises can be offered by the operator. This will not only aid penetration of different markets, but will provide an additional way of educating the public and raising awareness for conservation of the marine environment. Events that can be catered for include team building events, birthday parties and celebrations. The operator should not arrange the event, but only provide the vessel and safety equipment.

6.4.4.4. Education

Emphasis should be placed on education during the activity. This includes educating the participants, the social community and the public. Information that should be included in educational programmes for the public and for participants include the following:

- The importance of the marine environment and its survival for the fishing industry and tourism industry
- Information on the behaviour of whales and sharks
- The importance of whales and sharks for the ecosystem
- The viewing process for whale watching and shark cage diving
- Information on the migratory patterns of whales and sharks
- The impacts of pollution and global warming on the ocean and marine species.

6.4.4.5 Research

Research should be conducted to improve knowledge of whales and sharks as well as tourists. This research should include identifying the migratory patterns of both whales and sharks, their reasons for congregating on the South African coast and the influence of global warming on these animals. By identifying information pertaining to these concepts, operators will have a clear understanding of the animals and how the activity should be regulated. An incident during the 2016/2017 season that caused the sharks to disappear for approximately six weeks (Marine Dynamics, 2016). It was later discovered that Orca whales are killing the Great White Sharks, which caused the sharks to disappear. This is one topic of interest that should be explored in order to identify why Orcas kill Great White Sharks and where the sharks disappeared to.

By employing qualified marine biologists, operators can conduct their own research on the animals and the market for the sector. This type of research will include profiling and market segmentation, motives of participation, satisfaction and aspects influencing experiences.

6.4.4.6 Community relations

Three impacts have been identified which could influence the relationship between shark cage diving and whale watching operations and the community, namely awareness, negative aspects and community benefits. In terms of awareness, the operator can enhance awareness of the destination by means of the following:

- Provide opportunities for entrepreneurs in the area and increase the image of the destination further.
- By employing local residents as crew members, frontline staff, or tour operators the living standards of the local community can be enhanced and interaction between local residents and visitors can be increased.

Negative aspects arise with tourism activities in an area, such as damage to the environment, misuse of alcohol and drugs, disruptive behaviour, increased crime and traffic congestions. To avoid negative impacts on the community the following can be considered:

- By educating participants to the area on appropriate behaviour regarding the environment, destructive behaviour can be minimised or avoided. This includes informing participants on proper waste disposal and environmental-friendly behaviour, such as not feeding animals.
- The operator can contribute to the community by placing bins in areas where tourists congregate mostly. This will provide tourists to the area of a way of disposing of their litter appropriately instead of dumping litter in the environment.
- Parking should be laid out in such a manner to avoid traffic congestions. This can be done by having a separate entrance and exit for vehicles at the parking bay.

Community benefits should include a clean environment and increased entertainment opportunities. The operator should consider the following ideas pertaining to increasing community benefits:

- Open days should be held where the community can attend workshops on the marine environment and experience the activity by means of watching video recordings. Workshops can be arranged during school holidays for children in the community. These workshops can focus on educating children by means of activities suited to the various age groups, for example a colouring in competition or a puppet show. Special packages can be created for local community members as the current prices are sometimes not affordable for local communities. For example, 20% discount can be offered certain days or a special package for local residents with a reduced price. The operators should work together with the local authorities (municipality) in order to arrange such workshops.

6.4.5 Guidelines to sustainability

After the influencing factors relating to the internal, external, demand side and supply side have been discussed, the following guidelines (outputs) for sustainable management of marine adventure tourism operations can be established. The guidelines are divided into the three categories based on the core aspects of sustainability, namely environmental management, economic management and socio-cultural management.

6.4.5.1 Environmental management

- Crew members on-board a shark cage diving boat should know how to attract sharks without feeding them and how to set up the cage to ensure participants are safe
- The operator should implement environmental-friendly practices, such as boat engines with low CO₂ emissions and recycling and enforcing anti-chumming practices, as stipulated by the Marine Living Resources Act No 18 of 1998 (South Africa, 1998a).
- Operators should aim to decrease negative impacts, such as environmental damage caused by litter and oil and rowdy behaviour by tourists. This can be done by implementing certain measures, such as visitor control measures, environmental-friendly practices and opportunities for the community to participate in both the activity and decision-making.
- Operators should enforce anti-littering behaviour as well as compliance with regulations set by the government under the Marine Living Resources Act No 18 of 1998 (South Africa, 1998a).
- Operators should not approach whales at a distance closer than 50 meters.
- Operators should not throw, or allow participants to throw litter into the ocean. Instead provide a bin on the boat and remove any litter encountered in the ocean.
- Operators should not feed the animals in any way. This includes the use of chumming as a method of attracting sharks.
- Participants and operators should not touch or swim with the animals. Not only can this disrupt the animals, but it is dangerous for the participant.

6.4.5.2 Economic management

- Extending business operations to include additional services, such as a restaurant or coffee shop where day visitors can spend free time can increase the income of the operation. Marine eco-tours can be conducted during off-peak periods and conservation initiatives can be established. Through such extensions additional jobs can be created for the local residents, which contributes to increased income for residents.
- Setting competitive prices and ensuring the price charged for a trip is representative of the level of service.
- Calculate the total expenses of the operation to determine how much income is needed in order to cover all costs.

- Purchase supplies from local suppliers, such as food and equipment, instead of importing supplies from other parts of the country or the world.
- A budget should be established each year which highlights the total expected income and the expenses per department (marketing, financial, human resources and operations). This budget should be adhered to, to ensure financial growth.
- Local community members should be hired to enhance the living standards of local residents by providing them with an income.
- During off-peak seasons, such as winter months for shark cage diving and December months for whale watching, prices should be lowered to attract participants.

6.4.5.3 Social management

- Involve the local community in planning of sustainable development and expansion of the industry by hosting a general meeting once a year where the community can give their input.
- Hire employees from the local community to create jobs for residents.
- Social responsibility: Offer discounts on trips for local residents to offer them an opportunity to participate in the activity as well. Group discounts on prices can also be offered for school excursion groups.
- Hire local tour guides or give local residents the opportunity to train for tour guides. Local residents have knowledge about the environment that is useful to the operator. This will also create further employment opportunities.
- Educational programmes should be hosted for the local community on the marine environment. These programmes can be hosted at local schools to inform learners about the environment and to harbour positive attitudes towards sustainability from a young age.
- Programmes can be hosted during tourism month (September) for the local community where they can learn more about the marine environment. Promotions can also be run during this month which will encourage local residents to participate in the activity.
- Operators can run competitions on social media and in the community to encourage people to participate in conservation projects or to attend an educational programme.
- Educational programmes can be hosted at the Hermanus Whale Festival which will inform festival attendees about the whales in the area and conservation opportunities. This will contribute to increasing awareness of whales and sharks amongst local residents, and create understanding of the value of the Hermanus Whale Festival.

6.4.6 Outputs

Upon implementation of the above-mentioned framework a sustainable management approach can be ensured for marine adventure activities, such as shark cage diving and whale watching.

6.4.7 Feedback

Once outputs are achieved, the operation should be evaluated on the guidelines implemented on a yearly basis in order to identify the positive and negative aspects of the operation, as well as what is working and what is not working. Feedback can then be given to the employees of the operations based on the strengths and weaknesses of the operation and solutions can be established. Feedback will help to identify shortcomings or problems and solutions can be developed to solve these problems. The inputs of the operation should also be considered to provide comprehensive feedback. This will further help to put the problem into perspective and will enhance problem solving. The internal and external environments will therefore help operators to identify any problems within the operation and to come up with problem specific solutions.

6.5 RECOMMENDATIONS AND FUTURE RESEARCH OPPORTUNITIES

The following section discussed recommendations made by the researcher pertaining to sustainability of shark cage diving and whale watching, as well as the identification of future research opportunities in the field.

6.5.1 Managerial recommendations

The following managerial recommendations are made by the researcher regarding the management of marine adventure products, such as shark cage diving and whale watching.

- A service-oriented organisational culture of friendliness, helpfulness and professionalism should be created amongst employees of the operation. This means that employees should be satisfied in their jobs, they should not be overworked and they should receive appropriate remuneration. Satisfied employees will contribute to satisfied participants. The human resources department will be responsible for ensuring the service culture is enforced. For example, crew members can work in shifts. This will also allow for a greater number of jobs created.
- Marketing efforts should include regular blog posts on the conditions of the ocean and details of the trips taken. Information on the marine environment and new research efforts should also be communicated to the public. Not only will this increase awareness but will contribute to conservation even further. Marketing efforts should also include striking marketing material with specials and discounts, if applicable, along with the experiences of previous participants. This should be enforced by the marketing executive of the operation.
- Attention should be paid to the finer details of the service delivery process, which can enhance participants' satisfaction. This can include paying attention to aspects such as catering for vegetarian participants, offering blankets to participants on-board, offering to help participants on-board the boat and ensuring wetsuits are clean. This should be overseen and enforced by the operator.
- The operator should have regular meetings, at least once a month, to inform employees of any changes, happenings, or important aspects in the operation. These meetings should also be

used to give employees a chance to make suggestions and to acknowledge any problems amongst staff members.

- Training should be provided to staff members of all departments in the operation and should be specific to their positions. For example, marketers should receive training on online marketing, search engine optimisation and Google AdWords, while frontline employees should receive training in communicating effectively with participants and the booking system. The training needs should be identified by the operator through reviewing staff productivity on a monthly basis.
- The market taxonomy (T²RACE) should be used to produce a service which is conducive to the market. The service should include elements which participants from all six clusters can relate with, such as providing all participants a chance to view the sharks and whales from up close, if possible.
- The negative community impacts should be minimised by producing a service which benefits the community as well, such as employing local residents and enhancing the aesthetics of the city/town by having bins placed along the beach, at the harbour and in areas where tourists frequent.
- The guidelines, as established in this chapter, should be followed to ensure the sustainable management of marine adventure products in South Africa.

6.5.2 Recommendations for future research

The following recommendations can be made for future research in this regard:

- This research should be applied to other forms of marine adventure tourism to establish a framework which can be applied to marine adventure tourism products inclusive.
- The economic contribution of the complete marine adventure tourism sector should be determined.
- Research should be conducted into the core components of a general management plan for marine adventure tourism operations. The research should establish the general management plan in such a way so that it can act as a guideline for future business operations. Such a plan will provide operators the opportunity to identify any potential changes, risks, or opportunities in the market and operators will be able to manage the operation accordingly. Operators of varying activities within the scope of marine adventure tourism, such as scuba diving, snorkelling, shark cage diving, whale watching and deep-sea fishing, should be able to follow this management plan.
- Research should be conducted on the impact of shark cage diving and whale watching activities in the personal quality of life of the communities of Hermanus and Gansbaai.
- Interviews should be conducted with the local authorities to determine their level of understanding of the marine adventure tourism industry. These interviews should also identify

the gaps existing in relation to issuance of permits and licenses. Recommendations for improvement and government involvement can thus be made based on such results.

- Research should be conducted on the influence of pre-trip exposure to sustainable participant behaviour guidelines on marine adventure participants' behaviour during the trip. This is proposed to be a qualitative study with two respondent groups. The test group should undergo a presentation on sustainable participant behaviour, while the control group is not exposed to the presentation. The results obtained should be analysed to identify whether or not exposure to a presentation on sustainable participant behaviour before participating in such a trip, has an influence on participants.

