

Motivation-based segmentation of scuba divers at Ponta do Ouro

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Declaration of personal work

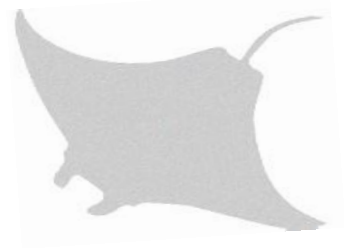
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Undertaking this MA has been a journey in so much more than just academic ways. I challenged myself on a level I never thought I would go, and not only did I learn more about my field of study, I also learned more about myself. What I am capable of and how to push through till the end, and no matter the outcome, it is a personal achievement I am proud of. I know for a fact that by daily taking a moment to be still, laying it down before God and finding my rest in Him is what held it together. Completing this would not have been possible without guidance, inspiration, motivation and encouragement of people along the way and I would like to thank the following

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Abstract

The value of tourism lies in the tourist's experience and one's motive or need to travel. The aim of selling a tourism product is to satisfy the tourist's need, and marketing aims to determine this need; in this case, the travel motives of scuba divers.

Research in marine tourism reveals that the industry has experienced an increase. Even though beach tourism of sand, sea and sex is still a mass tourism phenomenon, marine tourism consists of far more than just beach activities, and includes a wide spectrum of activities. The focus of this study is on the marine activity of scuba diving, and according to PADI (professional association of dive instructors), there are more than 20 million certified divers across the globe. There is also some different scuba diving specialities to participate in and a variety of certification agencies to choose from. Scuba diving tourists travel to a dive destination for various and a combination of motives. Conducting a careful analysis of scuba divers' travel motives helps operators to identify their market and understand their motives; whereafter, the product of scuba diving can be communicated more clearly from operators to divers.

The primary goal of this research study was to conduct a motivation-based segmentation of scuba divers visiting Ponta do Ouro. Four objectives were set to reach the goal through the different chapters of the study. The first objective (Chapter 2) was to analyse marine tourism, with the focus on the activity of scuba diving, and to gain a better understanding thereof. Objective two involves the analysis of motivational theories and travel motives as part of market segmentation (Chapter 3). The third objective (Chapter 4) was to statistically analyse the empirical results obtained from the data collection and to identify the travel motives from the five different clusters. Lastly, objective four was to summarise the findings, draw conclusions and make recommendations (Chapter 5).

A quantitative method was used to collect the data using an exploratory research design. 441 questionnaires were distributed, and a total of 313 were completed and could be used. The survey took place in the town of Ponta do Ouro, Mozambique, and the sample included scuba divers from different dive operators, all participating in scuba diving in the PPMR of Ponta do Ouro (n=313). A factor analysis was conducted to identify the most important motives and scuba diver loyalty. ANOVA, cluster analysis and cross-tabulations were also conducted to identify specific clusters according to the motives. The factor analysis identified five motivational factors, namely destination attributes, dive site attributes, personal interest, socialisation and relaxation, and ease of access (with mean values ranging from 3.7284 to 4.0373), as well as two loyalty factors, namely satisfaction and intention to return (with mean values of 4.2293 and 4.1585). Therefore, with mean values so close to each other, it can be



interpreted that all the mentioned factors are considered important. The five-cluster solution for the market of scuba divers was identified, namely advanced loyal divers, novice enthusiast diver, novice participant diver, advanced fanatic diver and novice fanatic diver. Results clearly show that the scuba divers are predominantly male, from South Africa, and have been diving for an average of six years. The highest-rated motives between the clusters were socialisation and relaxation, satisfaction (with dive operators), intention to return and personal interest.

Keywords: *Marine tourism, marine protected area, partially protected marine reserve, scuba diving, travel motives, marketing, market segmentation*



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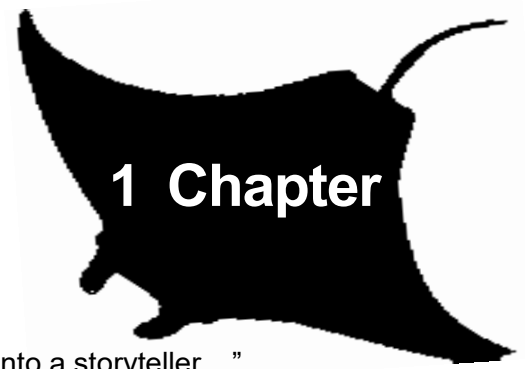
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“Travelling, it leaves you speechless, then turns you into a storyteller...”

- Ibn Battuta

Introduction and problem statement

1.1 Introduction

Tourism is seen as one of the world’s largest industries, with marine tourism taking up a considerable portion of the major forms of tourism in the world (Phillips & House, 2009:176). In the tourism industry, marine tourism is the only sector in tourism that is based on tourists and visitors who take part in active and passive leisure, and these tourists’ vacation expedition or activities are on, or in, shorelines, coastal waters and their immediate hinterlands (Nulty, Annet, Balnaves, Joyce & Teyssedre, 2007). The European Commission added that marine tourism is one of the world tourism industry’s fastest growing segments and has evolved into a multi-dimensional market over the years (Garrod & Wilson, 2003; Moskwa, 2012). The marine environment contains two-thirds of the earth’s surface and stretches from inshore environments to the vast expanse of open oceans. Therefore, it makes the marine environment a prime venue for undertaking a variety of activities such as boating, deep sea fishing, kayaking, surfing, free diving, snorkelling and scuba diving (Orams, 1999; Garrod & Wilson, 2003; Higham & Lück, 2008; Moskwa, 2012; Seymour, 2012:2). The last mentioned is also the focus of this research, namely scuba diving.

The scuba diving industry can be indicated as healthy in terms of creating business and job opportunities (Dimmock, Cummins & Musa, 2013; Lucrezi, Milanese, Markantonatou, Cerrano, Sará, Palma & Saayman, 2017). This also accounts for Mozambique where the popularity of scuba diving has increased over the last two decades since the end of the 25-year Civil War, but is starting to slow down and stagnate (Lucrezi *et al.*, 2017). Tourism as a whole in Ponta do Ouro increased systematically, bringing some economic benefits, with tourists going to the beach for relaxation and exploring the local culture and food (Cuamba & Jury, 2005). With the above mentioned in mind, it is important to take action in conducting marketing research to ensure scuba diving in Mozambique is sustainable, especially with the threat of market stagnation. Determining the profile and motives of scuba divers visiting Mozambique, in this case, Ponta do Ouro, will help to develop better marketing strategies and

products (Middelton, 1996; Moscardo, Morrison, Pearce, Lang & O’Leary, 1996). Understanding travel motives and market segmentation plays a vital role in successful business management, because it helps identifying and satisfying each market segment. Satisfied tourists become loyal tourists and will also motivate other potential tourists to travel to a specific destination. Therefore, it is important to identify tourists’ travel motives to satisfy their wants and needs (Ranjbarian, Ghafari & Oshire, 2017).

Therefore, the aim of this research is to conduct a motivation-based segmentation of scuba divers diving at Ponta do Ouro.

The purpose of this chapter is to discuss the research process that will be followed in this study. This will contain a discussion of the background to the study, formulating a problem statement, communicating goals and objectives, stating the research methodology, a discussion of the key concepts, and an explanation of the contents of various chapters.

1.2 Background to the study

The background of the study consists of three sections, i.e. literature on scuba diving, a brief discussion of Ponta do Ouro ¹as a diving site, and literature on market segmentation. This is accordingly discussed.

1.2.1 Scuba diving

The word ‘scuba’ stands for self-contained underwater breathing apparatus and forms a sizeable part of marine tourism activities. Scuba diving can be done for recreation, but can also be participated in for several other reasons such as industrial, commercial and rescue operations (Davis, 2007; Garrod & Gössling, 2008:3; Ong & Musa, 2012). The World Tourism Organization (WTO) (2001:85) defines scuba diving (divers) tourism as “*persons travelling to destinations with the main purpose of their trip being to partake in scuba diving*”, and the destination itself, as an attraction to dive, is more related to the quality of dives at the destination rather than any other factor such as the accommodation or other attractions, even though it is still important.

Statistics provided by the Professional Association of Diving Instructors (hereafter referred to as PADI) reveal that the numbers regarding certification of scuba divers have increased worldwide and are in excess of 20 million (Pro Dive, 2016; Aquatic Adventures, 2017; PADI, 2017). Even though the numbers have increased over the years, the market is starting to

¹ May also be referred to as Ponta

stagnate with the economy being the main reasons. Therefore, motivation-based market segmentation is important for direct marketing to take place so that the tourists' wants and needs can be met (Probert, 2017; Ranjbarian, Ghafari & Oshire, 2017; Robinson, 2018).

1.2.2 Ponta do Ouro as a scuba diving destination

Ponta do Ouro (See Map 1.1), also Ponta d'Ouro in English, meaning "tip of gold", is situated along the southern coast of Mozambique, and forms part of the PPMR (the Ponta do Ouro Partial Marine Reserve). Ponta do Ouro represents the southernmost part of the marine reserve and the town is located 15km away from the South African Kosi Bay border post (Mozambique Happenings, 2017; Lucrezi *et al.*, 2017). The PPMR was established in 2009 and is currently under evaluation by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to become a World Heritage Site. Ponta do Ouro and the PPMR are a sought-after destination for scuba diving and in earlier years, before the PPMR was established, over 70% of the tourists to this area were scuba divers (Bjerner & Johansson, 2001; Daly, Fraser & Snowball, 2015; Lucrezi *et al.*, 2017). Today, still more than half of the tourists to Ponta do Ouro are scuba divers (Lucrezi *et al.*, 2017), and as a result, there are numerous businesses, such as diving charters, making a living from scuba diving (Dimmock *et al.*, 2013).



Map 1.1: Locality map of Ponta do Ouro

1.2.3 Market segmentation

The American Marketing Association (AMA) (2013) defines marketing as “an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.” Therefore, marketing is important to improve and position a business as an attractive tourist destination with the purpose to attract more tourists and make a profit (Saayman, 2006; Hennings & Hallmann, 2015).

In order for businesses or dive operators to target the right divers (market) through marketing, product owners must determine their market’s wants and needs and this can be done through

a process called market segmentation. Market segmentation refers to when the consumers are divided into distinct groups with a similar set of wants and needs. These consumers, once segmented, can be homogenous on one or more segmentation criteria, but heterogeneous on other criteria. By doing market segmentation, different segments are identified, which allows destinations to develop better, specific and the most suitable product for each market they specifically want to target. Research on tourism market segmentation can provide product owners with information on various aspects and can be based on numerous consumer characteristics such as participation patterns, personality characteristics, demographics, geographics, motivation (reasons people visit a destination or buy a product) and behavioural characteristics (loyalty to destination, how tourists respond to various strategies of pricing and advertising) (Saayman, 2006; Ivanov, 2014:56; Hennings & Hallmann, 2015; Schoeman, Van der Merwe & Slabbert, 2016).