Appendices

Appendix A: Sustainability criteria for tourism operators

SUSTAINABILITY CRITERIA FOR OPERATORS

A: Demonstrate effective sustainable management									
1. A sustainability management system is in place									
2. The operator complies with all relevant legislation and regulations									
3. An up to date list of legal requirements are available									
4. All compliance with permits/licenses and planning conditions are recorded									
5. All staff members are aware of their roles and responsibilities i.t.o. the environment									
6. Staff have locally required licenses/certifications relevant to their duties									
7. Staff receive on-the-job and formal training with regards to awareness									
8. A complaint system is in place for customers									
9. Images used in marketing material is of actual experiences									
10. Marketing does not promise sightings of whales/sharks which are not guaranteed									
11. Claims about sustainability is based in past performances and not future aspirations									
12. Land use, activities are in compliance with local zoning and protected area laws, regulations									
13. Licenses, permits and management plans are in compliance with local zoning and protected area laws and regulations									
14. Endangered, protected wildlife has not been displaced, habitats destroyed during any activities									
15. Buildings do not destroy scenic amenity									
16. Water courses have not been altered and runoff from buildings, parking areas and grounds are channelled and filtered									
17. The level of accessibility is clearly communicated to the customer									
18. Land use/tenure and rights to activities to activities have formal legal recognition or there is documentation of agreements by local communities and indigenous owners									
19. The operator has an interpretation program with displays, guides and/or collateral									
SECTION B: Maximise social and economic benefits and minimise negative impacts									
20. The operator makes some form of contribution for public benefit									
21. Local residents are employed									
22. Training and career opportunities are offered to local residents									
23. Purchases are mostly from local providers									
24. A documented policy is made known to all staff and management against commercial, sexual or other forms of exploitation									
25. Percentage of women and minority employees are reflected in local demographics									
26. No child labour takes place									
27. Salaries and benefits meet or exceed regulations									
28. Overtime is paid for hours worked beyond the established work week									
29. Working hours do not exceed the established legal maximums									
30. Employees receive annual paid vacation									

31. Health insurance or the equivalent is provided to all employees							
32. No increase in the number of incidents or accidents							
33. No reduction in the availability of water, waste and energy to the community as a result of the operator							
34. Community has access to public, common areas and can engage in traditional livelihoods							
35. Rights-of-way, transport and housing remain accessible and affordable to locals							
SECTION C: Maximise benefits to cultural heritage and minimise negative impacts							
36. The operator has its own code of behaviour or guidelines which is annually reviewed							
37. There is an in-kind or cash contribution to the protection and preservation of sites visited							
38. Local residents retain equitable and cost-effective access to the site							
SECTION D: Maximise benefits to the environment and minimise negative impacts							
39. Purchasing policie favours local and/or ecologically sustainable products/services							
40. The purchasing policy requires re-usable, returnable and recycled goods							
41. Awareness is created amongst staff and guests as to minimising ennergy use							
42. Water sourcing, consumption is sustainable and does not adversely effect environmental flows							
43. The Carbon Footprint per activity is monitored and is not increasing year on year							
44. Carbon offset mechanisms and used where practical							
45. Customers and staff are aware of practical measures/opportunities to reduce transport related greenhouse gas emissions							
46. Wastewater is either disposed to a munisipal or governmental approved treatment system							
47. A solid watse management plan is in place with goals to minimise waste							
48. Chemicals used are recorded on a material safety datasheet							
49. Chemicals have been reviewd to identify alternatives							
50. Chemicals are stored and handled in accordance with aproprate standards							
51. There is minimal pollution in terms of:							
Noise							
Light							
Runoff							
Erosion							
Ozone depleting compounds							
Air pollutants							
Water pollutants							
Soil contamination							
52. There is evidence of compliance wirh local to international laws for any harvesting, consumption, display, sale or trade of wildlife							
53. Operator has a program in place to ensure they do not bring in alien species, nor spread them							
54. The organisation supports and contributes to biodiversity conservation, including natural protected areas and areas of high biodiversity value							
55. Operator contributes towards environmental education in biodiversity conservation initiatives							
56. With interaction with widlife the operator has sought approval from government or sanction from experts to ensure no adverse effects							
57. Program in place to minimise impacts such as disturbance of wildlife or natural ecosystems							

Appendix B: Hermanus residents' questionnaire

RESIDENTS' PERCEPTIONS OF HERMANUS WHALE FESTIVAL 2016

SECTION A: PROFILE OF THE RESIDENTS

A1. In what year were you born?	19_____	
A2. What is your gender?	Female	1
	Male	2
A3. Occupation? Please mark only one box.	Professional	1
	Manager	2
	Self-employed	3
	Technical	4
	Sales personnel	5
	Administrative	6
	Civil service	7
	Education	8
	Home duties	9
	Pensioner	10
	Unemployed	11
	Other (Specify)	12

A4. What is the highest education level you have completed? Please mark only one box.		
	No school	1
	Matric	2
	Diploma, degree	3
	Post-graduate	4
	Professional	5
	Other (Specify)	6

SECTION B: OVERALL IMPACT OF THE WHALE FESTIVAL

B1. Overall, how does the Hermanus Whale Festival affect the Hermanus <i>community</i> as a whole?						
Very negatively			No effect		Very positively	
-3	-2	-1	0	1	2	3
B2. Overall, how does the Hermanus Whale Festival affect <i>you</i> as individual?						
Very negatively			No effect		Very positively	
-3	-2	-1	0	1	2	3

SECTION C: PARTICIPATION IN THE FESTIVAL

C1. Which of the following statements best summarises your level of interest in the festival?
Please mark only one box.

I am an avid fan of this festival and try to attend as many as possible	1
I am interested in this festival and attend when I can	2
I am not interested in this festival, but I sometimes attend it because friends and family are interested	3
I have absolutely no interest in this festival and do not wish to attend it	4

C2. Are you working at the festival?	No	1
	Yes	2

C3. Approximately how long have you been living in Hermanus?
_____ years

C4. Evaluate the Hermanus Whale Festival:	TOTALLY DISAGREE	DO NOT AGREE	NEUTRAL	AGREE	TOTALLY AGREE
The festival is accessible to residents	1	2	3	4	5
The festival is well marketed	1	2	3	4	5
Information is readily available	1	2	3	4	5
The festival is well organised	1	2	3	4	5
The area fits the purpose of the event	1	2	3	4	5
The exposure to the Province is excellent	1	2	3	4	5
Other (Specify):	1	2	3	4	5

C5. How important are the following events as spectator/ participant to the festival?

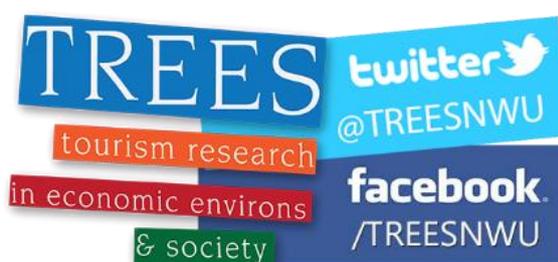
	5. Extremely important				
	4. Very important				
	3. Important				
	2. Slightly important				
	1. Not at all important				
1. Watershed Live	1	2	3	4	5
2. Eco-marine village	1	2	3	4	5
3. Coke music stand	1	2	3	4	5
4. Petzl Wolfpack Trails	1	2	3	4	5
5. Whale festival sporting events at Benguela Cove	1	2	3	4	5
6. Whale and Wheels	1	2	3	4	5
7. The Total Whale Half Marathon	1	2	3	4	5
8. Berg and Beach trail run	1	2	3	4	5
9. Go Rally: Cape to Hermanus	1	2	3	4	5
10. Clivia show	1	2	3	4	5
11. Street paarde	1	2	3	4	5
12. Treasure hunt	1	2	3	4	5
13. Chris Chameleon	1	2	3	4	5

SECTION D: SPECIFIC TOURISM IMPACTS

Please answer all questions in this section!

BECAUSE OF THE FESTIVAL....	STRONGLY DISAGREE	MODERATELY DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	MODERATELY AGREE	STRONGLY AGREE
employment opportunities in the area have increased	1	2	3	4	5	6
entertainment opportunities have increased	1	2	3	4	5	6
residents have more pride in their community	1	2	3	4	5	6
litter in the area has decreased	1	2	3	4	5	6
opportunities for local businesses have increased	1	2	3	4	5	6
public funding for community activities has increased	1	2	3	4	5	6
the rights of local residents have increased	1	2	3	4	5	6
the overall cost of living has increased	1	2	3	4	5	6
disruptive behaviour has increased	1	2	3	4	5	6
damage to the environment has increased	1	2	3	4	5	6
excessive drinking and/or drug use has increased	1	2	3	4	5	6
incidents of crime have increased	1	2	3	4	5	6
prices of some goods and services have increased	1	2	3	4	5	6
noise levels in the area have increased	1	2	3	4	5	6
interactions between locals and visitors have increased	1	2	3	4	5	6
parking availability in the area has increased	1	2	3	4	5	6
the turnover for local businesses has increased	1	2	3	4	5	6
traffic congestion in the area has increased	1	2	3	4	5	6
opportunities for shopping have increased	1	2	3	4	5	6
infrastructure in the area has improved	1	2	3	4	5	6
trading in the area has increased	1	2	3	4	5	6
more tourists visit this area	1	2	3	4	5	6
the image of the city/town has improved	1	2	3	4	5	6
the living standards of locals have improved	1	2	3	4	5	6
the economy of the area has improved	1	2	3	4	5	6
the maintenance of public facilities has improved	1	2	3	4	5	6
the overall appearance of the area has improved	1	2	3	4	5	6
there are opportunities for people to have fun	1	2	3	4	5	6
more people are aware of Hermanus as destination	1	2	3	4	5	6
there are more opportunities for entrepreneurs	1	2	3	4	5	6
residents get irritated with the number of people	1	2	3	4	5	6
friends visit me	1	2	3	4	5	6
THANK YOU FOR YOUR COOPERATION!						

Do you have any suggestions on how events such as this one can make a bigger contribution to your local community?



Research done by TREES (Tourism Research in Economic Environments and Society), North-West University, Potchefstroom Campus in collaboration with Northern Cape Tourism ©Copyright 2015

Appendix C: Marine adventure participants questionnaire

MARINE ADVENTURE ACTIVITY PARTICIPANTS 2016			
SECTION A: Demographic detail			
1. Gender	M	1	6. Highest level of education?
	F	2	No school
			1
2. Year of birth?			Matric (Grade 12)
			2
			Diploma/degree
			3
			Post-graduate
			4
3. Home language?			Professional
			5
Afrikaans	1		Other (Specify)
English	2		6
Other (Specify)	3		
			7. What is your annual gross income?
			<R 20 000
			1
4.1 Province of residence?			R20 001 - R140 000
			2
Gauteng	1		R140 001 - R221 000
Free State	2		3
Limpopo	3		R221 001 - R305 000
Mpumalanga	4		4
KwaZulu-Natal	5		R305 001 - R431 000
Nort West	6		5
Northern Cape	7		R431 001 - R552 000
Eastern Cape	8		6
Western Cape	9		R552 001 - R672 000
			7
			> R672 001
			8
			8. Which type of accommodation do you make use of ?
			Family and Friends
			1
4.2 Country of residence (if outside RSA borders)			Hotels
			2
			Guesthouse
			3
			Bed and Breakfast
			4
5.1 How many people are travelling in your group			Self-catering
			5
Number: <input type="text"/>			Camping
			6
5.2 How many people are you paying for during the Whale Festival (includnig yourself)?			10. Where did you hear about this operator?
			Television
Number: <input type="text"/>			1
			Radio
			2
5.3 If not a local resident of Hermanus, how many nights do you spend in the area?			Website
			3
			Email
			4
			Newsletter
			5
			Magazine
			6
9. What type of visitor are you?			Word-of-mouth
			7
a. Local resident			Office signage
b. Day visitor			8
c. Overnight visitor			Other (specify)
			9
			a.
			b.

11. Of all the marine animals, which one is your favourite?								
<input type="text"/>								
12. What other marine adventure activities do you participate in?				13.1 How many times have you been on such a trip previously?				
Surfing				Number: <input type="text"/>				
Scuba diving								
Sea kayaking				13.2 Would you do this again in the future?				
Wave rider (Speed boat)				Yes <input type="text"/>				
Snorkeling				No <input type="text"/>				
Deep sea fishing								
None				13.3 If "no" in 13.2, please indicate why not.				
Other (Specify)				<input type="text"/>				

14. Willingness to pay
Whale and shark numbers are under extreme pressure and generally there is lack of funding for the conservation of these species. Therefore, would you be willing to pay R30 as a conservation fee for the protection of:

14a. Whales	Yes	No	14b. Sharks?	Yes	No
-------------	-----	----	--------------	-----	----

14c. If NO, to question 14a or 14b above, rate the reasons for not supporting this initiative, where 1 is the most important reason and 4 the least important reason.

ca. I already pay tax and conservation should e funded by the government	
cb. Why should I pay when others are not?	
cc. It is too expensive.	
cd. It is not my concern.	
ce. Other reasons not listed above, please specify.	

SECTION C: Travel Motives

1. Please indicate, according to the scale provided, why you have decided to participate in this activity (i.e. whale watching or shark cage diving).

Extremely important					
Very important					
Important					
Slightly important					
Not at all important					
	1	2	3	4	5
a. Primarily for educational reasons (to learn things, increase my knowledge)	1	2	3	4	5
b. To photograph marine life	1	2	3	4	5
c. It is a spiritual experience	1	2	3	4	5

d. It is value for money	1	2	3	4	5
e. It is part of my lifestyle	1	2	3	4	5
f. For my well-being	1	2	3	4	5
g. To overcome risks					
h. So that other members of my party could learn about marine wildlife	1	2	3	4	5
i. For new experiences	1	2	3	4	5
j. To overcome a fear for whales/sharks	1	2	3	4	5
k. The feeling of success after the activity is over	1	2	3	4	5
l. To experience thrill and excitement	1	2	3	4	5
m. To be close to marine nature	1	2	3	4	5
n. To be close to a dangerous animal (such as a shark/whale)	1	2	3	4	5
o. To have a novel experience	1	2	3	4	5
p. Because it is challenging	1	2	3	4	5
q. To develop skills	1	2	3	4	5
r. To learn new skills	1	2	3	4	5
s. For fitness purposes	1	2	3	4	5
t. Adventure has unknown outcomes	1	2	3	4	5
u. The following excites me:					
1. Sharks	1	2	3	4	5
2. Whales	1	2	3	4	5
3. Dolphins	1	2	3	4	5
4. Seals	1	2	3	4	5
5. Penguins	1	2	3	4	5

SECTION C: Travel Motives

1. Please indicate, according to the scale provided, why you have decided to participate in this activity (i.e. whale watching or shark cage diving).					
Extremely important					
Very important					
Important					
Slightly important					
Not at all important					
	1	2	3	4	5
a. Primarily for educational reasons (to learn things, increase my knowledge)	1	2	3	4	5
b. To photograph marine life	1	2	3	4	5
c. It is a spiritual experience	1	2	3	4	5
d. It is value for money	1	2	3	4	5
e. It is part of my lifestyle	1	2	3	4	5
f. For my well-being	1	2	3	4	5
g. To overcome risks					
h. So that other members of my party could learn about marine wildlife	1	2	3	4	5

i. For new experiences	1	2	3	4	5
j. To overcome a fear for whales/sharks	1	2	3	4	5
k. The feeling of success after the activity is over	1	2	3	4	5
l. To experience thrill and excitement	1	2	3	4	5
m. To be close to marine nature	1	2	3	4	5
n. To be close to a dangerous animal (such as a shark/whale)	1	2	3	4	5
o. To have a novel experience	1	2	3	4	5
p. Because it is challenging	1	2	3	4	5
q. To develop skills	1	2	3	4	5
r. To learn new skills	1	2	3	4	5
s. For fitness purposes	1	2	3	4	5
t. Adventure has unknown outcomes	1	2	3	4	5
u. The following excites me:					
1. Sharks	1	2	3	4	5
2. Whales	1	2	3	4	5
3. Dolphins	1	2	3	4	5
4. Seals	1	2	3	4	5
5. Penguins	1	2	3	4	5

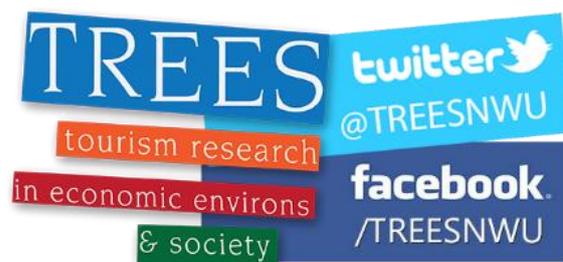
SECTION D: Experience

1. Please indicate the extent to which the following aspects have an influence on your experience.					
Great influence					
Big influence					
Some influence					
Slight influence					
No influence at all					
	1	2	3	4	5
a. Variety of animals (sharks/whales/seals)	1	2	3	4	5
b. Ease of accessibility of the operator	1	2	3	4	5
c. To learn more about the animal	1	2	3	4	5
d. To learn more about the viewing process	1	2	3	4	5
e. To be in close proximity to the animal	1	2	3	4	5
f. The comfort of the boat	1	2	3	4	5
g. Friendliness of the staff	1	2	3	4	5
h. The behaviour of the whales/sharks	1	2	3	4	5
i. Calm conditions of the sea	1	2	3	4	5
j. Seasickness	1	2	3	4	5
k. Location of the operator	1	2	3	4	5

l. Price of the trip	1	2	3	4	5
m. Atmosphere on land and on board	1	2	3	4	5
n. Internal appearance of the boat	1	2	3	4	5
o. Helpful and knowledgeable guides	1	2	3	4	5
p. Knowledge and skills of the skipper	1	2	3	4	5
q. Quality of the environment (pollution)	1	2	3	4	5
r. The people who I share the experience with	1	2	3	4	5
s. Reputation of the operator	1	2	3	4	5
t. Being able to purchase photographs/videos of my experience	1	2	3	4	5
u. Being familiar with the animal	1	2	3	4	5
v. Experiencing a closeness to nature	1	2	3	4	5
w. Professionalism of the staff/guides	1	2	3	4	5
x. Prompt service and response	1	2	3	4	5
y. Individual attention	1	2	3	4	5
z. Extras received on the trip (lunch/coffee)	1	2	3	4	5

2. Please indicate your level of satisfaction with regards to the following aspects.					
Great influence					
Big influence					
Some Influence					
Slight influence					
No influence at all					
	1	2	3	4	5
a. Service delivered by the operator	1	2	3	4	5
b. Friendliness of the staff	1	2	3	4	5
c. Knowledge of the operator and staff	1	2	3	4	5
d. Clear briefing and instructions	1	2	3	4	5
e. Standard of the equipment used	1	2	3	4	5
f. Information and interpretation regarding marine animals	1	2	3	4	5
g. Environmental friendly practices implemented (e.g. not too many boats per site)	1	2	3	4	5

3.1 Have the operators expressed their view regarding the impact of whale and shark tourism on the local community?								
							Yes	
							No	
3.2 If "yes" in 3.1, please shortly explain what their views are.								
4. Any further recommendations or suggestions?								
<i>Thank you for participating in this survey!</i>								
Research done by Tourism Research in Economic Environs and Society, North-West University, Potchefstroom Campus								



List of References

- Active-tourism. 2002. Official definition of active tourism. <http://www.active-tourism.com/Questions1ActTour.html> Date of access: 25 January 2017.
- Ap, J. 1990. Residents' perceptions research on the social impacts of tourism. *Annals of tourism research*, 17(4):610-616.
- Apps, K., Dimmock, K., Lloyd, D. & Huveneers, C. 2016. In the water with White Sharks (Carcharodon carcharias): participants' beliefs toward cage-diving in Australia. *Anthrozoös*, 29(2):231-245.
- Archer, B., Cooper, C. & Ruhanen, L. 2005. The positive and negative impacts of tourism. (In Theobald, W.T. Ed. *Global tourism*. Burlington: Elsevier Inc. p. 79-102).
- Aronsson, L. 2000. *The development of sustainable tourism*. London: Continuum.
- Askama, J.S. & Kieti, D.M. 2003. Measuring tourist satisfaction with Kenya's wildlife safari: a case study of Tsavo West National Park. *Tourism management*, 24(1):73-81.
- Avila-Foucat, V.S., Gendron, D., Revello-Fernandez, D., Popoca, E.I. & Ramirez, A. 2017. Determinants of the potential demand for whale watching in Loreto Bay National Park. *Marine policy*, 81(1):37-44.
- Baker, N. & Roberts, C. 2008. Attitude to and preferences of divers towards regulation. (In Garrod, B. & Gössling, S., eds. *New frontiers in marine tourism: diving experiences, sustainability, management*. Amsterdam: Elsevier. p. 171-187.)
- Ballantyne, R., Packer, J. & Falke, J. 2011a. Visitors' learning for environmental sustainability: testing short- and long-term impacts of wildlife tourism experiences using structural equation modelling. *Tourism management*, 32(1):1243-1252.
- Ballantyne, R., Packer, J. & Hughes, K. 2009. Tourists' support for conservation messages and sustainable management practices in wildlife tourism experiences. *Tourism management*, 30(1):658-664.
- Ballantyne, R., Packer, J. & Sutherland, L.A. 2011b. Visitors' memories of wildlife tourism: implications for the design of powerful interpretive experiences. *Tourism Management*, 32(1):770-779.

- Barendse, J. & Best, P.B. 2014. Shore-based observations of seasonality, movements, and group behaviour of southern right whales in a non-nursery area on the South African west coast. *Marine mammal science*, 30(4):1358-1382.
- Barkin, D. 2000. Social tourism in rural communities: an instrument for promoting sustainable resource management. <http://lasa.international.pitt.edu/Lasa2000/Barkin.PDF> Date of access: 30 October 2017.
- Barnett, V. 1974. Elements of sampling theory. London, UK: The English Universities Press Ltd.
- Basiron, M.N. 1997. Marine tourism industry: trends and prospects. Paper presented at the International Seminar on the Development of the Marine Tourism Industry in South East Asia, Longkwai.
- Baumgartner, C. 2009. Nachhaltigkeit im Tourismus. Von der Tourismuspolitik für Nachhaltigkeit zu einem Bewertungsschema. Innsbruck: Studienverlag.
- Baumgartner, C. 2013. Montenegro: wild beauty. (In Beckendorf, P. & Lund-Durlacher: D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p. 43-45).
- Beedie, P. 2005. The adventure of urban tourism. *Journal of travel and tourism management*, 18(3):37-48.
- Beedie, P. & Hudson, S. 2003. Emergence of mountain-based adventure tourism. *Annals of tourism research*, 30(3):625-643.
- Bennett, N.J. & Dearden, P. 2014. Why local people do not support conservation: community perceptions of marine protected area livelihood impacts, governance and management in Thailand. *Marine policy*, 44(1):107-116.
- Bentley, T.A. & Page, S.J. 2001. Scoping the extent of adventure tourism accidents. *Annals of Tourism Research*, 28(3):705-726.
- Bentley, T.A., Page, S.J. & Laird, I.S. 2001. Accidents in the New Zealand adventure tourism industry. *Safety science*, 38(1):31-48.
- Bentz, J. 2015. Optimal strategies for marine wildlife tourism in small islands. Portugal: Universidade dos Acores. (Thesis - PhD).
- Bentz, J., Dearden, P. & Calado, H. 2013. Strategies for marine wildlife tourism in small islands – the case of the Azores. *Journal of coastal research*. Special issue no 65:874-879.

- Bentz, J., Lopes, F. & Calado, H. 2016. Managing marine wildlife tourism activities: analysis of motivations and specialisation levels of divers and whale watchers. *Tourism management perspectives*, 18(1):74-83.
- Best, P.B. 2000. Coastal distribution, movements and site fidelity of right whales *Eubalaena australis* off South Africa. *South African journal of marine science*, 22(1):43-55.
- Bignoux, S. 2006. Short-term strategic alliances: a social exchange perspective. *Management decision*, 44(5):615-627.
- Bosch, Z.J. 2015. A needs analysis of adventure activities in South African National Parks. Potchefstroom: North-West University. (Dissertation - MA).
- Bostrom, M. 2012. A missing pillar? Challenges in theorizing and practicing social sustainability: introduction to the special issue. *Sustainability: science, practice & policy*, 8(1):3-4.
- Bradley, N. 2007. Marketing research: tools and techniques. Oxford: Oxford University Press.
- Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2):77-101.
- Brejla, P. & Gilbert, D. 2014. An exploratory use of web content analysis to understand cruise tourism services. *International journal of tourism research*, 16(2):157-168.
- Bruce, B.D. & Bradford, R.W. 2012. The effects of shark cage diving operation on the behaviour and movements of white sharks, *Carcharodon carcharias*, at the Neptune Islands, South Australia. *Marine biology*, 160(1):889-907.
- Brymann, A., Bell, E., Hirschon, P., Dos Santos, A., Du Toit, J., Masenge, A., Van Aardt, I. & Wagner, C. 2016. Research methodology: business and management contexts. Cape Town: Oxford University Press.
- Buckley, R. 2000. NEAT trends: Current issues in nature, eco and adventure tourism. *International Journal of tourism research*, 2(6):437-444.
- Buckley, R. 2007. Adventure tourism products: price, duration, size, skill, remoteness. *Tourism management*, 28(1):1428-1433.
- Buckley, R. 2010. Adventure tourism management. Oxford: Elsevier.
- Buckley, R. 2012a. Rush as a key motivation in skilled adventure tourism: resolving the risk recreation paradox. *Tourism management*, 33(4):961-970.