For the purpose of this study, the focus was on motivation and behavioural segmentation. To understand the wants, needs and desires of tourists, what cannot be seen must be understood, thus, the tourists' travel motives. Travel motives are a person's direction to behaviour and are the reasons for one's needs, desires and actions (Johannsen, 2016). There are various reasons why people travel, and studies by psychologists, sociologists and other researchers have attempted to determine these reasons in order to be better understood.

What a tourist gets out of travel experiences, the travel motives behind them seeking these experiences can be explained. Travel motives are the driving force behind actions, and the research regarding travel motives, performed by Iso Ahola (the founder of travel motivations), is based on a two-dimensional leisure motivation theory, namely seeking and escaping. Seeking involves the seeking of some rewards and escaping involves everyday problems, tension, stress, every day and familiar environments, routine and appeal of the new situation and both these elements have personal and interpersonal components (Iso-Ahola, 1982; Šimková & Holzner, 2014). The motivation model, according to Iso Ahola (1982), covers four aspects and these are seeking intrinsic interpersonal rewards, escaping intrinsic personal awards, escaping personal environment and escaping interpersonal environment (Iso-Ahola, 1982; Šimková & Holzner, 2014). Another well-known theory of travel motives is the push and pull theory. Push factors initiate the desire to travel and can be described as the motivation behind tourists to take part in activities to reduce their needs. Push factors are the need for relaxation, adventure, escape and socialisation, to name a few. These factors can also be described as intrinsic motivations. Pull factors are destination generated motivations and have an influence on destination choice. This emerges because of the destination's attractiveness, such as recreational facilities, beaches and cultural attractions (Gnoth, 1997; UK Essays, 2013). The theories will be discussed in full in Chapter 3.

Mainly, studies on travel motives do attempt to answer the question ‘why’. Why tourists choose to visit a specific destination, why these tourists return to a certain destination and why people travel in general. Although a combination of studies has been conducted on travel motives at different dive destinations, they tend to have in some manner similar but still different results. Table 1.1 lists previous research found based on scuba divers’ travel motives at various diving destinations. These are discussed below.

Table 1. 1: Analysis of previous research on scuba diving motives

Author (s)	Place of study	Title
Bentz, Lopes, Calado and Dearden (2016a)	Azores, northeast Atlantic ocean	Managing marine wildlife tourism activities: analysis of motivations and specialization levels of divers and whale watchers
Fuchs, Reichel and Shani (2016)		Scuba divers: the thrill of risk or the search for tranquillity
Geldenhuis, Van der Merwe and Slabbert (2014)	Sodwana Bay, South Africa	Who is the scuba diver that visits Sodwana Bay and why?
Lucrezi, Saayman and Van der Merwe (2013)	Sodwana Bay, South Africa	Managing diving impacts on reef ecosystems: Analysis of putative influences of motivations, marine life preferences and experience on diver's environmental perceptions
Edney (2012)	Federated states of Micronesia	Diver characteristics, motivations and attitudes: Chuuk Lagoon
Kler and Tribe (2012)		Flourishing through scuba: Understanding the pursuit of dive experiences

Meisel-Lusby and Cottrell (2008)	Florida Keys, USA	Understanding motivations and expectations of scuba divers
----------------------------------	-------------------	------------------------------------------------------------

Source: Author's own compilation

Previous research on scuba diving shows that there is a variety of motives regarding why people visit diving destinations and that it differs according to the respondents' dive experience and the destination itself. The research conducted by Fuchs *et al.* (2016) concluded that divers ultimately scuba dive for the relaxation thereof and the results found by Bentz *et al.* (2016a) show that there is a difference between more experienced divers and beginner divers. The beginner divers wanted to practise skills and gain confidence, whereas the more experienced divers simply just wanted to dive (see chapter 4), and see blue sharks and manta rays. Overall, the main motive for divers visiting the Azores was to specifically dive at these islands. Research conducted in Sodwana Bay on two different occasions, both of which had focused on diver motives, found that divers had four primary motives for diving, namely personal challenge, discovery and exploration, devotion, and relaxation and escape (Geldenhuys, *et al.*, 2014). Lucrezi *et al.* (2013) found that, in general, divers visiting Sodwana Bay do so to relax, to get away, spend time with family and friends and to have fun. There was a bigger variety in motives according to diver specialty and experience; more experienced divers showed bigger interest in discovering new species, satisfying their passion for diving and photographing marine life, while the beginner divers showed a greater interest in developing their skills, exploring a new dive destination and overcoming their fears. Edney (2012) found that divers diving in Micronesia primarily do so to enjoy the underwater environment and to see artefacts and shipwrecks. In the pursuit of understanding dive experiences and motives, Kler and Tribe (2012) reveal that the reason for diving is because of the 'feel good feeling' that goes with it and that diving promotes positive experiences that lead to 'the good life'. Furthermore, research done in the Florida Keys, USA, also distinguished between the motives of beginner divers and more experienced divers, and the results show that beginner divers' motives were for the challenge of scuba diving and the experience that goes with it, whereas more experienced divers, on the other hand, want to see shipwrecks and use their scuba gear (Meisel-Lusby & Cottrell, 2008).

The studies of Meisel-Lusby and Cottrell (2008), Edney (2012), Kler and Tribe (2012), Lucrezi *et al.* (2013), Geldenhuys *et al.* (2014) and Bentz *et al.* (2016a) also state that by understanding diver motives and what makes them enjoy their dives, preferences and perceptions can assist operators with proper dive tourism management, developing a better product and gaining a competitive advantage.

In these studies, it is clear that the results differ from the different destinations, which supports why research on travel motives of scuba divers and using it to develop better marketing strategies can be of benefit for operators in Ponta do Ouro. Previous studies done in Ponta do Ouro placed a greater focus on the willingness to pay for marine-based tourism and the sustainability and use of resources in the scuba diving industry, not necessarily on the travel motives of scuba divers to Ponta do Ouro (Daly, Fraser & Snowball, 2015; Lucrezi *et al.*, 2017; Lucrezi & Saayman, 2017).

The above-mentioned studies of Meisel-Lusby and Cottrell (2008), Edney (2012), Kler and Tribe (2012), Lucrezi *et al.* (2013), Geldenhuys *et al.* (2014), Bentz *et al.* (2016a) and Fuchs, Reichel and Shani (2016) predominantly focused on travel motives, but not necessarily making use of the travel motives as segmentation method. This study aimed to determine the travel motives of scuba divers to Ponta do Ouro and further to that to segment the market based on their travel motives. This is based on research done by Kruger, Van der Merwe, Bosch and Saayman (2018) on adventure activities. Kruger *et al.* (2018) identified the influence of tourists' behaviour on adventure preferences in SANParks (South African National Parks) in addition to certain socio-demographic aspects and travel motives. Results found by Kruger *et al.* (2018) clearly show the influence of behavioural and socio-demographic aspects, its value and the contribution thereof in the development of adventure activities. Therefore, this particular study focused on linking, specifically, travel motives with the product in order for operators in Ponta do Ouro to communicate a direct and specific message to the market through marketing.

1.3 Problem statement

This specific research regarding scuba divers' travel motives to Ponta do Ouro forms part of a project called Green Bubbles, which is an EU-funded (European Union) project, dedicated to making scuba diving more sustainable. The core focus of the project was to minimise the negative and maximise the positive impacts of diving by achieving social, environmental and economic sustainability. The Portofino Marine Protected Area in Italy and Partial Marine Reserve of Ponta do Ouro in Mozambique were the two identified sites for this case study selected for the Green Bubbles project (Green Bubbles, 2015).

As stated, scuba diving is one of the primary activities in Ponta do Ouro, making the area attractive and very popular among South Africans and international visitors (Bjerner & Johansson, 2001; Pereira, 2003; Green Bubbles, 2015; Lucrezi *et al.*, 2017). Apart from that, the diving industry in Ponta do Ouro is relatively young with limited marketing research that has been conducted in the past. There is also limited infrastructure in the small town of Ponta

do Ouro with limited access for normal sedan vehicles, making it difficult to attract just any scuba diver. This limited access to Ponta do Ouro is about to become easier due to a tar road, connecting Ponta do Ouro with the Kosi Bay boarder, which is (at the time of writing) under construction and should be finished by the end of 2018 (Probert, 2017).

One important method to gain competitive advantage against other diving sites and to better market diving in Ponta do Ouro is to conduct marketing segmentation research (Garrod & Gössling, 2008:32; Ranjbarian, Ghafari & Oshire, 2017). Holloway and Robinson (1995:37) and George (2012:267) clearly indicate that for marketing to be effective, one must fully understand the customer in terms of who they are, where they are from and why they buy a certain service or product. By understanding the travel motives, a clear and specific message through marketing can be communicated by the operators to a specific target, which can assist in increasing diver numbers (Green Bubbles, 2015).

Therefore, the problem that this research addressed is to determine the different market segments of the diving market to Ponta do Ouro based on their travel motives, categorised in clusters based on their motives.

1.4 Goal of the study

1.4.1 Goal

The goal of this study was to conduct motivation-based segmentation of scuba divers at Ponta do Ouro.

1.4.2 Objectives

To reach the goal of the study, the following objectives were set:

Objective 1:

To conduct a literature study regarding marine tourism, with a focus on scuba diving, to gain a better understanding of the scuba diving market.

Objective 2:

To analyse literature pertaining to market segmentation and travel motives, along with travel motives as segmentation basis.

Objective 3:

Analysing the data gathered on scuba divers during the field work to identify the different scuba diving segments based on their motives for diving in Ponta do Ouro.

Objective 4:

To summarise the findings according to the results of this study in terms of market segmentation, which identified the travel motives of divers in Ponta do Ouro, following recommendations on marketing and recommendations for possible further research studies.

1.5 Research design

Between the different research designs of causal-, exploratory- and descriptive-research design, an exploratory research design was used for this study to analyse the travel motives of scuba divers to Ponta do Ouro. An exploratory research design was conducted and used to systematically describe and accurately provide facts and characteristics of a population and to discover associations or relations between selected variables. Descriptive studies are not limited to observation data and can also be specified as a popular method for data collection in surveys and case studies (Dudovskiy, 2018).

1.6 Literature study

The literature study was done based on the specific keywords, listed below, pertaining to the study. Dough (2010) states that a literature study is done when one is conducting a research project, using previous studies in the literature and the result is a finished project that reveals or presents what has been found during the research. This study consists of two literature studies, where in the first literature study, Chapter 2's emphasis is on marine tourism and scuba diving, explaining what marine tourism is, where scuba diving fits in and what the sport entails. The second literature study, Chapter 3, focused on market segmentation and travel motives, where more detail on these specific topics is provided.

Information on these specific topics of marine tourism, scuba diving, market segmentation and travel motives was gathered from different primary and secondary sources. Academic

journals, theses and dissertations, search engines and the internet such as Google Scholar were consulted to collect the literature.

The keywords are marine tourism, marine protected area, partially protected marine reserve, scuba diving, travel motives, marketing, market segmentation.