Buckley, R. 2012b. Sustainable tourism: research and reality. *Annals of tourism research*, 39(2):528-546.

Buckley, R., McDonald, K., Duan, L., Sun, L. & Chen, L.X. 2014. Chinese model for mass adventure tourism. *Tourism management*, 44(1):5-13.

Burgin, S. & Hardiman, N. 2015. Effects of non-consumptive wildlife-oriented tourism on marine species and prospects for their sustainable management. *Journal of environmental management*, 151(15):210-220.

Burns, L. & Howards, P. 2003. When wildlife tourism goes wrong: a case study of stakeholder and management issues regarding Dingoes on Fraser Island, Australia. *Tourism management*, 9(1):699-712.

Butler, R.W. 1980. The concept of a tourist area lifecycle of evolution: implications for management resources. *Canadian geographer*, XXIV, 1(5):5-12.

Butler, R.W. & Boyd, S. 2000. *Tourism and national parks: issues and implications*. Chichester: Wiley.

Cagua, E.F., Collins, N., Hancock, J. & Rees, R. 2014. Whale shark economics: a valuation of wildlife tourism in South Ari Atoll, Maldives. *PeerJ*, 12(2):515.

Wikimedia Commons. 2017. File: Map of South Africa.svg.
https://commons.wikimedia.org/wiki/File:Map_of_South_Africa.svg Accessed: 21 February 2018. .

Carpenter, G., & Priest, S. 1989. The AEP and non-outdoor leisure pursuits. *Leisure studies*, 8(1):65-75.

Cater, C.I. 2006. Playing with risk? Participant perceptions of risk and management implications in adventure tourism. *Tourism management*, 27(1):317-325.

Cater, C.I. 2010. Any closer and you'd be lunch! Interspecies interactions as nature tourism at marine aquaria. *Journal of ecotourism*, 9(2):133-148.

Catlin, J. & Jones, R. 2010. Whale shark tourism at Ningaloo Marine Park: a longitudinal study of wildlife tourism. *Tourism management*, 31(1): 386-394.

Chen, C. 2011. From catching to watching: moving towards quality assurance of whale/dolphin watching tourism in Taiwan. *Marine policy*, 35(1):10-17.

Chen, C. 2015. Regulation and management of marine litter. (In Bergmann, M., Gutow, L. & Klages, M., eds. *Marine anthropogenic litter*. New York: Springer International Publishing. p. 395-428).

- Child, D. 2006. *The essentials of factor analysis*. 3rd ed. New York: Continuum.
- Choi, H.S.C. & Sirikaya, E. 2005. Measuring residents' attitude toward sustainable tourism: development of sustainable tourism attitude scale. *Journal of travel research*, 43(4):380-394.
- Cisneros-Montemayor, A.M., Barnes-Mauthe, M., Al-Abdulrazzak, D., Navarro-Holm, E. & Sumaila, U.R. 2013. Global economic value of shark ecotourism: implications for conservation. *Fauna and flora international*, 47(3):381-388.
- Clark, R.N. & Stankey, G.H. 1979. *The recreation opportunity spectrum: a framework for planning, management, and research*. USDA forest Service, General Technical Report PNW-98, Seattle, USA.
- Coccosis, H., Edwards, J.A. & Priestly, G.K. 1996. *Sustainable tourism: European experiences*. Guilford: Biddles.
- Coetzee, W. & Saayman, M. 2009a. Sustainable development past and present. (In Saayman, M. ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 97-122).
- Coetzee, W. & Saayman, M. 2009b. Sustainability and ecotourism. (In Saayman, M. ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 123-146).
- Constantine, R. & Bejder, L. 2008. Managing the whale- and dolphin-watching industry: time for a paradigm shift. (In Higham, J. & Lück, M. eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 49-65).
- Cooper, S. 2007. *The impact of holiday homes on the environment and social capacity of Kapparis, Cyprus*. Portsmouth: University of Portsmouth. (Dissertation – BSc).
- Cooper, B. 2010. *Establishing the store attributes that black consumers consider when buying casual wear*. North-West University, Potchefstroom Campus. (Thesis – MBA).
- Cooper, D.R. & Schindler, P.S. 2006. *Business research methods*. 12th ed. New York, NY: McGraw Hill Education.
- Cordero, J.C.M. 2008. Residents' perception of tourism: a critical theoretical and methodological review. *Ciencia ergo sum*, 15(1):35-44.
- Crompton, J.L. 1979. Motivations for pleasure vacation. *Annals of tourism research*, 6(4):408-424.
- Csikszentmihalyi, M. 1975. *Beyond boredom and anxiety*. San Francisco, California: Jossey-Bass.

Csikszentmihalyi, M. & Csikszentmihalyi, I.S. 1999. Adventure and the flow experience. (In Miles, J.C. & Priest S., eds. Adventure programming. State College, Pa.: Venture. p. 153-158).

Cunningham, P.A., Huijbens, E.H. & Wearing, S.L. 2012. From whaling to whale watching: examining sustainability and cultural rhetoric. *Journal of sustainable tourism*, 20(1):143-161.

Curtin, S. 2005. Nature, wild animals and tourism: an experiential view. *Journal of ecotourism*, 4(1):1-5.

Curtin, S. 2010. Managing the wildlife tourism experience: the importance of tour leaders. *International journal of tourism research*, 12(1):219-236.

Daldeniz, B. & Hampton, M.P. 2013. Dive tourism and local communities: active participation or subject to impacts? Case studies from Malaysia. *International journal of tourism research*, 15(5):507-520.

Daly, C.A.K., Fraser, G. & Snowball, J.D. 2015. Willingness to pay for marine-based tourism in Ponta do Ouro partial marine reserve, Mozambique. *African journal of marine science*, 37(1):33-40.

Dann, G.S.M. 1977. Anomie, ego-enhancement and tourism. *Annals of tourism research*, 4(4):184-194.

Danson, T. 2012. 1000 ocean quotes. <http://beachchairscientist.com/2012/06/08/100-ocean-quotes/> Date of access: 8 November 2017.

Davenport, J. & Davenport, J.L. 2006. The impact of tourism and personal leisure transport on coastal environments: a review. *Estuarine, coastal and shelf science*, 67(1):280-292.

Davis, D., Banks, S., Birtles, A., Valentine, P. & Cuthill, M. 1997. Whale sharks in Ningaloo Marine Park: managing tourism in an Australian marine protected area. *Tourism management*, 18(5):259-271.

Davies, M.B. & Hughes, N. 2014. Doing successful research project: using qualitative or quantitative methods. 2nd ed. New York: Palgrave Macmillan.

DEA **see** Department of Environmental Affairs

Deale, C.S. 2013. Corporate social responsibility and the sustainable tourism practise of Marriott International. (In Beckendorf, P. & Lund-Durlacher, D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p.103-114).

- Dearden, P., Topelka, K.N. & Ziegler, J. 2008. Tourist interactions with sharks. (In Higham, J. & Lück, M. eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 66-90).
- Deltori, A. & Giudici, E. 2015. Marine protected areas: their contribution to sustainable tourism. *The international journal of environmental sustainability*, 10(3):1-12.
- Deming, W.G. 1996. A decade of economic change and population shifts in US regions. *Monthly Lab. Rev.*, 119:3.
- Department of Environmental Affairs (DEA). 2017. Allocation process for boat-based whale watching and white shark cage diving operating permits. Pretoria.
- Diakomihalis, M.N. 2007. Great maritime tourism evolution, structures and prospects. *Research in transportation economics*, 21(1):419-455.
- Dicken, M.L. & Hosking, S.G. 2009. Socio-economic aspects of the tiger shark diving industry within the Aliwal Shoal Marine Protected Area, South Africa. *African journal of marine sciences*, 31(2):227-232.
- Dimmock, K. & Musa, G. 2015. Scuba diving tourism system: a framework for collaborative management and sustainability. *Marine policy*, 54(1):52-58.
- Ditton, R.B., Osburn, H.R., Baker, T.L. & Thailing, C.E. 2002. Demographics, attitudes, and reef management preferences of sport divers in offshore Texas waters. *ICES journal of marine science*, 59(10):186-191.
- Dixon, J.A. & Sherman, P.B. 1990. *Economics of protected areas: a new look at the benefits and costs*. Washington DC: Island Press.
- Dobson, J. 2006. Sharks, wildlife tourism, and state regulation. *Tourism in marine environments*, 3(1):15-23.
- Dobson, J. 2008. Shark! A new frontier in tourist demand for marine wildlife. (In Higham, J. & Lück, M., eds. *Marine wildlife and tourism management: insights from the natural and social sciences*. Oxfordshire: CABI International. p. 49-65).
- Dogan, H.Z. 1989. Forms of adjustment: sociocultural impacts of tourism. *Annals of tourism research*, 16(2):216-236.
- Doiron, S. & Weissenberger, S. 2014. Sustainable dive tourism: social and environmental impact – the case of Roatan, Honduras. *Tourism management perspectives*, 10(1):19-26.

- Douglas, N., Douglas, N. & Derret, R. 2001. Special interest tourism. Melbourne, Australia: Wiley.
- Dowling, R.K. & Weeden, C. 2017. Cruise ship tourism. 2nd ed. Oxfordshire: CAB International.
- Doxey, G. 1975. A causation theory of visitor-residents irritants: methodology and research inferences. (*In* The impact of tourism. Sixth Annual Conference Proceedings of the Travel Research Association. San Diego, <https://monash.rl.talis.com/items/0B253BC0-DB47-1698-C053-89D37FA8EF60.html> Date of access: 24 October 2017).
- Duffus, D.A. 1988. Non-consumptive use and management of cetaceans in British Columbia coastal waters. Canada: University of Victoria. (Thesis – PhD).
- Duffus, D.A. & Dearden, P. 1990. Non-consumptive wildlife orientated recreation: a conceptual framework. *Biological conservation*, 53(3):213-231.
- Duman, T. & Mattila, A. S. 2005. The role of affective factors on perceived cruise vacation value. *Tourism management*, 26(3):311–323.
- Du Toit, D.R., Biggs, H. & Pollard, S. 2011. The potential role of mental model methodologies in multistakeholder negotiations: integrated water resources management in South Africa. *Ecology and society*, 16(3):21-30.
- Dwyer, L. & Forsyth, P. 2007. Economic measures of tourism yield: what markets to target? *International journal of tourism research*, 10(2):155-168.
- Dwyer, L. & Thomas, F. 2012. Tourism yield measures for Cambodia. *Current issues in tourism*, 15(4):303-328.
- Dyer Island Cruises. 2017. Activity description. <https://dyer-island-cruises.activitar.com/services/1064?adults=0&children=99&date=2017-06-01> Date of access: 27 July 2017.
- Eagles, P.F.J. 2014. Research priorities in park tourism. *Journal of sustainable tourism*, 22(4):528-549.
- Earle, S. 1998. Call of the sea. <http://content.time.com/time/subscriber/article/0,33009,989255-5,00.html> Date of access: 8 November 2017.
- Ellis, M.J. 1973. Why people play. Englewood Cliffs, New Jersey: Prentice-Hall.
- Enya. 2017. Enya quotes. <https://www.brainyquote.com/quotes/quotes/e/enya356975.html> Date of access: 8 November 2017.

- Erkus-Ozturk, H. & Eraydin, A. 2010. Environmental governance for sustainable tourism development: collaborative networks and organisation building in the Antalya tourism region. *Tourism management*, 31(1):113-124.
- Evans, A. 2013. Why I won't go shark cage diving. National Geographic online. <http://digitalnomad.nationalgeographic.com/2013/11/21/why-i-wont-go-shark-cage-diving/> Date of access: 12 October 2017.
- Fabinyi, M. 2008. Dive tourism, fishing and marine protected areas in the Calamianes Islands, Philippines. *Marine policy*, 32(1):898-904.
- Fennell, D.A. 1999. Ecotourism: an introduction. New York: Routledge.
- Fennell, D.A. 2007. Ecotourism. 3rd ed. New York: Routledge.
- Fennell, D.A. 2015. Ecotourism. 4th ed. Oxford: Routledge.
- Field, A. 2009. Discovering statistics using SPSS. 3rd ed. London: Sage.
- Findlay, K.P. & Best, P.B. 2016. Distribution and seasonal abundance of large cetaceans in the Durban whaling grounds off KwaZulu-Natal, South Africa, 1972-1975. *African journal of marine species*, 38(2):249-262.
- Foley, N.S., Corless, R., Escapa, M., Fahy, F. & Fernandez-Macho, J. 2014. Developing a comparative marine socio-economic framework for the European Atlantic area. *Journal of ocean and coastal economics*, 1(1):1-25.
- Foyle, L. & Lough, C. 2007. Marine tourism and leisure plan. *Tourism development international*, 33(6):168-182.
- Fuggle, R.F. & Rabie, M.A. 1996. Environmental management in South Africa. Cape Town: Juta and Company Ltd. (Pty).
- Gallagher, A. & Pike, K. 2011. Sustainable management for maritime events and festivals. *Journal of coastal research*, 1(61):158-165.
- Gansbaai.com. 2015. Shark cage diving in Gansbaai. <http://www.gansbaai.com/en/things-to-do/shark-cage-diving/> Date of access: 17 September 2015.
- Gansbaaiinfo. 2015. Gansbaai Information. <http://www.gansbaaiinfo.com/info/index.html> Date of access: 14 September 2015.

- Garrod, B. & Wilson, J.C. 2003. Marine ecotourism: issues and experiences. Australia: Channel View Publications.
- Geldenhuys, S. 2009. Ecotourism criteria and context. (*In* Saayman, M. Ecotourism: getting back to basics. Potchefstroom: The Platinum Press. pg. 1-24).
- Geldenhuys, L. 2012. The influence of Blue Flag status on tourist decision-making in South Africa. Potchefstroom: North-West University. (Dissertation - MCom).
- Geldenhuys, L., Van der Merwe, P. & Slabbert, E. 2014. Who is the scuba diver who visit Sodwana Bay and why? *South African journal for research in sport, physical education and recreation*, 36(2):91-104.
- Geldenhuys, L., Van der Merwe, P. & Saayman, M. 2016. Setting the table for mountain tourism: the case of a South African National Park. (*In* Ritchins, H. & Hull, J.S., eds. Mountain tourism: experiences, communities, environments and sustainable futures. Canada: CAB International. p. 310-318).
- Geldenhuys, S. 2009. Ecotourism criteria and context. (*In* Saayman, M. ed. Ecotourism: getting back to basics. Potchefstroom: The Platinum Press. p. 2-24).
- George, R. 2007. Managing tourism in South Africa. Goodwood: Oxford University Press.
- George, R. 2012. Managing tourism in South Africa. Goodwood: Oxford University Press.
- George, R. 2014. Marketing tourism in South Africa. 5th ed. Cape Town: Oxford University Press.
- George, R. 2015. Managing tourism in South Africa. 2nd ed. Goodwood: Oxford University Press.
- Gerber, S.B. & Finn, K.V. 2013. Using SPSS for Windows: Data analysis and graphics. USA: Springer.
- Giddy, J.K. 2017. A profile of commercial adventure tourism participants in South Africa. *An international journal of tourism and hospitality research*, <http://dx.doi.org/10.1080/13032917.2017.1366346> Date of access: 30 October 2017.
- Giddy, K.K. & Webb, N.L. 2016. The influence of the environment on motivations to participate in adventure tourism: the case of the Tsitsikamma. *South African geographical journal*, 98(2):351-366.

- Giddy, J.K. & Webb, N.L. 2017. The influence of the environment on adventure tourism: from motivations to experiences. *Current issues in tourism*, <http://dx.doi.org/10.1080/13683500.2016.1245715> Date of access: 30 October 2017.
- Global Reporting Initiative. 2013. Sustainability reporting. <https://www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx> Date of access: 30 October 2017.
- Google maps. 2015. 34.3857592, 19.1998116, 10.75. <https://www.google.co.za/maps/@-34.3857592,19.1998116,10.75z> Accessed: 17 September 2015
- Gossling, S. & Hall, C.M. 2006. Uncertainties in predicting tourism flows under scenarios of climate change. *Climatic change*, 79(3):163-173.
- Government Gazette no 35782. 2012. 30 Oktober 2012 p. 49.
- Gravetter, F.J., Wallnau, L.B. & Forzano, L.B. 2016. Essentials of statistics for the behavioural sciences. 9th ed. Boston, USA: Cengage Learning.
- Gray, H.P. 1980. International travel – international trade. Massachusetts: Heath and Co.
- Gutierrez, E., Lamoureux, K., Matus, S. & Sebunya, K. 2005. Linking communities, tourism and conservation: a tourism assessment process. *Washington: Conservation International, The George Washington University*.
- Gursoy, D., Chen, J.S. & Chi, C.G. 2014. Theoretical examination of destination loyalty formation. *International journal of contemporary hospitality management*, 26(5):809-827.
- Hair, J., Anderson, R. E., Tatham, R. L. & Black, W. C. 1995. Multivariate data analysis. 4th ed. New Jersey: Prentice Hall.
- Hall, C.M. & Page, S. 2005. The geography of tourism and recreation: environment, place and space. 2nd ed. New York: Routledge.
- Hall, C.M. 2000. Tourism planning: planning, processes and relationships. Harlow: Prentice Hall.
- Hall, M.C. 2001. Trends in ocean and coastal tourism: the end of the last frontier? *Ocean & coastal management*, 44(1):601-618.
- Halpenny, E. 2002. Marine ecotourism: impacts, international guidelines and best practice case studies. USA: The International Ecotourism Society.
- Hamid, M.A. & Isa, S.M. 2015. The theory of planned behaviour on sustainable opportunities ad challenges. *Journal of applied environmental and biological sciences*, 5(6):84-88.

- Harriott, V.J., Davies, D. & Banks, S.A. 1997. Recreational diving and its impacts on marine protected areas in Eastern Australia. *Ambio*, 26:173-179.
- Hawai'i Pacific University. 2016. Aqua facts.
<http://www.oceanicinstitute.org/aboutoceans/aquafacts.html> Date of access: 19 January 2016.
- Hermann, U.P. 2015. Development of a tourism management framework for Mapungubwe National Park. Potchefstroom: North-West University (Thesis - PhD).
- Hermanus.co.za. 2016. Demographics. <http://www.hermanus.co.za/demographics> Date of access: 20 February 2016.
- Hermanus.co.za. 2017. Demographics. <https://www.hermanus.co.za/demographics> Date of access: 12 October 2017.
- Hermanusonline. 2015. Visit Hermanus, a village by the sea in South Africa.
<http://www.hermanusonline.mobi/> Date of access: 30 October 2017.
- Hermanustourism. 2015. Hermanus the seaside village. <http://www.hermanustourism.info/about-hermanus.php?category=hermanus> Date of access: 17 September 2015.
- Hermanus Whale Festival. 2015. Welcome to the Hermanus whale festival.
<http://www.satourisonline.com/> Date of access: 17 September 2015.
- Higginbottom, K. 2004. Wildlife tourism: impacts, management and planning. Australia: Common Ground Publishing Pty Ltd.
- Higham, J.E.S., Bejder, L., Allen, S., Corkeron, P.J. and Lusseau, D. 2016. Managing whale-watching as a non-lethal consumptive activity. *Journal of sustainable tourism*, 24 (1):73-90.
- Higham, J.E.S., Bejder, L. & Lusseau, D. 2009. An integrated and adaptive management model to address the long-term sustainability of tourist interactions with cetaceans. *Environmental conservation*, 35(4):294-302.
- Higham, J. & Lück, M. 2008. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CAB International.
- Higham, J.E.S. & Hendry, W.F. 2008. Marine wildlife viewing: insights into the significance of the viewing platform. (In Higham, J. & Lück, M. Eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CAB International. p. 137-146).
- Holden, A. 2006. Tourism studies and the social sciences. New York: Routledge.

- Holder, J. 1988. Pattern and impact of tourism on the environment of the Caribbean. *Tourism management*, 9(2):119-127.
- Hudson, S. 2002. Sport and adventure tourism. USA: Haworth Hospitality Press.
- Inskeep, E. 1991. Tourism planning: an integrated and sustainable development approach. New York: Van Nostrand Reinhold.
- Ioannides, D. 2001. Sustainable development and shifting attitudes of tourism stakeholders: toward a dynamic framework. (In McCool, S.F. & Moisey, R. N., eds. Tourism, recreation and sustainability. New York: CABI Publishing. p. 55-77).
- Isa, S.M. & Ramli, L. 2014. Factors influencing tourist visitation in marine tourism: lessons learned from FRI Aquarium Penang, Malaysia. *International journal of culture, tourism and hospitality research*, 8(1):401-419.
- Iso-Ahola, S.E. 1989. Motivation for leisure. (In Jackson, E.L. & Burton, T.L., eds. Understanding leisure and recreation: mapping the past, charting the future. USA: Venture Publications. p.247-279).
- Jago, L., Chalip, L., Brown, G., Mules, T. & Shameem, A. 2003. Building event into destination branding: insights from experts. *Event management*, 8(1):30-14.
- James, R.J. 2001. From beaches to beach environments: linking the ecology, human-use and management of beaches in Australia. *Ocean & coastal management*, 43(1):495-514.
- Jennings, G. 2001. Water-based tourism, sport, leisure and recreation experiences. Burlington: Elsevier.
- Jennings, G. & Nickerson, N.P. 2005. Quality tourism experiences. Oxford: Butterworth-Heinemann.
- Jeong, C. 2014. Marine tourist motivations: comparing push and pull factors. *Journal of quality assurance in hospitality and tourism*, 15(3): 294-309.
- Johnson, R. & Kock, A. 2006. South Africa's White Shark cage-diving industry – is there cause for concern? (In Nel, D.C. & Peschalk, T.P., eds. Finding a balance: White shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. Proceedings of a specialist workshop. WWF South Africa Report Series – 2006/Marine/001. p. 40-59).
- Jurowski, C. & Gursoy, D. 2004. Distance effects on residents attitudes towards tourism. *Annals of tourism research*, 31(2):296-312.

- Kals, E., Schumacher, D. & Montada, L. 1999. Emotional affinity towards nature as a motivational basis to protect nature. *Environment and behaviour*, 31(1):178-202.
- Kaltenborn, B.P. & Emmelin, L. 1993. Tourism in the high north: management challenges and recreation opportunity spectrum planning in Svalbard, Norway. *Environmental management*, 17(41):<https://doi.org/10.1007/BF02393793> Date of access: 15 February 2018.
- Kapoor, P., Powell, P. & Abbott, J.L. 2006. Conventional disputes, unconventional resolutions: an analysis of dispute resolution in the meetings, incentives, conventions, and exhibition industry. *Journal of convention & event tourism*, 8(3):45-70.
- Kent, K., Sinclair, J. & Diduck, A. 2012. Stakeholder engagement in sustainable adventure tourism development in the Nanda Devi Biosphere Reserve, India. *International journal of sustainable development & world ecology*, 19(1):89-100.
- Kim, J. & Muller, C.W. 1978. Factor analysis: statistical methods and practical issues. Beverly Hills, California: Sage.
- Kim, K., Oh, I. & Jogaratnam, G. 2007. College students: a revised model of push motives. *Journal of vacation marketing*, 13(1):73-85.
- Kizielewicz, J., Haahti, A., Luković, T. & Gračan, D. 2017. The segmentation of the demand for ferry travel – a case study of Stena Line. *Economic research - Ekonomska istraživanja*, 30(1):1003-1020.
- Kleinbaum, D., Kupper, L., Nizam, A. & Rosenberg, E. 2014. Applied regression analysis and other multivariable methods. USA: Cengage Learning.
- Kokkis, H. & Tsartas, P. 2001. Sustainable tourism development and the environment. Athens: Kritiki (in Greek).
- Kollmuss, A. & Agyeman, J. 2010. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental education research*, 8(3):239-260.
- Kozak, M. 2002. Comparative analysis of tourist motivations by nationality and destinations. *Tourism management*, 23(3):221-232.
- Kreitner, R. 1989. Management. 4th ed. Boston: Houghton Mifflin Company.
- Krejcie, R.V. & Morgan, D.W. 1970. Determining sample size for research activities. *Educational and psychological measurement*, 30(1):607-610.