1.7 Method of research

Method of research consists of an empirical survey, sampling, development of measuring instrument, survey/collection of data and data analysis. In tourism and recreation, the relationship between travel motives and activities is generally empirically examined (Mehmetoglu & Normann, 2013:5).

Three types of research data can be gathered, namely qualitative data, quantitative data and a mixed method of qualitative and quantitative data, and in this study, quantitative research data was collected by means of a survey using questionnaires. Quantitative research, according to Maree and Pietersen (2007:145), is an objective and systematic process using numerical data from a selected population in order to generalise the findings of the study and to understand and interpret reasons, motivations and opinions (DeFranzo, 2011). Making use of quantitative research has some advantages, as stated by Slabbert (2004:63) and DeFranzo (2011), such as the appropriateness of the collection of a demographic profile, it is inexpensive to conduct, and relatively easy to analyse the data by using statistical software.

1.7.1 Empirical survey

1.7.1.1 Method of collecting data

For the purpose of this research, the researchers made use of an exploratory research design with the selected method of quantitative research using questionnaires to gather the data. The study was based on direct interactions with the representatives of the scuba diving industry. The information that was needed for this study was not solely collected through existing sources, but via self-designed questionnaires that were handed to the scuba divers and once completed they were collected and interpreted. Maree and Pieterse (2007:216) suggest that validity refers to the extent to which the measuring instrument measures what it is supposed to and content validity is the manner in which the measuring instrument includes the content of the specific construct set out to be measured.

1.7.1.2 Sampling

In the case of this study, the population consisted of the divers at the selected dive operators, at the time of the survey, in Ponta do Ouro. The selected dive operators were Back to Basics Adventures, Blowing Bubbles, Gozo Azul, Oceana, Scuba Adventures and Whaler. Trained fieldworkers travelled to Ponta Do Ouro, Mozambique, and ensured familiarisation with the sites and locations of dive operators.

Sampling belongs to two major classes, according to Maree (2016:192), i.e. probability method and non-probability method. A non-probability sampling method, more specifically, the convenience sampling method was used. This method is ideal as it refers to situations where the selected population elements are conveniently and easily available and usually quick and cheap (Maree & Pietersen, 2007:177); therefore, the available scuba divers at each operator.

1.7.1.3 Ethical considerations

Trained fieldworkers were selected from the North-West University to conduct the surveys. Consent, from both the operators and respondents, was obtained for the voluntary participation of both parties. To ensure the respondents were well informed of the goal of the study and their contribution, the fieldworkers explained the purpose of the research and that the participation in completing the questionnaire would take approximately seven to 10 minutes. The fieldworkers assured the respondents that their participation was voluntary, their responses anonymous and will be used confidentially and only for the purpose of the research. The respondents were also informed that they were allowed to forfeit participation at any given moment. Ethical approval was obtained from the Ethics Committee of the North-West University, Potchefstroom Campus: EMS2016/11/04-02/09.

1.7.1.4 Development of measuring instrument

A structured questionnaire was used to collect data that were problem-specific to this study. The development of the questionnaire was based on research conducted by Seymour (2012), Geldenhuys, Van der Merwe and Slabbert (2014) and Lucrezi *et al.* (2017), where some were used in 2016 in Portofino, Italy as part of the Green Bubbles project.

The type of questions that appeared in the questionnaire can be divided into two categories, namely open and closed questions. Open questions are unstructured questions where space is provided for the respondents to write an answer (Maree, 2016:180). Closed questions have a list of responses where the respondent has to choose the most accurate answer according to him or her (Maree, 2016:180).

The questionnaire included several sections relevant to the study and determined the visitor profile of divers visiting Ponta do Ouro, their travel motives and also the loyalty to Ponta do

Ouro as diving site of these visitors. This formed part of the motivation-based segments of divers visiting Ponta. The questionnaire comprised three sections. Section A captured socio-demographic and geographic details (visitor profile), related to age, gender, marital status and also the level of education and occupation of the respondents (Geldenhuys, 2018). This section also determined the divers' dive experience and their highest level of qualification along with the use of social media. Section B of the survey focused on the divers' motives (Geldenhuys, Van der Merwe & Slabbert, 2014) for diving at Ponta do Ouro. Section C measured the loyalty towards Ponta do Ouro as a diving destination to determine whether the divers were satisfied with their diving experience and whether or not they will revisit Ponta do Ouro in the future and recommend other divers to visit this specific diving site.

The scale that was used to measure the different constructs, such as media usage, motives for diving and the loyalty to Ponta do Ouro as a diving site, was a five-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

1.7.1.5 Collection of data

Trained fieldworkers were stationed at the different dive operators in Ponta do Ouro as mentioned previously. The fieldworkers approached divers after a dive and introduced themselves while explaining the ongoing research, asking the scuba divers if they were willing to participate by completing a structured questionnaire that was handed out to the divers and collected once they were done. The data gathered by this research were not just to determine the travel motives and behaviour of scuba divers, but also for the dive operators to determine their scuba diver profile, in order to improve their marketing strategies.

The data were gathered during the school holidays of April 2017, October 2017 and April 2018. According to Lucrezi *et al.* (2017), there are approximately 62 000 dives per year in Ponta do Ouro, and Robinson (2018) and Probert (2017) state that approximately 50% of these dives are from return visitors who, on average, stay four to five nights and do two dives per day. 441 questionnaires were distributed and a total of 313 were completed and could be used for the compilation of data.

1.7.1.6 Data analysis

After the questionnaires were distributed and completed, the data were captured with Microsoft Excel and statistically analysed. For further analysing and processing of information, the Statistical Programme for Social Sciences (SPSS) was used (SPSS Inc., 2013). A factor analysis was conducted to indicate the travel motives that were considered more important to the participants. A factor analysis can be explained as a method used to uncover the dimensions of a set of variables by determining which items, referred to as factors, "belong

together” in the way they are answered similarly, and the purpose of a factor analysis is to describe the variance/covariance relationship among these factors (Maree, 2016; Terblanche, 2012). A cluster analysis was conducted and can be described as an exploratory analysis with the aim to identify structures in the data, which can also be referred to as a segmentation analysis (Statistics Solutions, 2018). An analysis of variance (ANOVA) was conducted to determine whether there was any significant difference between respondents’ motives. Maree and Pietersen (2007) confirm that an ANOVA test, combined with Tukey’s multiple comparison test, is done when one wants to compare independent groups and is used to measure the variables that need to be compared between independent groups based on their average scores on a quantitative variable.

The data and findings of the reserve will be presented and compared in tables and figures in the results chapter, chapter 4.

1.8 Defining the concepts

The following concepts are defined.

1.8.1 Marine Tourism

The International Coastal and Marine Tourism Society (ICMTS) defines marine tourism, in Orams (1999), as follows, “*Coastal and Marine Tourism includes those recreational activities which involve travel away from one’s place of residence which have as their host or focus the marine environment and/ or coastal zone (where the marine environment is defined as those waters which are saline and tide affected)*”. In the tourism industry, marine tourism is only a sector that is based on tourists and visitors who take part in the active and passive leisure and vacation journeys or pursuits on, or in coastal waters, shorelines and their immediate hinterlands (Nulty *et al.*, 2007).

1.8.2 Marine Protected Area (MPA)

According to the National Oceanic and Atmospheric Administration U.S Department of Commerce (2016), marine protected areas conserve, manage and protect. They are multiple-use sites for activities such as recreational activities, surfing, diving, fishing and boating. The International Union for Conservation of Nature (IUCN) (2017) suggests that “*MPAs involve the protective management of natural areas so as to keep the areas in their natural state. MPAs can be conserved for a number of reasons including economic resources, biodiversity conservation, and species protection. They are created by delineating zones with permitted and non-permitted uses within that zone.*”

1.8.3 Partial Protected Marine Reserve (PPMR)

Marine protected areas can be classified as either Type 1, where all possible harmful activities including fishing, aquaculture and degrading are excluded, or where there is only partial protection where certain requirements must be met in order to be considered Type 2. Ponta do Ouro has aquatic activities that are allowed in the park, which include scuba diving and fishing, which classify as Type 2, making it a Partial Protected Marine Reserve (Environment Foundation, 2018).

1.8.4 Scuba diving

The word scuba is an abbreviation for self-contained underwater breathing apparatus, which means equipment humans use to breathe under water (Garrod & Gössling, 2008:3; Dimmock & Musa, 2015:53). Scuba diving is used by people who travel to a destination with the primary purpose to partake in scuba diving (WTO, 2001).

1.8.5 Travel motives

Travel motives are the factors that create a desire for a person to travel. These factors can be divided into two groups, namely those who are primarily related and those who are not primarily related to the actual chosen destination (Coltman, 1989:42). A motive can be seen as something that drives people to make a decision/s. Travel motive/s is/are a want or need that drives tourists to make a decision about a specific destination (Saayman, 2001:12).

1.8.6 Marketing

According to Saayman (2006:2), marketing can be seen as a unique experience that is created through the activities and products that are being introduced by a business. Usually, customers want something specific from a business and, on the other hand, the business wants something from the customer. Therefore, marketing can be seen as an activity that takes place by exchanging things between a business and its customers. *“Marketing is an organisational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organisation and its stakeholders”* (Lamb, Hair & McDaniel, 2009:4).

1.8.7 Market segmentation

Market segmentation is an essential element of marketing and can be defined as *“a set of characteristics or variables used to allocate potential customers into homogeneous groups.”* This includes dividing the market into segmentation bases such as geographic, socio-demographic, psychographic and behavioural characteristics. It is important for a tourism product or destination to conduct market segmentation to target the correct visitors according to their wants and needs in terms of tourism (Saayman, 2006; Wedel & Kamakura, 2010).

1.9 Preliminary chapter classification

This section provides a description of each chapter.

Chapter 1: Introduction and problem statement.

This chapter formed the outline of the study. The introduction and background of this study were included along with the problem statement, goals and objectives, the method of research and the definitions of the keywords. The motivation to accomplish the goal of the research was stated in this chapter.

Chapter 2: Scuba diving as a marine tourism activity

The second chapter formed a literature review. Therefore, the aim was to provide a body of literature pertaining to some of the key concepts of the study, such as marine tourism and Marine Protected Areas (MPA). Different literature sources were examined by looking at existing, previous and similar studies carried out on marine tourism and scuba diving itself.

Chapter 3: Motivation theories, travel motives and market segmentation in the tourism industry

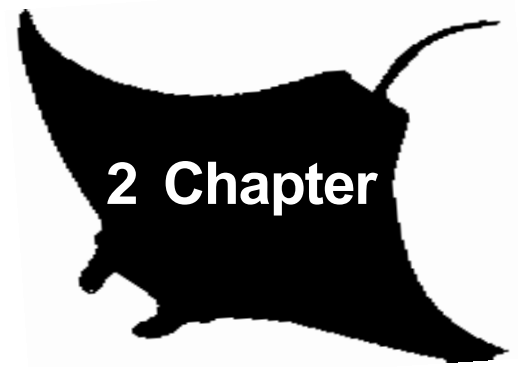
This third chapter also formed a literature review of this study that aimed to provide a literature review on the importance of proper marketing by understanding the wants and needs of customers to a specific topic or, stated otherwise, motivation-based segments. An examination of different literature sources by looking at previous and similar studies carried out on marketing, travel motives and the behaviour of scuba divers is provided.