- Kruger, M. & Saayman, M. 2017. An experience-based typology for natural event tourists. *International journal of tourism research*, 19(5):605-617.
- Kumar, R. 2009. Sports, adventure and recreation tourism. New Delhi: SBS Publishers and Distributors.
- Kuo, J.L. 2002. The effectiveness of environmental interpretation at resource-sensitive tourism destinations. *International journal of tourism research*, 4(1):87-101.
- Kurtzman, J., Zauhar, J., Ahn, J. & Choi, S. 1998. Global understanding, appreciation and peace through sports tourism. <http://www.free-press.com/journals/jst/archive/vol3no4/global.htm> Date of access: 1 August 2016.
- Kuvan, Y. & Akan, P. 2005. Residents' attitudes toward general and forest-related impacts of tourism: the case of Belek, Antalya. *Tourism management*, 26(5):691-706.
- Lee, J.W. & Brahmastreene, T. 2013. Investigating the influence of tourism on economic growth and carbon emissions: evidence from panel analysis of the European Union. *Tourism management*, 38(1):69-76.
- Levy, D. 2017. The environmental factors determining temporal distributions of cetaceans in Mossel Bay. Cape Town: University of Cape Town (Dissertation - MA).
- Liam, C. & Cooper, C. 2009. Beyond sustainability: optimising island tourism development. *International journal of tourism research*, 11(1):89-103.
- Littig, B. & Grießler, E. 2005. Social sustainability: a catchword between political pragmatism and social theory. *International journal of sustainable development*, 8(1-2):65-79.
- Lombard, L. 2016. The top 10 countries where most of SA's tourists come from. <http://www.traveller24.com/Explore/BusinessTravel/the-top-10-countries-where-most-of-sas-tourists-come-from-20160408> Date of access: 7 September 2017.
- Lovecraft, H.P. 2009. The white ship. <http://www.hplovecraft.com/writings/texts/fiction/ws.aspx> Date of access: 8 November 2017.
- Lück, M. 2003. Education on marine mammal tours as agent for conservation – but do tourists want to be educated? *Ocean & coastal management*, 46(1): 943-956.
- Lück, M., 2007. Managing marine wildlife experiences: the role of visitor interpretation programmes. (In Higham, J.E.S. & Lück, M. Eds. Marine wildlife and tourism management: insights from the natural and social sciences. Wallingford: CAB International. p. 334-346).

- Lück, M. 2008a. The encyclopaedia of tourism and recreation in marine environments. London: CAB International.
- Lück, M. 2008b. Managing marine wildlife experiences: the role of visitor interpretation programmes. (In Higham, J. & Lück, M., eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CABI International. p. 334-346).
- Lück, M. 2013. Nautical tourism, development: opportunities and threats. https://www.researchgate.net/profile/Michael_Lueck2/publication/275100397_Nautical_Tourism_Development_Opportunities_and_Threats/links/55bca25c08ae9289a095d17c.pdf Date of access: 27 July 2017.
- Lück, M. 2015. Education on marine mammal tours – but what do tourists want to learn? *Ocean & coastal management*, 103(1):25-33.
- Lucrezi, S., Saayman, M. & Van der Merwe, P. 2013. Perceived diving impacts and management implications at a popular South African reef. *Coastal management*, 41(5):381-400.
- Lukovic, T. 2013. Nautical tourism. Oxfordshire: CABI International.
- Luksenburg, J.A. & Parsons, E.C.M. 2014. Attitudes towards marine mammal conservation issues before the introduction of whale watching: a case study in Aruba (Southern Caribbean). *Aquatic conservation: marine and freshwater ecosystems*, 24(1):135-146.
- Lundie, S., Dwyer, L. & Forsyth, P. 2007. Environmental-economic measures of tourism yield. *Journal of sustainable tourism*, 15(5):1-18.
- Malhotra, N. K. 2007. Marketing Research: an applied orientation. 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Malhotra, N., Mavondo, F., Mukherjee, A. & Hooley, G. 2013. Service quality of frontline employees: A profile deviation analysis. *Journal of Business Research*, 66(9):1338-1344.
- Manning, M. 2011. When we do what we see: the moderating role of social motivation on the relation between subjective norms and behaviour in the theory of planned behaviour. *Basic and applied social psychology*, 33(4):351-364.
- Manwa, H. 2013. Planning for sustainability: the Okavango Delta management plan. (In Beckendorf, P. & Lund-Durlacher, D., eds. International cases in sustainable travel and tourism. Oxford: Goodfellow Publishers Ltd. p. 25-40).

Map of Hermanus, Western Cape. 2015. Retrieved from <https://www.google.co.za/maps/@-34.3857592,19.1998116,10.75z> Date of access: 17 September 2015.

Map of geographical location of shark cage diving in South Africa. 2017. Retrieved from <https://www.google.co.za/maps/place/Western+Cape/@-33.7906283,19.1248413,8z/data=!4m5!3m4!1s0x1dcc5d887a698df3:0xe98e798f2136a28b!8m2!3d-33.2277918!4d21.8568586> Date of access: 17 September 2015.

Map of Southern Right whales congregation sites, Western Cape South Africa. 2015. Retrieved from https://www.google.co.za/search?q=south+africa&espv=2&biw=1366&bih=623&site=webhp&source=lnms&tbm=isch&sa=X&ved=0CAcQ_AUoAmoVChMI_qOS4dT9xwIVx2sUCh26EQrC&dpr=1#tbm=isch&q=western+cape+map+&imgrc=8EIUz1-mu4NBoM%3A Date of access: 16 September 2015.

Marafa, L.M. & Chau, K.C. 2014. Framework for sustainable tourism development on coastal and marine zone environment. *Tourism, leisure and global change*, 1(1):1-11.

Maree, K. & Pietersen, J. 2008. Sampling. (In K. Maree, ed. First steps in research. Pretoria: Van Schaik. P. 172-180.)

Marine Dynamics. 2015. Our conservation efforts. <http://www.sharkwatchsa.com/en/saving-the-ocean/our-conservation-efforts/> Date of access: 16 September 2015.

Marine Dynamics. 2017a Rates and special information. <http://www.sharkwatchsa.com/en/the-trip/pricing/> Date of access: 8 March 2017.

Marine Dynamics. 2017b. Shark Alley and Dyer Island. <http://www.sharkwatchsa.com/en/the-area/dive-area/> Date of access: 11 August 2017.

Martin, P. & Priest, S. 1986. Understanding the adventure experience. *Journal of adventure education*, 3(1):18-21.

Maslow, A. 1943. A theory of human motivation. *Psychological review*, 50(3):370-396.

Mason, E. 2010. Adventure and its relationship to outdoor learning. http://www.outdoor-learning.org/Portals/0/IOL%20Documents/Horizons%20Documents/Horizons%20pdf%20archive/pd_h50.advent.inol.pdf Date of access: 11 September 2014.

Mason, P. 2000. Zoo tourism: the need for more research. *Journal of sustainable tourism*, 8(4):333-339.

- McIntosh, R.W. 1977. *Tourism: principles, practices philosophies*. New York: Wiley.
- McKay, T. 2012. Adventure tourism: opportunities and management challenges for SADC destinations. *Acta academica*, 45(3):30-62.
- Mehmetoglu, M. & Normann, O. 2013. The link between travel motives and activities in nature-based tourism. *Tourism review*, 68(2):3-13.
- Merriam-Webster Dictionary. 2017a. Framework. <https://www.merriam-webster.com/dictionary/framework> Date of access: 6 October 2017.
- Merriam-Webster Dictionary. 2017b. Nautical. <https://www.merriam-webster.com/dictionary/nautical> Date of access: 4 February 2017.
- Meyer, L.A., Thapa, B. & Pennington-Grey, L. 2002. An exploration of motivations among scuba divers in north central Florida. (In Schuster, R., ed. *Proceedings of the 2002 Northeastern Recreation Research Symposium*. Gen. Tech. Rep. NE-302. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. p. 292-295).
- Millington, K., Locke, T. & Locke, A. 2001. Adventure travel. *Travel & tourism analyst*, 4(1):65-98.
- Mohd, S. & Ramlli, L. 2014. Factors influencing tourist visitation in marine tourism: lessons learned from FRI Aquarium Penang, Malaysia. *International journal of culture, tourism and hospitality research*, 8(1):103-117.
- Molero, L. & Albaladejo, I.P. 2007. Profiling segments if tourists in rural areas of South-Eastern Spain. *Tourism management*, 28(3):757-767.
- Morgan, D.J. 2001. Risk, competence and adventure tourists: applying the adventure experience paradigm to white-water rafters. *Leisure/loisir*, 26(1-2):107-127.
- Mortlock, C. 1984. *The adventure alternative*. Milnthorpe, UK: Cicerone Press.
- Moscardo, G. 2001. *Understanding visitor-wildlife interactions: factors influencing satisfaction*. Australia: CRC Reef Research Centre.
- Moscardo, G. 2003. Interpretation and sustainable tourism: functions, examples and principles. *Journal of tourism studies*, 14(1):112-123.
- Moscardo, G. & Ballantyne, R. 2008. Interpretation and attractions. (In Fyall, A.I., Garrod, B., Leask, A. & Wanhill, S., eds. *Managing visitor attractions: new directions*. Oxford: Butterworth-Heinemann. p. 237-252).

- Moscardo, G. & Saltzer, R. 2004. Understanding wildlife tourism markets. (In K. Higginbottom., ed. *Wildlife tourism impacts, management and planning*. Common Ground/Sustainable Tourism CRC, Altona, Victoria, Australia. p. 167-185).
- Mostert, P.G. & Du Plessis, P.J. 2007. *Introduction to marketing management: a South African perspective*. Faerie Glen: Mustard House Marketing.
- Murphy, P.E. & Murphy, A.E. 2004. *Strategic management for tourism communities: bridging the gaps*. Bristol: Channel View.
- National Ocean Service. 2017. How much of the ocean have we explored? <https://oceanservice.noaa.gov/facts/exploration.html> Date of access: 2 August 2017.
- Nel, D.C. & Peschak, T.P. 2006. Finding a balance: white shark conservation and recreational safety in the inshore waters of Cape Town, South Africa. Proceedings of a specialist workshop held on 29 and 30 May 2006. Date of access: 24 October 2017.
- Neumann, S.B. 2006. The knowledge gap: implication for early education. (In D. Dickinson & Neumann, S.B., eds. *Handbook of early literacy research*. New York: Guilford. p. 29-40).
- Oberholzer, S., Saayman, M., Saayman, A. & Slabbert, E. 2010. The socio-economic impact of South Africa's oldest marine park. *Koedoe*, 52(1):1-9.
- Opaschowski, H.W. 2001. *Tourismus im 21. Jahrhundert, das gekaufte paradies*. Hamburg: B.A.T. Freizeit-Forschungsinstitut GmbH.
- Orams, M. 1999. *Marine tourism: development, impacts and management*. London: Routledge.
- Orams, M.B. 2000. Tourists getting close to whales, is it what whale-watching is all about? *Tourism management*, 21(1):561-569.
- Orams, M.B. 2002. Feeding wildlife as an attraction: a review of issues and impacts. *Tourism management*, 23(1):281-293.
- Orams, M. 2013. Economic activity derived from whale-based tourism in Vava'u, Tonga. *Coastal management*, 41(1):481-500.
- O'Riordan, T. & Stoll-Kleeman, S. 2002. *Biodiversity, sustainability and human communities: protecting beyond the protected*. Cambridge: Cambridge University Press.
- Overstrand Municipality. 2010. The impact of tourism on the Overstrand economy. <https://www.overstrand.gov.za/en/documents/strategic-documents/impact-of-tourism-on-the-overstrand-economy/1325-impact-of-tourism-2010/file> Date of access: 30 October 2017.

Overstrand Municipality. 2015. Integrated development plan: review for 2015/16. 3rd review of 2012/2017 cycle in terms of section 34 of the Municipal Systems Act, 2000. Draft 25 March 2015. <https://www.overstrand.gov.za/en/documents/strategic-documents/integrated-development-plan/3014-draft-idp-review-for-2016-17/file> Date of access: 24 October 2017.

Oxford Dictionaries. 2017. Framework. <https://en.oxforddictionaries.com/definition/framework> Date of access: 6 October 2017.

Padin, C. 2016. A sustainable tourism planning model: components and relationships. *European business review*, 24(6):510-518.

Page, S.J., Bentley, T.A. & Walker, L. 2005. Scoping the nature and extent of adventure tourism operations in Scotland: how safe are they? *Tourism management*, 26(1):381-397.

Page, S.J. & Connell, J. 2009. Tourism: a modern synthesis. 3rd ed. London: South Western Cengage Learning.

Page, S.J., Bentley, T & Walker, L. 2005. Scoping the nature and extent of adventure tourism operations in Scotland: how safe are they? *Tourism management*, 6(4):314-327.

Palys, T. 2008. Purposive sampling. (In Given, L.M., ed. The sage encyclopedia of qualitative research methods. 2nd ed. Los Angeles: Sage. p. 697-8).

Papageorgiuo, M. 2016. Coastal and marine tourism: a challenging factor in marine spatial planning. *Ocean & coastal management*, 129(1):44-48.

Parsons, E.C.M. 2012. The negative impacts of whale watching. *Journal of marine biology*, 1(807294):1-9.

Pearce, P.L. 2006. The value of a benchmarking approach for assessing service quality satisfaction in environmental tourism. (In Prodeaux, B., Moscardo, G. & Laws, E., eds. Managing tourism and hospitality services: theory and international applications. Wallingford: CAB International. p. 282-299).

Pearce, J., Strickland-Munro, J. and Moore, S.A. 2017. What fosters awe-inspiring experiences in nature-based tourism destinations? *Journal of sustainable tourism*, 25(3):362-378.

Penny, G.S., Cockcroft, V.G. & Hammond, P.S. 2011. Seasonal fluctuations in occurrence of inshore Bryde's whales in Plettenberg Bay, South Africa, with notes on feeding and multispecies associations. *African journal of marine science*, 33(3):1403-414.

- Petrick, J.F. & Durko, A.M. 2015. Segmenting luxury cruise tourists based on their motivations. *Tourism in marine environments*, 10(3):149-157.
- Pike, S. 2008. Destination marketing: an integral marketing communication approach. Amsterdam: Butterworth-Heinemann.
- Platt, S. 1995. Encountering wildlife without feeding. Land for Wildlife Note No. 35. November 1995. Land for Wildlife. Melbourne.
- Polyxeni, M. & Ourania, K. 2008. Ethics in tourism. http://polyxenimoira.weebly.com/uploads/3/0/4/6/30464652/ethics_in_tourismmoira-katsoula.pdf
Date of access: 8 December 2015.
- Pomfret, G. & Bramwell, B. 2014. The characteristics and motivational decisions of outdoor adventure tourists: a review and analysis. <http://shura.shu.ac.uk/9779/> Date of access: 28 July 2017.
- Pratt, S. & Suntikul, W. 2016. Can marine wildlife tourism provide an edutaining experience? *Journal of travel and tourism marketing*, 33(6):867-884.
- Priest, S. & Gass, M.A. 2005. Effective leadership in adventure programming. 2nd ed. New Hampshire: Human Kinetics.
- Pulido-Fernandez, J.I., Andrades-Caldito, L. & Sanchez-Rivero, M. 2015. Is sustainable tourism an obstacle to the economic performance of the tourism industry? Evidence from an international empirical study. *Journal of sustainable tourism*, 23(1):47-64.
- Raj, A. 2007. The new age of tourism and the new tourist. http://www.indianmba.com/Faculty_Column/FC565/fc565.html Date of access: 7 August 2017.
- Ratepayers Association Hermanus. 2014. Quarterly Newsletter: September 2014. http://www.ratepayers.co.za/uploads/1/3/7/4/13749469/hra_quarterly_newsletter_-_september_2014.pdf Date of access: 11 August 2017.
- Rawles, C.J.G. & Pearson, E.C.M. 2005. Environmental motivation of whale-watching tourists in Scotland. *Tourism in marine environments*, 1(2):129-132.
- Reisinger, Y., & Turner, L. 1998. Cultural marketing for Asian tourism into Australia. (In Chebat, J.C. & Oumlil, A., eds. Proceedings of the 1998 Multicultural Marketing Conference. Developments in Marketing Science: Proceedings of the Academy of Marketing Science. Cham: Springer. p. 535-535).

- Reynolds, P.C. & Braithwaite, D. 2001. Towards a conceptual framework for wildlife tourism. *Tourism management*, 22(1):31-42.
- Rhormens, M.S., Pedrini, A. & Ghilardi-Lopes, A.P. 2017. Implementation feasibility of a marine ecotourism product on the reef environments of the marine protected areas of Tinhare and Boipeba islands (Cairu, Bahia, Brazil). *Ocean & coastal management*, 139(1):1-11.
- Richards, K., O'Leary, B.C., Roberts, C., Ormond, R., Gore, M. & Hawkins, J.P. 2015. Sharks and people: insight into the global practice of tourism operators and their attitudes to shark behaviour. *Marine pollution bulletin*, 91(1):200-210.
- Rodriguez, J.R.O., Parra-Lopez, E. & Yanes-Estevez, V. 2007. The sustainability of island destinations; tourism area life cycle and teleological perspectives. *Tourism management*, 29(1):53-65.
- Rogerson, C.M. 2007. The challenges of developing adventure tourism in South Africa. *Africa insight*, 37(2):228-244.
- Rotherham, S. 2017. Gansbaai struggles as great white sharks disappear. <http://www.2oceansvibe.com/2016/01/15/gansbaai-struggles-as-great-white-sharks-disappear/> Date of access: 16 October 2017.
- Rousseau, J.J. 2003. A discourse on inequality. London: Penguin.
- Rutzen, M. 2015. Marine conservation: Shark Diving Unlimited. <http://www.sharkdivingunlimited.com/conservation/marine-conservation/> Date of access: 17 September 2015.
- Ryan, R. 2012. Effects of ecotourism and adventure tourism in the Santa Cruz Province, Argentina. Kenosha: Carthage College. (Undergraduate thesis).
- Saayman, M. 1999. What is cultural tourism and how can we benefit from it? Paper presented at Tourism, Environment and Conservation North-West, Pilanesberg, 8 September.
- Saayman, M. 2006. Marketing tourism products and destination: getting back to basics. Potchefstroom: Leisure Consultants.
- Saayman, M. 2008. En route with tourism: an introductory text. 2nd ed. Potchefstroom: Institute for Tourism and Leisure Studies.
- Saayman, M. 2009. Hospitality, leisure and tourism management. Potchefstroom: The Platinum Press.

- Saayman, M. 2012. An introduction to sports tourism and event management. Cape Town: Sun Media Metro.
- Saayman, M. 2013. En route with tourism. 4th ed. Cape Town: Juta & Company (Pty) Ltd.
- Saayman, M. 2014. A missed opportunity. (*In* Ramawela, M, van Wyk, S. & Mosue, K., eds. Marine Tourism: Special Overview. SA: Tourism Business Africa. p.18-19).
- Saayman, M. 2017a. Blue economy: tourism challenges. Paper presented at IATE 2017 Round table: Blue growth and tourism, Rimini, Italy, 23 June 2014 https://events.unibo.it/conference-iate-rimini-2017/download-area/blue-growth_melville-saayman.pdf/@@download/file/BLUE%20GROWTH_Melville%20Saayman.pdf Date of access: 25 October 2017.
- Saayman, M. 2017b. The potential economic impact of marine tourism to the Blue Economy. Paper presented at the South African Marine Institute (SAMI) conference. 6 April 2017, Port Elizabeth.
- Saayman, M., Saayman, A. & Joubert, E.M. 2013. The contribution of the Wacky Wine Festival to the local economy. *Journal of contemporary management*, 10(1):427-447.
- Saayman, M. & Slabbert, E. 2004. A profile of tourists visiting the Kruger National Park. *Koedoe*, 47(1):1-8.
- Saayman, M., Slabbert, E. & Van der Merwe, P. 2009. Travel motivation: a tale of two marine destinations in South Africa. *South African journal for research in sport, physical education and recreation*, 31(1):81-94.
- SACarrental.com. 2015. Map of Western Cape, South Africa. https://www.google.co.za/search?q=south+africa&espv=2&biw=1366&bih=623&site=webhp&source=lnms&tbm=isch&sa=X&ved=0CAcQ_AUoAmoVChMI_qOS4dT9xwIVx2sUCh26EQrC&dpr=1#tbm=isch&q=western+cape+map+&imgsrc=8EIUz1-mu4NBoM%3A Accessed: 16 September 2015.
- SAMSA **see** South African Maritime Safety Authority
- Saunders, M., Lewis, P. & Thornhill, A. 2016. Research methods for business studies. 7th ed. Edinburgh: Pearson Education Ltd.
- Schiffman, L.G., Kanuk, L.L. & Wisenblit, J. 2010. Consumer behaviour. 10th ed. Upper Saddle River, New Jersey: Pearson-Prentice Hall.
- Schoeman, K.D. 2015. Developing a perceived value model for the cruise experience. Potchefstroom: North-West University (Thesis - PhD).

- Scholtz, M. 2014. A critical assessment of the social impacts of tourism in selected South African communities. Potchefstroom: North-West University (Thesis - PhD).
- Scholtz, M., Kruger, M. & Saayman, M. 2015. Determinants of visitor length of stay at three coastal parks in South Africa. *Journal of ecotourism*, 14(1):21-47.
- Schott, C. 2007. Selling adventure tourism: a distribution channels perspective. *International journal of tourism research*, 9(4):257-274.
- Scott, D. 2011. Why sustainable tourism must address climate change. *Journal of sustainable tourism*, 19(1):17-34.
- Semeniuk, C.A.D., Haider, W., Beardmore, B. & Rothley, K. 2009. A multi-attribute trade-off approach for advancing the management of marine wildlife tourism: a quantitative assessment of heterogeneous visitor preferences. *Aquatic conservation: marine and freshwater ecosystems*, 19(1):194-208.
- Senge, P.M. 2014. The dance of change: the challenges of sustaining momentum in learning organisations. New York: Doubleday.
- Seymour, K.D. 2012. The perceived value of scuba diving tourists at a marine destination. Potchefstroom: North-West University (Dissertation - MA).
- Sharkcagediving.net. 2015. About us. <http://www.sharkcagediving.net/about-us/> Date of access: 30 October 2015.
- Sharkcagediving.net. 2017. Great White Shark Ecology and Conservation. <http://www.sharkcagediving.net/images/PDF/GWSTsample-certificate.pdf> Date of access: 7 February 2017.
- Sierra, V. 2002. Desarrollo sostenible: acotaciones conceptuales y revisiones estrategicas. *Sustainable development: conceptual assessments and strategic reviews*, 2749(1):13-23.
- Singh, L.K. 2008. Ecology, environment and tourism. Delhi: Isha Books.
- Single, L. 2002. Representative sampling. Paper presented at the AWDS Task Force's Marketing Workshop, Big Sky, Montana, 20 September 2002.
- Sirakaya, E., Sasidharan, V. & Sonmez, S. 1999. Redefining ecotourism: the need for a supply-side view. *Journal of travel research*, 38(2):168-172.