Chapter 4: Empirical results

This chapter formed the fourth chapter of the study and reported findings on the profile of the scuba divers, their loyalty, and motives of why scuba divers visit the MPA of Ponta do Ouro.

Chapter 5: Conclusions and recommendations

The final chapter aimed at providing the conclusions and recommendations regarding the travel motives of scuba divers visiting Ponta do Ouro. The results can be used by dive operators to develop and market their products more effectively. This will also create the possibility for future research recommendations.



“If there is magic on this planet, it is contained in water” – Loren Eiseley

“There’s nothing wrong with enjoying looking at the surface of the ocean itself, except that when you finally see what goes on underwater, you realise that you’ve been missing the whole point of the ocean...” - Dave Barry

Scuba diving as a marine tourism activity

2.1 Introduction

Mankind has always been interested in the oceans and since the beginning, people started to explore the underwater world. 71% of the earth’s surface is covered with water, and marine ecosystems include oceans, the deep sea, the sea floor, coral reefs, lagoons, mangroves and estuaries (Hawai’i Pacific University, 2016; Kennedy, 2018). This 71% of water add up to two-thirds of the planet’s surface where, according to the National Ocean Service (2017), only 5% have been explored.

The marine environment is one of the largest components of the tourism industry and the European Commission states that even though marine tourism is just one of the sectors in the tourism industry, it is of significant value. This is because marine tourism is home to a number of human facilities and activities and because of the beauty and natural resources, coastal areas have become popular destinations for tourists to visit (Hall, 2001:601; Moskwa, 2012; Papageorgiou, 2016; European Commission, 2018). Marine tourism is defined by Orams (1999) as: *“Those recreational activities that involve traveling away from one’s place of residence and have as their host or focus the marine environment (where the marine environment is defined as those waters which are saline and tide-affected).”* Marine tourism as one of the sectors in tourism includes activities associated with the coast and adjacent waters. This consists of various sub-sectors, namely marine wildlife tourism, marine adventure tourism, leisure and recreation tourism, marine ecotourism and cultural tourism accessed in coastal towns. These sub-sectors are divided into two categories. The first category includes operators and companies directly involved with the marine environment, such as scuba diving, snorkelling, deep sea fishing, sea kayaking and marine wildlife experiences. The second category includes those who are indirectly involved, such as coastal

resorts, boat companies, suppliers and equipment rental agencies and ferry services (Orams, 1999; Geldenhuys, 2018).

Marine tourism has evolved into a multi-dimensional market over the years with a variety of activities. These activities that include hotels and restaurants, beach resorts, boat operators, cruise ships, charter yacht companies and coastal water sports such as boating, deep sea fishing, kayaking, surfing, snorkelling and scuba diving, are all making an economical contribution to the marine industry (Garrod & Wilson, 2003; Atkins, 2018). These activities provide job opportunities, economic benefits, conservation of marine life and protection of marine environments (Van der Merwe, Slabbert & Saayman, 2011), and this also pertains Ponta do Ouro as the scuba industry is attracting the majority of the tourists, providing jobs and creating business opportunities for other sectors in the area (Lucrezi *et al.*, 2017). Therefore, the goal of this chapter is to discuss and analyse scuba diving in marine tourism, what it entails, different scuba diving activities and training, and other research conducted on the topic of diving.

The following framework (Figure 2.1) presents an outline of the contents of the chapter.

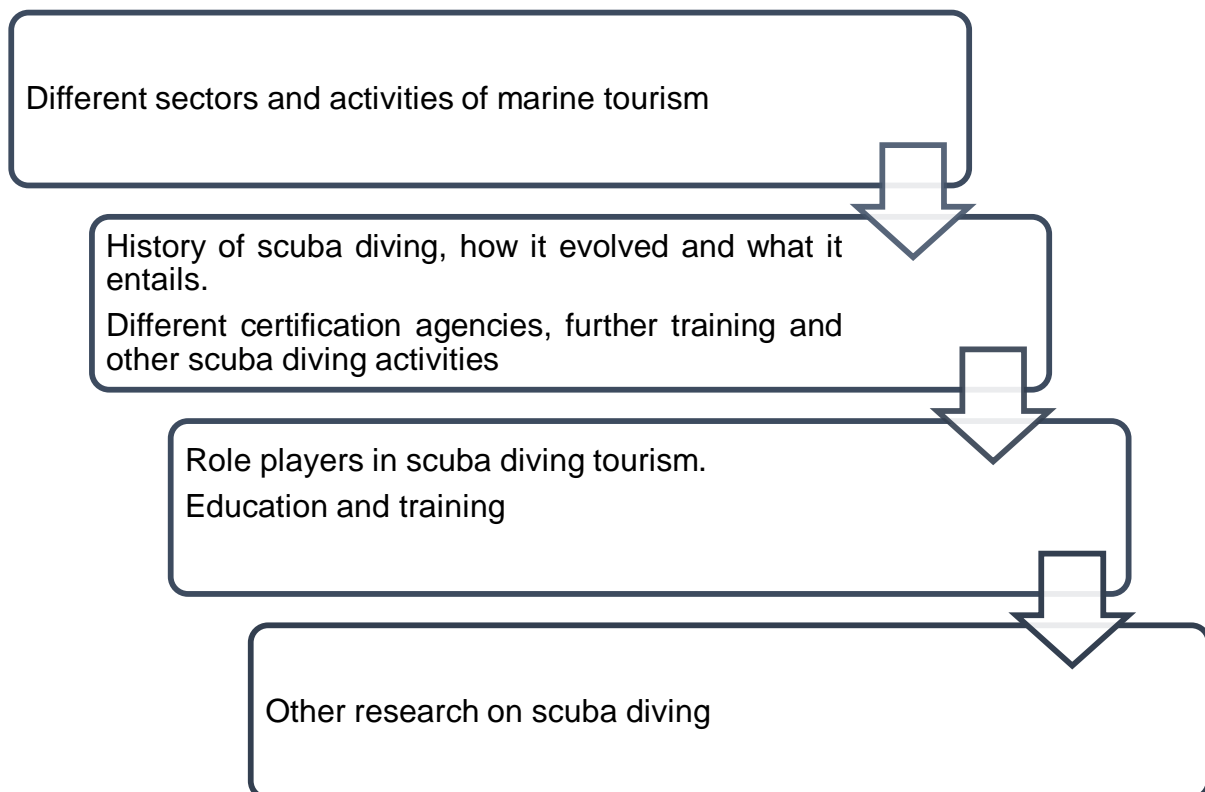


Figure 2. 1: Chapter 2's layout of literature review

Source: Author's own compilation.

2.2 Different sectors of Marine Tourism.

Marine tourism can be classified, according to Foyle and Lough (2007), as the sector in tourism that is based on tourists who are either participating in active or passive leisure activities or tourists who undertake a journey in or on shorelines and coastal waters. With the most popular definition of marine tourism by Orams (1999), there are also other definitions describing it as:

- Tourism activities that are taking place in a marine environment (Page & Connell, 2009).
- The sector of the tourism industry that is based on tourists who take part in active and passive leisure or journeys in or on coastal waters, their shorelines and their immediate coastal lands (Nulty *et al.*, 2007).
- Closely related to coastal tourism, marine tourism includes tourism activities that are ocean based, such as yacht cruising, deep-sea fishing and marine wildlife watching, to name a few (Hall, 2001:602).

Marine tourism amounts to a number of different aspects that lead up to the existence thereof and the popularity of marine tourism increased because humans have always been fascinated with the expanse of the ocean and the unknown underwater world (IUCN, 2017; IMO, 2018). The industry has developed and expanded from focusing on the four 'S' slogan of tourism, namely sun, sea, sand and sex (Orams, 1999:11) to the inclusion of other marine activities for recreational purposes, for example whale watching, surfing, deep sea fishing and scuba diving (Hall, 2001:601). Marine tourism is closely related to coastal tourism, but where coastal tourism involves leisure and recreational activities that take place in offshore waters and the coastal zone, marine tourism involves the mentioned concepts as well as ocean-based tourism (Hall, 2001; Geldenhuys, 2018). When people decide to travel for recreation, many tend to head to the water because of the diversity it offers and, according to Atkins (2018), most (Americans) participate in some form of water-related tourism spending, on average, 10 percent of their income on recreational activities. Marine tourism comprises different sectors (Figure 2.2), which include aquatic tourism, beach tourism, cruise tourism, island tourism, marine ecotourism and marine events (Seymour, 2012; Atkins, 2018) and will be discussed below.

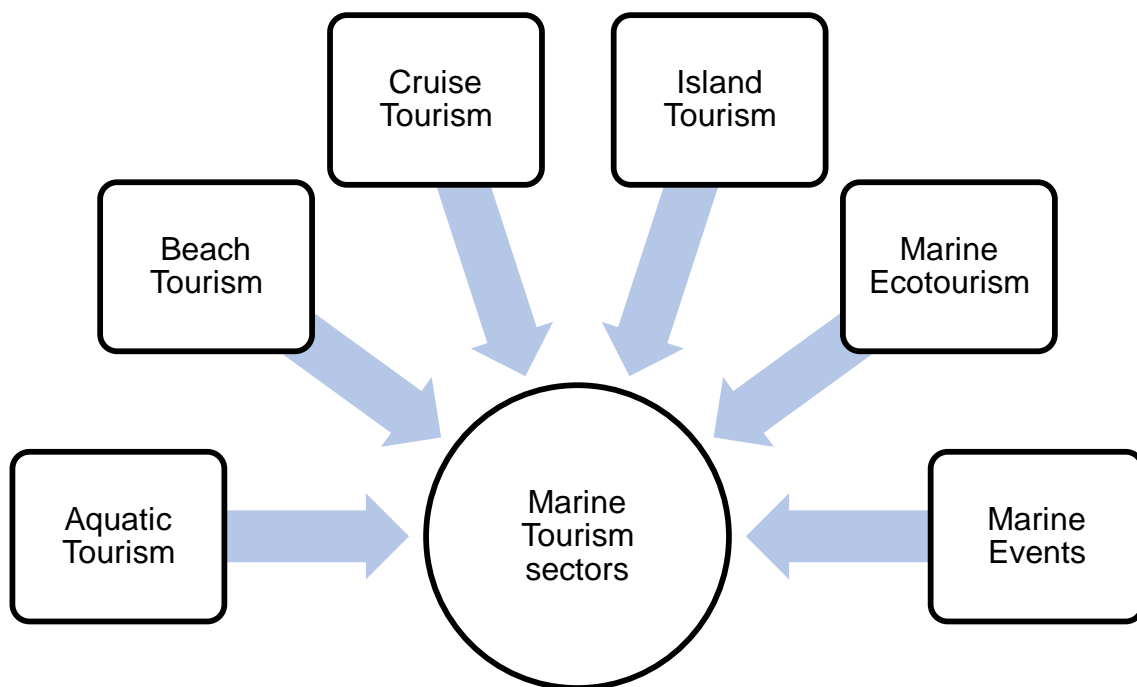


Figure 2. 2: Representation of marine tourism diversity

Source: (Adapted from Seymour, 2012).

- **Aquatic tourism**

With the aim of replicating natural habitats as accurately as possible, the small rectangular concrete tanks have been replaced by larger and sometimes even irregularly shaped tanks. Aquariums have moved from just showcasing a part of the underwater world to an attraction that includes conservation, education and research projects, for example Monterey Bay Aquarium in California and uShaka Marine World in Durban, KwaZulu-Natal (Karydis, 2011; Seymour, 2012).

- **Beach tourism**

This is one of the earliest modern forms of tourism and a day at the beach provides a few things for tourists that will make them come back for it and this includes recreation, a chance to renew the spirit, and relaxation. The beach can be described as a desirable pleasure space (Franklin, Picken & Osbaldiston 2013; Atkins, 2018). The increase in marine tourism

(yachting, scuba diving and surfing for example), according to Hall (2001:601), is because of the development of beach resorts and the selling of 'sun, sand and surf experiences'.

- **Cruise tourism**

Cruise tourism is defined by Cartwright and Baird (1999:23) as a multi-centre holiday. Cruising as tourism started in the 1980s and some vessels built in the 1980s were twice the size of those built in the 1970s. The 'floating entertainment centres' became larger and more luxurious since the 1990s, with some featuring casinos, miniature golf courses, shopping malls and theatres, and examples of cruise companies include Azamara Club Cruises, Costa Cruise Lines, Crystal Cruises, Celebrity Cruises, Holland America Line, MSC Cruises, Princess Cruises, Royal Caribbean International and Seabourn Cruises (Seymour, 2012; Atkins, 2018; Crown Cruise Vacations, 2018).

- **Island tourism**

An island is a piece of sub-continental land surrounded by water. There are different types of islands (where three are mentioned here), such as continental islands that lie on the continental shelf of a continent, for example Trinidad off South America, Taiwan off Asia and Tasmania off Australia. Oceanic islands are mostly volcanic in origin and do not sit on continental shelves, such as Macquarie Island in the Pacific and Saint Helena in the South Atlantic Ocean. Furthermore, there are tropical islands that include the Maldives, Seychelles, Samoa and Tonga, to name a few (Geography & You, 2017). According to Styliadis and Terzidou (2007), islands are a desirable form of land and Conlin and Baum (1995) state that the 'allure of islands' is the reason people go for relaxation and rejuvenation whether they be in the Seychelles, Mediterranean or the South Atlantic Ocean. Tourism is a major economic boost for islands and tourism development, either as mass tourism activities, or more specialised, it is a popular sector in the marine tourism industry (Styliadis & Terzidou, 2007).

- **Marine ecotourism**

As one of the world's fastest growing tourism business segments, ecotourism is expanding and many believe that this is because people are becoming more knowledgeable about the value thereof. Ecotourism has become a popular way to enjoy water resources, appreciating its beauty and supporting conservation efforts (Atkins, 2018) and it also includes infrastructure that supports coastal tourism developments such as accommodation, second or vacation homes, food and beverages and restaurants. Marine ecotourism, in short, can be seen as the responsible travel to natural marine environments and is a key piece in ensuring that the conservation thereof contributes to the well-being of local people (ILCP, 2016). In Mexico alone, 900 000 visitors are attracted to the Gulf of California, generating millions in US-dollars and is a global example of how ecotourism has a major contribution to the success of coastal

communities. Another successful story, also in Mexico, in Baja along the Californian coast, is the recovery of grey whales. They were almost extinct after humans have been hunting them for their blubber oil, but luckily people's attitudes changed and efforts were made to ban the hunting of whales and today more than ten million people join commercial whale watching trips, per year, making this a source of income that has become essential for the marine ecotourism industry (Day, 2007:7; ILCP, 2016).

- **Marine events**

Marine events can be the special focus on a certain event or activity which can be social or business related. There are various motivations behind different marine events, whether a sport event that includes a surf competition such as the Billabong Pro in Jeffery's Bay, South Africa and the South Atlantic Yacht Race, or other events such as a seminar, training courses, shipping events and maritime presentations, to name a few. A few examples include the Maritime Cyber Resilience Forum in Hamburg, the Global Liner Shipping Asia in Singapore and Europort, Hermanus Whale Festival and Sardine Run in South Africa, the exhibition for maritime technology in Rotterdam, the whale festival in Hermanus and Sardine Run in South Africa (International, 2018; Seymour, 2012).

2.2.1 Marine activities

Marine environments are a perfect host for various marine activities and these activities are a form of recreation. Recreation is defined by Hurd and Anderson (2018) as an activity that people enjoy and recognise as having socially redeeming values. People engage in this activity in their free time and the reason for performing is the majority of the time more important than the activity. Matheison and Wall (1982:7) state that recreation activities are done during leisure, and Phelps (1988) supports this by stating that any activities of leisure are done by a choice for pleasure.

Not all marine tourism activities necessarily take place in, under or on the water, making the marine environment a perfect destination for various other activities (Orams, 1999). These activities can occur in one or more of the different sectors discussed and illustrated in Figure 2.2. They are categorised and divided into four groups, namely non-specialist leisure pursuits, shore based, water-based: motorised where scuba diving fits in and water-based: non-motorised (Figure 2.3). Activities such as marine mammal watching, fishing, snorkelling, scuba diving, boat trips and coastal footpaths, and rock pooling also include marine tourism activities (Garrod & Wilson, 2003:3; Nulty *et al.*, 2007).

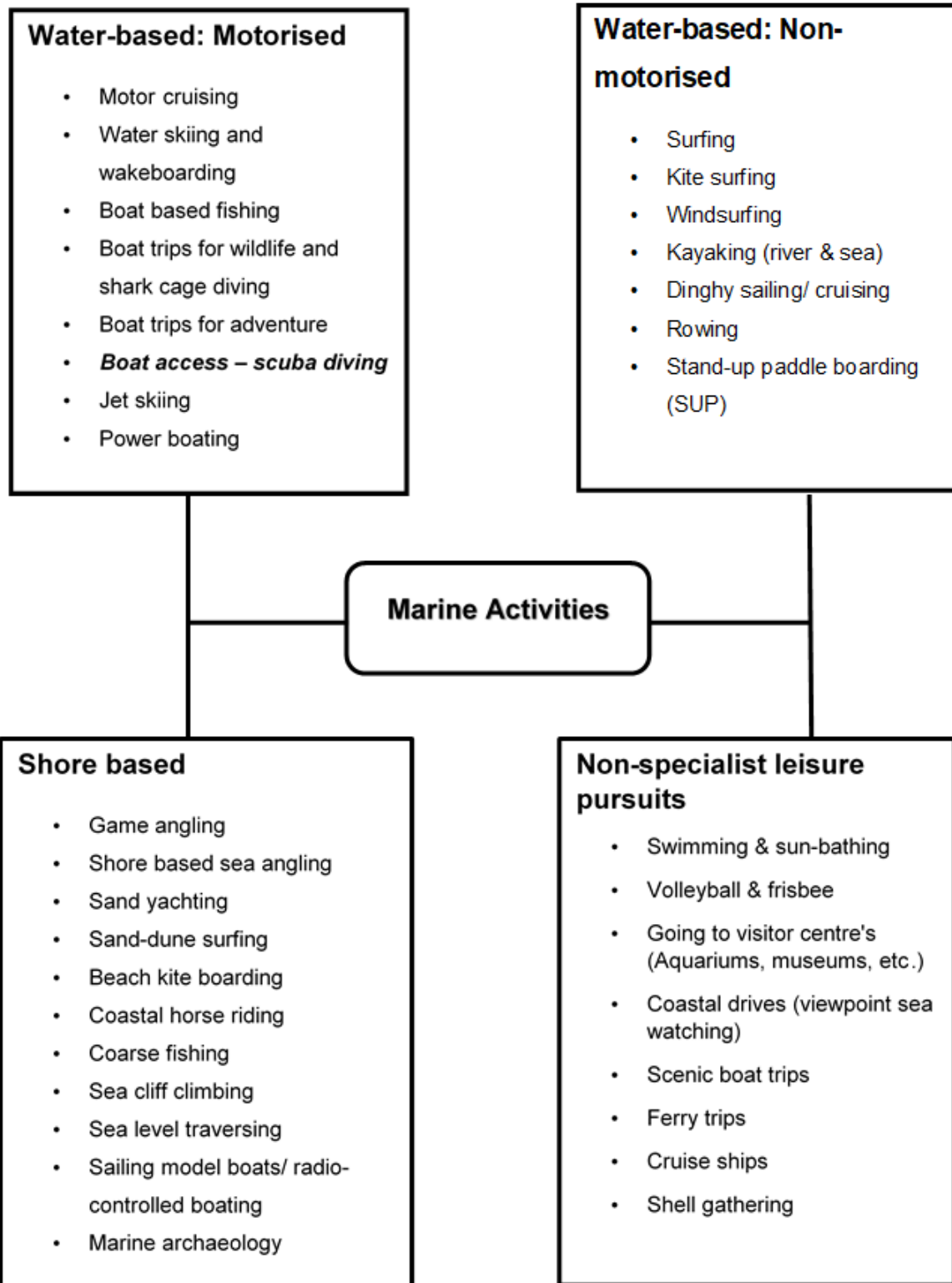


Figure 2. 3: Different marine activities

Source: (Adapted from Nulty et al., 2007:18; Seymour, 2012; Geldenhuys, 2018)

Scuba has been identified in marine activities as under water-based, motorised activities. The next section discusses scuba diving regarding how it began, what it entails and different certification agencies, other diving activities and additional training.

2.3 How did the sport of scuba diving evolve and what does it entail?

The following section discusses the history of scuba diving and basic equipment, other diving activities, and different certification agencies.

2.3.1 The history of scuba diving

The history of scuba diving dates back centuries and humanity has been exploring and diving in the underwater world for various reasons, but originally for food, pearls and sponges (Destination Scuba, 2009).

Starting in the 16th century, people used diving bells that were stationed a few feet below the surface using captured air to breathe and full diving suits were developed with metal helmets that could withstand water pressure. By the 1800s, the development started to pick up some speed with surface-supplied air helmets, to where scientific and other technological avenues of investigations accelerated. Scientific research studies from France and Scotland helped to shed light on the limits for diving with compressed air and also on the effects that water pressure has on the human body. From that time, numerous improvements in technology, including carbon dioxide scrubbers, air pumps, wetsuits and regulators to name a few, made it possible for people to stay underwater for longer periods. Scuba diving is still one of the most beloved recreational activities and has come a long way since (Graver, 2009; Lonsdale, 2012; Aqua Views, 2015; IMO, 2018; Thrillspire, 2018).