- Slabbert, E. 2004. An integrated tourism model for cultural events. Potchefstroom: North-west University. (Thesis – PhD).
- South Africa. 1973. The Seabirds and Seals Protection Act no. 46 of 1973. Pretoria.
- South Africa 1986. The International Convention for the Preservation of Pollution from Ships Act no. 2 of 1986. Pretoria.
- South Africa. 1997. Basic Conditions of Employment Act of 1997. Pretoria.
- South Africa. 1998a. Marine Living Resources Act no. 18 of 1998. Cape Town.
- South Africa. 1998b. National Environmental Act no. 107 of 1998. Pretoria.
- South Africa. 2003. National Protected Areas Act no. 57 of 2003. Cape Town.
- South Africa. 2004. National Biodiversity Act no. 10 of 2004. Cape Town.
- South Africa. 2013. Prevention and Combatting of Trafficking in Persons Act no. 7 of 2013. Cape Town.
- South African Maritime Safety Authority. 2015. Marine Tourism along South Africa's coastline. Accessed on: <http://www.samsa.org.za/> Date of access: 23 September 2015.
- SPSS Inc. 2017. SPSS® 24.0 for Windows, Release 24.0., Copyright© by SPSS Inc. Chicago, Ill. www.spss.com Date of access: 25 October 2017.
- Steyn, L. 2010. Consumer perceptions regarding labels on clothing and household textile products: a study in Gauteng. 3rd ed. Pretoria: Van Schaik.
- Stambouis, Y., & Skayannis, P. 2003. Innovation strategies and technology for experience-based tourism. *Tourism management*, 24(1):35-43.
- Stole, J., Fine, G. & Cook, K. 2001. Sociological miniaturism: seeing the big through the small in social psychology. *Annual review of sociology*, 26(1):387-413.
- Stout, G.W. & Green, N.P.O. 1986. *Work out biology*. London: McMillan Education Ltd.
- Strydom, H. 2007. Sampling and sampling methods. (*In De Vos, A.S., ed. Money generation model – version 2. <http://mgm2impact.com/> Date of access: 24 Oktober 2017*).
- Sung, H. 2004. Classification of adventure travellers: behaviour, decision making, and target markets. *Journal of travel research*, 42(4):343-356.

- Sung, H.Y., Morrison, A.M. & O'Leary, J.T. 2000. Segmenting the adventure travel market by activities: from the North American industry providers' perspective. *Journal of travel and tourism marketing*, 9(4):1-20.
- Swanepoel, J.W.H., Swanepoel, C.J., Van Graan, F.C., Allison, J.S., Weideman, H.M. & Santana, L. 2015. Elementary statistical methods. 3rd ed. Potchefstroom: AndCork.
- Swanson, K.K. & Horridge, P.E. 2006. Travel motivations as souvenir purchase indicators. *Tourism management*, 27(1):671-683.
- Swarbrooke, J. 1991. Sustainable tourism management. London: CAB International.
- Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G. 2003. Adventure tourism: the new frontier. London: Butterworth-Heinemann.
- Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G. 2006. Adventure tourism: the new frontier. Oxford: Butterworth-Heinemann.
- Tandwa, L. 2016. Unabridged birth certificate travel rule scrapped. <http://www.news24.com/SouthAfrica/News/unabridged-birth-certificate-travel-rule-scrapped-20160205> Date of access: 31 October 2017.
- Techera, E.J. & Klein, N. 2013. The role of law in shark-based eco-tourism: lessons from Australia. *Marine policy*, 29(1): 21-28.
- Terblanche, H. 2011. Travel motives of adventure tourists: a case study of Magoebaskloof adventures. Potchefstroom: North-West University. (Dissertation - MA.)
- Theerapappisit, P. 2012. The bottom-up approach of community-based ethnic tourism: a case study in Chiang Rai. (In Kasimoglu, M. & Aydin, H., eds. Strategies for tourism industry: micro and macro perspectives. <http://www.intechopen.com/books/strategies-for-tourism-industry-micro-and-macro-perspectives> Date of access: 25 October 2017).
- Thomas, L. 1998. Economic values of protected areas: guidelines for protected area managers. Gland: IUCN.
- Thomas, S. & Crompton, J. 2003. A conceptualisation of the relationships between service quality and visitor satisfaction and their links to destination selection. *Leisure studies*, 22(1):65-80.
- Tiedt, L. 2011. Travel motivations of tourists to selected marine national parks. Potchefstroom: North-West University. (Dissertation - MA).
- Tilden, F. 1977. Interpreting our heritage. 3rd Edn. Chapel Hill: North Carolina Press.

- Todd, S.L., Graefe, A.R. & Mann, W. 2002. Differences in scuba diver motivations based on level of development. http://nrs.fed.us/pubs/gtr/gtr_ne289/gtr.ne289_107.pdf Date of access: 14 February 2012.
- Topelka, K.N. & Dearden, P. 2005. The shark watching industry and its potential contribution to shark conservation. *Journal of ecotourism*, 4(2):108-128.
- Tovar, C. & Lockwood, M. 2008. Social impacts of tourism: an Australian regional case study. *International Journal of Tourism Research*, 10(4):365-378.
- Trave, C., Brunnschweiler, J., Shaeves, M., Diedrich, A. & Barnett, A. 2017. Are we killing them with kindness? Evaluation of sustainable marine wildlife tourism. *Biological conservation*, 209(1):211-222.
- Traveller24. 2017. SA a 'world leader in responsible whale watching' but more regulation needed. <http://www.traveller24.com/Explore/Green/sa-a-world-leader-in-responsible-whale-watching-but-more-regulation-needed-20170630> Date of access 15 February 2018.
- Triantafillidou, A. & Petala, Z. 2016. The role of sea-based adventure experiences in tourists' satisfaction and behavioural intentions. *Journal of travel and tourism marketing*, 33(1):67-87.
- Tubb, K. 2010. An evaluation of effectiveness of interpretation within Dartommor National Park in reaching the goals of sustainable tourism development. *Journal of sustainable tourism*, 11(6):476-498.
- Turpie, J., Savy, C., Clark, B. & Atkinson, L. 2005. Boat-based whale watching in South Africa: an economic perspective. Rhodes: DEAT: Marine and Coastal Management.
- Valentine, P. & Birtles, A. 2004. Wildlife watching. (In Higginsbottom, K., ed. *Wildlife tourism: impacts, management and planning*. Australia: Common Ground Publishing. p. 16-34).
- Van der Merwe, P. 2009. Adventure tourism. (In Saayman, M., ed. *Ecotourism: getting back to basics*. Potchefstroom: The Platinum Press. p. 219-250).
- Van der Merwe, P. & Saayman, M. 2008. Travel motivations of tourists visiting the Kruger National Park. *Koedoe*, 50(1):154-159.
- Van der Merwe, P. & Saayman, M. 2014. Factors influencing a memorable game viewing experience. *Africa journal of hospitality, tourism and leisure*, 3(2):1-17.
- Van der Merwe, P., Slabbert, M. & Saayman, M. 2011. Travel motivations of tourists on selected marine destinations. *International journal of tourism research*, 13(5):457-467.

- Van der Riet-Neethling, J. 2015. R30 million was spent during the Whale Festival. <http://www.netwerk24.com/ZA/Hermanus-Times/Nuus/R30-million-was-spent-during-the-Whale-Festival-20151021?mobile=true> Date of access: 21 September 2017.
- Venkatesh, U. 2006. Leisure: meaning and impact on leisure travel behaviour. *Journal of services research*, 6(1):87-108.
- Venter, J.A. & Mann, Q.A. 2012. Preliminary assessment of surf-zone and estuarine linefish species of the Dwesa-Cwebe Marine Protected Area, Eastern Cape, South Africa. *Koedoe*, 54(1): 1-10.
- Vianna, G.M.S., Meekan, M.G., Pannell, D.J., Marsh, S.P. & Meeuwig, J.J. 2012. Socio-economic value and community benefits from shark-diving tourism in Palau: a sustainable use of reef shark populations. *Biological conservation*, 145(1):267-277.
- Vogelgat Private Nature Reserve. 2017. Social and cultural significance of the reserve. <http://vogelgat.co.za/social-and-cultural-significance-of-the-reserve/> Date of access: 14 August 2017.
- Waligo, V.M., Clarke, J. & Hawkins, R. 2013. Implementing sustainable tourism: a multi-stakeholder involvement management framework. *Tourism management*, 36(1):342-353.
- Ward, C. & Berno, T. 2011. Beyond social exchange theory. *Annals of tourism research*, 38(4):1556-1569.
- WCED **see** World Commission in Environment and Development
- Wearing, S.L., Cunningham, P.A., Scweinsberg, S. & Jobberns, C. 2014. Whale watching as ecotourism: how sustainable is it? *Cosmopolitan civil societies journal*, 6(1):38-55.
- Weber, K. 2001. Outdoor adventure tourism: a review of research approaches. *Annals of tourism research*, 28(2):360-377.
- Wiid, J. & Diggines, C. 2015. Marketing research. 3rd ed. Cape Town: Juta & Company (Pty) Ltd.
- Williams, P. & Soutar, G.N. 2005. Close to the 'edge': critical issues of adventure tourism operators. *Asia pacific journal of tourism research*, 10(3):247-61.
- Williams, P. & Soutar, G.N. 2009. Value, satisfaction and behavioural intentions in an adventure tourism context. *Annals of tourism research*, 36(3):418-488.

- Williams, P.W., Hainsworth, D. & Dossa, K.B. 1995. Community development and special event tourism: the men's world cup of skiing at Whistler, British Columbia. *Journal of tourism studies*, 6(2):11-20.
- Wilson, C. & Tisdell, C. 2003. Conservation and economic benefits of wildlife-based marine tourism: sea turtles and whales as case studies. *Human dimensions of wildlife: an international journal*, 8(1):49-58.
- Windle, J. & Rolfe, J. 2014. Estimating the nonmarket economic benefits of beach resource management in southeast Queensland, Australia. *Australian journal of environmental management*, 21(1). <http://dx.doi.org/10.1080/14486563.2013.875953> Date of access: 25 October 2017.
- Wischniewski, J., Windmann, S., Juckel, G. & Brune, M. 2009. Rules of social exchange: game theory, individual differences and psychopathology. *Neuroscienc & behavioural reviews*, 33(3):305-313.
- World Commission in Environment and Development (WCED). 1987. The Brundtland Report – Our common future. London: Oxford University Press.
- World Tourism Organisation (WTO). 2001. Tourism 2020: vision global forecasts and profiles of market segments. <http://www.unohrls.org/UserFiles/MTR/worldtoursiminput.pdf> Date of access: 30 October 2017.
- Wongthong, P. & Harvey, N. 2014. Integrated coastal management and sustainable tourism: a case study of the reef-based SCUBA dive industry from Thailand. *Ocean & coastal management*, 95(1):138-146.
- WTO **see** World Tourism Organisation
- Xu, J., Lue, Y., Chen, L. & Liu, Y. 2009. Contribution of tourism development to protected area management: local stakeholder perspectives. *International journal of sustainable development world ecology*, 16(1):30-36.
- Yolal, M., Gursoy, D., Uysal, M., Kim, H.L. & Karacaoglu, S. 2016. Impacts of festivals and events on residents' well-being. *Annals of tourism research*, 61(1):1-18.
- Yoon, Y. & Uysal, M. 2005. An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26(1):45-56.
- Zaltzman, D. 2010. Adventure travel put at \$89 billion global market. <http://www.travelmarketreport.com/leisure?articleID=4075&LP=1> Date of access: 13 January 2017.

Zeppel, H. & Muloin, S. 2008. Marine wildlife tours: benefits for participants. (In Higham, J. & Lück, M., eds. Marine wildlife and tourism management: insights from the natural and social sciences. Oxfordshire: CABI International. p. 19-47).

Zhou, Y. & Ap, J. 2009. Residents' perceptions towards impacts of the Beijing 2008 Olympic Games. *Journal of travel research*, 48(1):78-91.

DECLARATION

I, C Vorster (ID: 710924 0034 084), Language editor and Translator and member of the South African Translators' Institute (SATI member number 1003172), herewith declare that I did the language editing of a thesis written by Ms L Geldenhuys from the North-West University (student number 21800995).

Title of the thesis: A sustainable management framework for marine adventure tourism products



18 November 2017

C Vorster

Date