A timeline of scuba diving history is provided below, dating several inventions and discoveries that contributed to scuba diving as it is known today. The history of scuba diving is put together by different sources of information (Destination Scuba, 2009; Stanford, 2013; Aqua Views, 2015; Bellis, 2017; All About Scuba, 2018; CMAS, 2018).

1535: Guglielmo de Lorena develops a diving bell, operated on a basis of air being trapped under the open bottomed container. The diver could venture air out and return until it became unbreathable.

1691: Edmund Halley patented a diving bell in the form of a truncated cone, with weighted barrels that were connected from the surface to an air pipe with compressed air.

1715: An underwater cylinder was invented by John Lethbridge that supplied compressed air through an air pipe from the surface.

1843: The Royal Navy establishes the first diving school based on lessons learned from the Royal George salvage.

1865: An underwater breathing apparatus in the form of a steel tank filled with compressed air is patented by Benoit Rouquayrol and Auguste Denayrouze. It was strapped to the diver's back, attached to a hose, continually pumping fresh air. The underwater breathing apparatus also included a very early version of other diving equipment, such as a diving helmet and rudimentary demand regulator.

1876-1877: A prototype of closed-circuit scuba, the first workable self-contained diving rig that uses compressed oxygen, was developed by an English merchant seaman, Henry Fluess.

1893: The first underwater camera was invented by Louis Boutan.

1911: An oxygen re-breather is introduced by Draeger of Germany.

1912: Based on the work of Haldane and driven by Chief Gunner George Stillson, a programme to test tables and staged decompression was set up by the navy.

1917: The US Navy began to use the Mark V diving helmet for their underwater work.

1923: The first underwater colour photos by WH Longley.

1924: The US Navy and Bureau of Mines conducted the world's first helium-oxygen mixture experimental dives.

1925: Yves Le Prieur successfully introduced an underwater suit.

1933: Yves Le Prieur developed equipment that makes the diver independent from hose connections. The equipment includes a high pressure tank, demand valve and the swim fins by Louside Corlieu in France.

1942-1943: Lieutenant Jacques-Yves Cousteau and Emil Gagnan redesigned a car regulator that automatically provided the diver with compressed air on demand and the Aqua Lung was born.

1951: The "J" valve was developed.

1955: Al Tillman and Bev Morgan created the first formal instructor certification programme.

1959: CMAS (Confédération Mondiale des Activités Subaquatiques) was formed.

1960: The National Association of Underwater Instructor (NAUI) was established by Al Tillman and Neal Hess.

1966: John Cronin and Ralph Ericson founded the Professional Association of Diving Instructors (PADI).

1970: Scuba Schools International (SSI) was established by a man named Bob Clark.

1971: The stabilisation jacket was introduced by Scubapro.

1980: To promote safe diving, Duke University established Divers Alert Network (DAN).

1983: The first monetary dive computer, the Orca Edge was submitted.

1985: Scuba diving reached a breakthrough and the Titanic wreck was found.

1990: Scuba diving was recognised as a sport.

1999: Descending to 200 meters, the deepest oceanic dive was done by Chuck Driver and John Bennett and later, a man named Barte Vestor, went to a depth of 225 meters.

2001: John Bennett breaks his own world record, with a dive to 308 meters in the Philippines.

2001 to present: People are still taking part and enjoying the sport daily with new and improved technologies and equipment being developed.

2.3.2 Basic scuba diving equipment

SCUBA, a mode of underwater diving, is an abbreviation for self-contained underwater breathing apparatus that a diver uses to breathe while under the water surface, and this makes scuba diving a gear intensive sport. Modern scuba diving gear consists of one or more air cylinders, connected to an air hose and a regulator that controls the air pressure in the diver's lungs. There are essential gear elements necessary for divers to partake in this activity and these elements include: wetsuit or exposure suit, mask, fins, weight belt, buoyancy compensator (BC), regulator / demand valve (DV), submersible pressure gauge (SPG) and cylinder. This will be discussed below and illustrated in Figure 2.5 (Davis, 2007; Roy, 2016).

- Wetsuit or exposure suit: Helps to keep the diver warm and provides protection against the elements.
- Mask: The mask creates an air pocket in front of the diver's eyes and nose so that the diver can see clearly underwater and also to equalise the pressure on sinuses and ears as the diver goes deeper.
- Fins: The fins provide the diver with propulsion that makes it possible to swim more easily.

- Weight belt: Helps the diver to regulate buoyancy.
- Buoyancy compensator (BC): This is an inflatable jacket that allows the diver to stay buoyant while diving. At the back of the BC is also where the cylinder is strapped tight for diving.
- Regulator/demand valve (DV): The DV connects to the cylinder, which provides air to the diver on inhalation. Also attached to the regulator is a spare DV called the 'octo'. This is the back-up regulator, has a longer hose and is a bright yellow of colour so that it can easily be found and used in case of an emergency.
- Submersible pressure gauge (SPG): The SPG or depth gauge is an important gear element that indicates and provides essential information. A diver must always monitor the depth of a dive and the diver must be aware of the remaining air supply in the cylinder and the SPG makes that possible.
- Cylinder: The cylinder holds the compressed air which allows the diver to stay and breath underwater.



Figure 2. 4: Basic scuba gear

Source: (Compiled from Mares, 2018)

There are many manufacturers of scuba diving equipment that include brands such as Aqualung, Cressi, Mares, Poseidon, Scubapro and Tusa. The type of gear a diver uses depend on personal taste, what the diver are willing to pay and the reason for use (PADI, 2018; SSI, 2018).

2.3.3 Different certification agencies in scuba diving

There are different kinds of certification agencies in scuba diving when one is interested in becoming a qualified diver, whether the future diver is interested in recreational diving or a technical certification, there are certification agencies that offer one or the other, or both (Gibb, 2018). The World Recreational Scuba Training Council (WRSTC) is an organisation founded in 1999 and is dedicated to the safety of recreational diving, establishes (minimum) training standards for recreational diving and comprises smaller Recreational Scuba Training Councils (RSTCs) that are spread across different regions in the world (WRSTC, 2018). Recreational scuba diving does not have one centralised agency for qualifying, there are several organisations providing scuba training and these agencies represented by certified instructors, dive masters and dive operators regulate the sport as a whole and also participate in research and promoting marine conservation. Not all certification agencies are members of the WRSTC, but also provide standard quality training. Basic training remains the same, but some certification agencies differ in philosophies; where some may focus on creating a certain dive style such as a recreational style, others may focus on teaching skills of a more technical style (Gibb, 2018; WRSTC, 2018). Four of the most well-known and worldwide recognised agencies will be briefly introduced below and the certification levels and terms between these agencies are provided in Table 2.1.

- CMAS – Confédération Mondiale des Activités Subaquatiques

Also known as the World Underwater Federation, CMAS is one of the world's oldest scuba diving organisations and is a European Dive Certification with its head office situated in Rome, Italy. CMAS is divided into three committees that deal with different activities, namely the Sports Committee that operates underwater sports such as apnoea, finswimming, spearfishing, sport diving and underwater hockey to name a few. The Technical Committee governs recreational diving and seeks to promote world-class diving standards and the Scientific Committee, which deals with and focuses on marine environment-related issues and how divers can play an important role in the overall health of ecosystems and biodiversity. They also developed an international training system according to the CMAS international diver standards that allows the diver to have his or her certifications recognised globally and consists of diver, specialty diver, technical diver and leadership diver (CMAS, 2018).

- NAUI – National Association of Underwater Instructors

Based on ‘the principles of democratic self-governance and commitment for excellence’, NAUI has a reputation as the best training that reflects their core values of ‘quality dive training through education.’ NAUI is a non-profit association and their values include leadership and instructor training, trust and respect and expanding knowledge and skills. NAUI also commits to empower divers to make a difference for the underwater world and in association with the Disney World Conservation Fund forms part of the Green Diver Initiative that focuses on the promotion and safeguard of underwater ecosystems. After PADI, it is the second largest scuba certification agency (Gibb, 2018; NAUI, 2018).


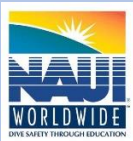


- PADI – Professional Association of Diving Instructors

With more than 25 million divers who started their dive journey with PADI, this is the biggest certification agency and offers the most popular dive curriculum in the world with certifications that are recognised internationally. They stand for education, exploration, community and conservation (PADI, 2018; Aqua Views, 2015). PADI centres can be found in almost any dive destination across the world and are also very active in marine conservation on an operation of their own called Project Aware (Gibb, 2018; PADI, 2018).

- SSI – Scuba Schools International

Based in the United States, SSI has provided training, scuba certifications, resources, dive centres and instructors for more than 45 years and also includes 30 service centres, is represented in over 100 countries and offers educational material that is available in over 30 languages. Beneficially designed and meticulously tested the SSI training programmes, referred to as the SSI Diver Diamond, are based on four components of proper knowledge, equipment, skills and experience. SSI certifications also enjoy international recognition (Gibb, 2018; SSI, 2018).

Table 2. 1: Different level comparison of different agencies

CMAS	NAUI	PADI	SSI
			
CMAS * (1 Star)	Scuba Diver & Nitrox Diver	Open Water Diver	Open Water Diver
CMAS ** (2 Star)	Advanced Diver & Specialty Diver	Advanced Open Water Diver	Advanced Adventurer
	Rescue Scuba Diver & Basic Life Support	Rescue Diver	Diver Stress & Rescue
CMAS *** (3 Star) Includes rescue diver	Master Diver & Training Assistant	Master Scuba Diver	Master Scuba Diver

Source: (Compiled from CMAS, 2018; NAUI, 2018)

2.3.4 Other diving activities and additional training

Scuba Schools International (SSI) (2018) mean there are many different diving disciplines making use of scuba equipment, which require additional training and qualification to the skills and knowledge obtained by the entry-level courses. For the purpose of this study, the disciplines are divided into three groups, namely recreational specialties, environmental specialties and technical specialties, all depending on the type of activity performed during a dive. Recreational specialties are for leisure purposes and to safely enjoy the beauty of life beneath the surface; environmental specialties include diving in different environmental locations such as reefs, currents, ice and different altitudes, to name a few; and technical specialties that involve diving in an environment 30 to 40 metres and beyond, requiring decompression, the use of expanded technologies as well as equipment and a variable mixtures of gas. There is a considerably amount of courses to take part in and only a few are discussed, giving an outline of the possibilities (PADI; 2018; SSI, 2018).

- **Recreational specialties**

Rescue diver: Being a rescue diver means that the diver had successfully completed a Rescue Diver Course, which makes the diver part of an “*elite group of respected divers*” (PADI, 2018). According to CMAS-ISA ²(2017) this specifically prepares the diver for how to react in

² Confédération Mondiale des Activités Subaquatiques – Instructors South Africa

different major and minor dive emergencies, using a variety of techniques. The diver puts into practice the skills and knowledge in different scenarios where the topic includes how to identify and manage stress in other divers, how to rescue a panicked diver, how to rescue an unresponsive diver and self-rescue (CMAS-ISA, 2017; PADI, 2018).

Underwater photography and/or videography: With so many underwater cameras to choose from, and the desire to capture the beauty of the underwater world, this is one of the most popular diving specialties, whether a pro-photographer or a beginner using a point-and-shoot camera. Taking underwater pictures or videos, the diver uses a method of three basic rules, namely shoot, examine and adjust to get great shots of marine life (PADI, 2018).

Underwater navigation: Being a certified underwater navigation diver means that the diver has adequate skills, experience and knowledge to use natural navigation and a compass to navigate effectively under water and how to identify hazards and possible problems (CMAS-ISA, 2017).

Underwater search and recovery: This increases the chances of finding an object under water. The diver is able to plan the search or recovery of an item prior to the dive, to use his or her compass in search patterns, and to identify objects of all sizes and lifting them, using numerous patterns and methods (Pro Dive, 2016; Aqua Views, 2018; PADI, 2018).

- **Environmental specialties**

Altitude diving: PADI (2018) describes altitude diving as when one dives in altitudes higher than 300 metres above sea level, for example diving in a mountain lake. Furthermore, PADI (2018) states that training includes how to handle emergencies that may occur in altitude diving, dive planning, procedures, techniques, organisation and how to calculate dive profiles for altitude diving or how to adjust the dive computer.

Cave diving: Cave diving can be dangerous as it is possible to become claustrophobic and disoriented, but is a unique and rewarding experience. It is also challenging as it involves the exploring of underwater caves and caverns. The diver has skills about dive planning that include distance limits and air management, how to use other specialised equipment needed such as breathing systems and lights, and also techniques for anti-silting and how to avoid disorientation (PADI, 2018).

Deep diving: According to PADI (2018), there is “something exciting and mysterious about exploring deeper dive sites while scuba diving.” Knowing personal limits, qualifying encompasses of dive panning, managing gas supply and dealing with narcosis, buoyancy control, specialised equipment for deep diving and buddy contact procedures (CMAS-ISA, 2017; PADI, 2018).

Drift diving: 'Going with the flow' is accurate to describe drift diving. This type of diving can be calm and invigorating at the same time. By doing a drift dive, the diver enjoys going with the currents of the ocean or gliding along down rivers. Buoyancy control is important and also staying close to your buddy or with the group (PADI, 2018).

Ice diving: This is a type of diving where teamwork is essential, from safety divers and tenders to support personnel. Different types of ice, the effects of the cold on the diver, site selection, preparation and emergencies all play an essential role. Handling emergencies and problems, safety procedures, using the correct equipment, line-securing and communications are some of the required skills for being an ice diver. This is a different beauty few others will experience (CMAS-ISA, 2017; PADI, 2018).

Night diving: The word says it all and PADI (2018) explains it as dropping into a new world even though the diver has visited the dive site before. Diving at night is the best way to view certain marine wildlife and an emphasis will be placed on navigation in the dark and light handling. During a night dive, the diver experiences the changing behaviour of the animals and plant life occurring at night (CMAS-ISA, 2017).

Wreck diving: This type of diving involves the exploring wrecks of cars, planes and ships under water. By taking part in wreck diving, the diver knows how to safely navigate in tight spaces underwater while exploring the wrecks with minimum disturbance or damage to its inhabitants (PADI, 2018).

- **Technical specialties**

Nitrox diving: During the certification of this course, CMAS-ISA (2017) promises the diver to improve existing skills and obtain greater recognition of his or her diving equipment. The diver is taught how to maximise time underwater and safely eliminate increased decompression, while using a mixture of adequate gasses (CMAS-ISA, 2017).

Rebreather: Being a rebreather diver means diving in an environment of zero bubbles. Rebreathers vary significantly, which is why the diver has to learn the manufacturer's literature for the specific type of rebreather he or she will be using (CMAS-ISA, 2017). Training includes guided sessions by an instructor and also self-study where the student will learn about bailout requirements and also how to arrange a bailout cylinder system, oxygen consumption and scrubbers. The diver will have to complete one confined and four open water dives in order to qualify. During certification, the diver will practise planning, emergency procedures and executing deep dives (CMAS-ISA, 2017; PADI, 2018).

Trimix diving: This type of diving involves breathing a gas consisting of a combination of oxygen, helium and nitrogen. Trimix diving is suggested to be appropriate for deep dives to

reduce nitrogen narcosis, which is a condition affecting deep divers, giving the diver a sense of euphoria, disorientation, poor judgement, short-term memory loss and hallucinations to name a few of the symptoms (Press, 2017; Gotter, 2018).

Sidemount diving: Originally used for cave diving, sidemount diving has become a more familiar application and not just for caverns anymore. In contrast with the cylinder on the back of the diver, here, two or more tanks are in a backmount configuration, lying along the hips, under the shoulders and parallel to the diver's body (Hires, 2010).

2.4 Role players in the Scuba Diving Tourism System

Scuba diving as a recreational sport has increased to an extent that scuba diving itself and the business activity supporting it have become part of important tourism sectors (Dimmock & Musa, 2015:52). The marine environment, scuba divers, the scuba diving tourism industry and the host community are the central elements in the scuba diving tourism system (SDTS). The host community includes the residence of the area and provide cultural and social resources. The government, policy-makers and managers manage and provide access to the marine environment. The scuba diving industry is made up form scuba diving and charter businesses as well as suppliers to the industry such as transport and the hospitality sector (Lucrezi *et al.*, 2017).

The marine environment is located at the core of the SDTS, since it is the key element on which all stakeholders in the system depend. Stakeholders involved in the operation of the SDTS are the scuba divers (also the demand) and the suppliers of the scuba diving tourism services. The use of fragile ecological environments makes it more complex to stakeholder relations and at the same time stakeholders have to prioritise the resources and functions according to their needs (Dimmock & Musa, 2015:53). Furthermore, according to Dimmock and Musa (2015:53), it is clear that each stakeholder has their own role and responsibilities and they do not only interact with each other, they depend on each other. The areas overlapping with each other require collaboration, which helps different stakeholders to recognise their own unique perspectives and provide an exchange process and greater collective understanding.

The services of the SDTS include services such as scuba diving operators, charter operators, scuba diving education and training, and associated tourism and services industries and will be briefly discussed.

- **Scuba diving operators**

A diving operator or dive centre can be called the base location. This is where, mostly recreational but others like technical divers as well, learn to scuba dive or take part in guided trips to different reefs, wrecks, caves and locations, depending on where the operator is located. Many dive centres operate under the standards of the International Organization for Standardization, ISO 24803:2017, which specifies the requirements for service providers such as dive operators. In the field of recreational scuba diving, this includes snorkelling activities, introductory diving activities such as Discover Scuba Diving (DSD), organised and guided diving for certified divers, training and education and the rental of equipment. ISO 24803:2017 also specifies the quality of the services given to the clients (ISO, 2017).

- **Charter operators**

A charter can be defined as when one makes use of a specific company to hire a motor vehicle, an aircraft or ship for a certain purpose. Therefore, in this case, a charter operator is a business or forms part of a business such as a dive centre, to provide a service along with other services for the scuba divers. Examples of operators in Ponto do Ouro are Back to Basic Adventures, Blowing Bubbles, Gozo Azul, Oceana, Scuba Adventures and Whaler (Probert, 2017).

- **Scuba diving education and training**

According to the World Recreational Scuba Training Council (WRSTC) (2018), training for scuba diving is normally provided by a trained and qualified instructor who is registered and a member of a certification agency, for example PADI, NAUI, CMAS or SSI to name a few (Farrell, 2016). Basic training for the recreational diver comprises the learning of skills required in order for the diver to partake in the safe conduct of underwater activities using scuba equipment. There are minimum prerequisites in order for a student to qualify and this includes that the applicant must be a certain age, otherwise he or she must be accompanied by an adult who has a minimum, open water certification. It is also required that the student is medically declared fit for diving by a licensed medical practitioner or doctor, the student must also be aware of and understand the risks involved in diving and a parental or guardian signature is required in the case of a minor. Furthermore, the students will make use of a dive-training manual to study for the course where he or she will undertake an examination and the results and documentation shall be retained for five years by the instructor. Lastly, the student must demonstrate the scuba skills in a confined/pool session (WRSTC, 2018; PADI, 2018). The skills learned in the basic training include:

- Pre-dive preparations and gear testing



- Entries and exits from shore or boat
- Breathing from and recovering the demand valve
- Replacing a mask and clearing water from the mask
- Buddy breathing
- Providing and receiving air supply from or to another diver
- Equalisation of air spaces
- Under water mobility
- Hand signals to communicate underwater
- Monitoring dive time, depth and air supply
- Controlled and safe descending and ascending
- Buoyancy control (WRSTC, 2018; PADI, 2018).

When the required skills are reached with the diver understanding the basic principles, the diver receives a certification card, also known as a “C-card”, which indicates on what level the diver is qualified. Divers must take this specific card with them when they are on a diving trip (WRSTC, 2018).

- **Associated tourism and services industries**

By focusing on the tourists’ experience through the service provided to them makes tourism a service-intensive industry. The different sectors such as accommodation, transport and food services all play an important role in the overall experience of the tourists, and because of the economic benefits thereof, it requires entrepreneurial involvement, which is a major contributor in the developing of the different sectors. This also plays a role in the development and empowerment of local tourism and provides multiple job opportunities and benefits to more sustainable businesses (Gurrieri, Lorzio & Stramaglia, 2013).

In the next section, other research on scuba diving in general is provided in Table 2.2 and discussed, indicating the variety of research topics on scuba diving

2.5 Other research on scuba diving

Several studies on scuba diving in general have been conducted where researchers not only focused on travel motives (as discussed in Chapter 1), but also on a variety of topics. These topics include economic benefits, the impact of scuba diving on coral reefs and shipwrecks, impacts on marine parks, underwater behaviour of scuba divers and monitoring and promoting environmentally sustainable scuba diving.

Table 2. 2: Other scuba diving research

Author (s)	Place of study	Title
Saayman and Saayman (2018)	Italy	Are there economic benefits from marine protected areas? An analysis of scuba diver expenditure
Hammerton (2017)	Eastern Australia	Determining the variables that influence scuba diving impacts in eastern Australian marine parks
Edney (2016)	Australia	A framework for managing diver impacts on historic shipwrecks
Kessy (2016)	Tanzania	Product diversification in Tanzania; the case for scuba diving
Richards, O'Leary, Roberts, Ormond, Gore and Hawkins (2015)		Sharks and people: insight into the global practices of tourism operators and their attitudes to shark behaviour
Giglio, Luiz and Schiavetti (2015)	Brazil	Marine life preferences and perceptions among recreational divers in Brazilian coral reefs
Smith, Scarpaci, Scarr and Otway (2014)	Eastern Australia	Scuba diving tourism with critically endangered grey nurse sharks (<i>Carcharias taurus</i>) off eastern Australia: tourist demographics, shark behaviour and diver compliance
Hunt, Harvey, Miller, Johnson and Phongsuwan (2013)	Philippines, South East Asia	The green fins approach for monitoring and promoting environmentally sustainable scuba diving operations in south east Asia

Nair and Salim (2013)	Perhentian island, Malaysia	Influence of scuba divers' specialization on their underwater behaviour
Tapsuwan and Asafu-Adjaye (2008)	Similan Islands, Thailand	Estimating the economic benefit of scuba diving in the Similan Islands, Thailand
Hawkins, Roberts, Kooistra, Buchan and White (2005)	Saba Marine Park	Sustainability of scuba diving tourism on coral reefs of Saba

Source: Author's own compilation

Previous research mentioned above in Table 2.2 on scuba diving in general shows that there is a variety of research conducted in different scuba diving locations ranging from the impact of scuba diving on coral reefs, the sustainability thereof, scuba divers' behaviour based on their diving specialty, scuba diving shipwrecks, with specific marine species and the economic benefit that scuba diving can bring to a community. Results from Edney (2016) show that divers make intentional and unintentional contact with shipwrecks, which is not necessarily a major threat, but still to some extent can be significant, because of the attraction's popularity and high visitation levels. This includes the exhaled bubbles coming into contact with the shipwreck, touching artefacts, anchoring the boat and mooring damage. The study also provides heritage managers with a framework to assist them in deciding on management actions that will balance divers' access and protecting the dive site. In the study of Smith *et al.* (2014), findings show that divers conformed with the guidelines of this activity and that the grey nurse sharks showed usual swimming behaviour with no obvious changes with the distance or number of divers. Hawkins *et al.* (2005) found that there was an average number of dives between the five dive sites per year and ranged from 445 to 2 163 dives. After nine years of examining the effects of scuba diving in the Saba Marine Park, it was found that there were more damaged coral and fragments in the high-use areas (0-20m) than the low-use areas (40-60m); however, the damage was not consequently related only to the intensity of diving. Saayman and Saayman (2018) reveal that the establishing of an MPA in Portofino in 1998 has led to an increase in tourism in the area and making scuba divers an important source of income for the local economies around the MPA. Results show that during a scuba trip, the average diver spends around €360 (R5956,12 at the time of writing) and approximately 47% of all spending costs go to the scuba industry. There is a difference in underwater behaviour between recreation specialties and results show that specialised/skilled divers are more alert regarding unacceptable behaviour than less specialised/skilled divers. Even though the chance is still there, touching the reefs or collecting dead pieces of corals

are likely to be the behaviour traits in less skilled divers rather than skilled divers. However, the importance of providing insights into coral preservation and more responsible diving are beneficial for all divers (Nair & Salim, 2013). Research conducted by Tapsuwan and Asafu-Adjaye (2008) concluded that divers spend on average more than US\$ 3000 (R43581,78 at the time of writing) and the estimated economic value scuba diving contributes to the Similan Islands is US\$ 54.96 million (R797 428 380,00 at the time of writing). Therefore, scuba diving is a great source of economic boost for the islands.

Due to the growing concern of environmental impacts on coral reefs and ocean habitats, Hunt *et al.* (2013) introduced a code of conduct called Green Fins in the Philippines, a conservation initiative working with scuba diving operators to promote a set of standards for sustainable diving activities. The aim is to reduce the impact that stressors have on ecosystems and reefs and findings show that through the implementation of Green Fins, the environmental standards are reducing the impact on the marine environment. Kessy (2016) conducted research on diversifying the wildlife tourism product of Tanzania by developing marine tourism, as marine areas attract a very large number of tourists. Results reveal that scuba diving is indeed receiving more attention in the area as well as the potential for developing scuba diving in Tanzania and how the country can benefit from it. In the shark diving industry, 42% from 45 operators used attractants to lure sharks during shark diving. There were operators who reported no troublesome behaviour causing concern, while others reported that sharks have been behaving 'more aggressively'. Findings also show that the demand for shark encounters is increasing and holds the potential to raise awareness and conservation efforts for sharks (Richards *et al.*, 2015). The study by Giglio *et al.* (2015) examined the perceptions and marine preferences of divers and found that experienced divers preferred cryptic animals where beginner divers' preferences were megafauna. Main motives for divers to return include fish and coral diversity, socialisation, scenic beauty, improving of skills and diving historical shipwrecks. They also state that by understanding the motives and preferences of divers, visitors' enjoyment can be maximised. Hammerton (2017) conducted research to identify variables influencing scuba diving impacts in Australian marine parks. Variables to have an influence include the location of original certification, total number of dives logged and diving depth, three variables of understanding marine park zoning, number of days since last dive, the use of photographic equipment and site selection. Results reveal that differences in prior training as well as awareness of marine park regulations are also important factors that have an impact in the marine park as this has a more direct influence on divers' behaviour in and towards the park.

Per conclusion of these studies, Tapsuwan and Asafu-Adjaye (2008) and Saayman and Saayman (2018) focused on the economic impact, as well as the study of Kessy (2016) that

had a product diversification point of view. Hawkins, Roberts, Kooistra, Buchan and White (2005) focused their research on the sustainability of scuba diving, and also Hunt *et al.* (2013) where they launched and introduced a code of conduct (Green Fins) with the aim of promoting sustainable diving standards. The study by Hammerton (2017) focused on the variables that had an impact on scuba diving in marine parks, while the study of Edney (2016) analysed the impact of divers on historic shipwrecks and how to manage it effectively. Nair and Salim (2013), Smith *et al.* (2014) and Richards *et al.* (2015) conducted research on scuba diver behaviour and the impact it has on coral reefs and marine species such as sharks, as well as the sharks' behaviour towards the divers, where Giglio *et al.* (2015) studied the marine life preferences and perceptions of scuba divers.

From the above-mentioned studies, it is clear that scuba diving activities have an impact on the marine environment such as coral reefs, communities and the local economy. Therefore, it is important to conduct research regarding scuba diving in different locations around the world so that the effect it has on a variety of factors can be identified as well as the contribution it can bring to various sectors, and therefore be sustainably managed in order to provide growth in the industry and also shed light on the importance of conservation of marine environments.

2.6 Conclusion

The goal of this chapter was to provide insight into the topic of scuba diving and the content of this chapter was divided into four sections. The first section focused on marine tourism and the different sectors and activities of marine tourism. Sub-sectors were identified, namely aquatic tourism, beach tourism, cruise tourism, island tourism, marine ecotourism and marine events. Activities include water-based: motorised and water based: non-motorised, shore-based activities and non-specialist leisure pursuits. The second part of this chapter discussed the history of scuba diving, what the sport entails, as well as further training that includes three different areas, namely recreational specialties, environmental specialties and technical specialties. Furthermore, four of the most popular certification agencies were briefly discussed, CMAS, NAUI, PADI and SSI. Lastly, the role players in the SDTS were discussed, namely scuba diving operators, charter operators and scuba diving education and training. Lastly, other research topics on scuba diving were discussed, revealing the variety of interest in this activity. The research focused on topics such as economic benefits, impacts on marine habitats and marine parks and underwater behaviour.

“We need to transform our ocean relationship from abuse to stewardship, from exploitative consumption to valuing the ocean’s gifts” – Mark J. Spalding

Motivation theories, travel motives and market segmentation in the tourism industry

3.1 Introduction

Marketing is among the most important factors of a business. Mortimer *et al.* (2009:1) state that without customers there can be no business and with the use of resources as effectively and efficiently as possible, the aim is to maximise growth and generate profit over time (Saayman, 2006). Marketing is a process of matching the desires and needs of consumers with what a business offers, with the goal to distribute ideas, goods and services and finding opportunities to create exchanges, which will satisfy customers’ unmet needs (Pike, 2008; Dolnicar, Grün & Leisch, 2018:3).

From a marketing perspective, potential tourists with specific needs, who are prepared to spend money on an experience exclusive to them, make up the tourism market. Palacio and McCool (1997:236) define market segmentation as, “*a process by which a large, potentially heterogeneous market is divided into smaller, more homogeneous components or segments*”. The process of market segmentation is used to detect these possible tourists, with the aim to satisfy their needs and demands, and is also beneficial in terms of the contribution it can make to the marketing of tourism. A marketing mix for each segment can be developed once the segment has been identified. The four aspects of a marketing mix, namely product, price, place and promotion affect and rely on one another (Saayman, 2006; NetMBA, 2010).

The product includes the amenities of infrastructure and superstructure and tangible and intangible features (Saayman, 2006; Mortimer *et al.*, 2009:17). Price refers to all the expenses of tourism related activities, such as accommodation, travel, entertaining and spending costs. Place refers to the marketing area and the end destination, as well as, when and where the product or service is available (Saayman, 2006; Mortimer *et al.*, 2009:17). Furthermore,

promotion can be referred to as marketing communication and comprises of the ways the product is introduced whether it is directly to the tourist or through travel agents and tour operators indirectly (Saayman, 2006:3; Conrad, 2017).

Tourism marketing consists of physical or tangible components (buildings, food and products for example), a service component (contributing to the everlasting experience), and thirdly, the experience component. These three components are also used in advertising campaigns to develop new products. Linking motives with activities and then destination choice turns motivation into a topic of interest for managers and marketers (Moscardo *et al.*, 1996; Pearce & Lee, 2005:226). This study aims to identify these needs or travel motives of scuba divers, so that the dive operators can have a clearer understanding of who the market is.

According to Šimková and Holzner (2014), tourism is about the personalities, lifestyles and attitudes of tourists and the practice of travelling, whether it may be for business, education or pleasure. It is closely linked to the psychology of examining and finally understanding the motivation for travelling. Garrod and Gössling (2008:32) state that by understanding the travel motives of tourists better, the process of marketing can be done more operatively. Research by Maslow (1954), Lundberg (1971), Crompton (1979), Iso-Ahola (1982), Browen and Clarke (2009), and Mehmetoglu and Normann (2013:4) attempts to identify the driving force of motivation behind tourists. Through findings by Lubbe (1998), Browen and Clarke (2009), Kruger and Saayman (2009a), Saayman (2006:21) and Geldenhuys, Van der Merwe and Slabbert (2014:93), the most common travel motives of tourists entail some advantages and can be generally summed up as:

- Gaining a competitive advantage against other (diving) destinations, which is of great value to an expanding market.
- Being well informed about the travel motives can improve marketing efforts.
- Roaming to a destination for the tourists to take part in activities that meet their needs.
- More effective marketing strategies come from a profound understanding of travel motives and lead to the creation of a sustainable management plan for destinations.

Therefore, this chapter will analyse the concept of theories on travel motives, travel motives and insight regarding travel motives as part of a market segmentation method.

The following framework (Figure 3.1) presents the discussed topics of this chapter.

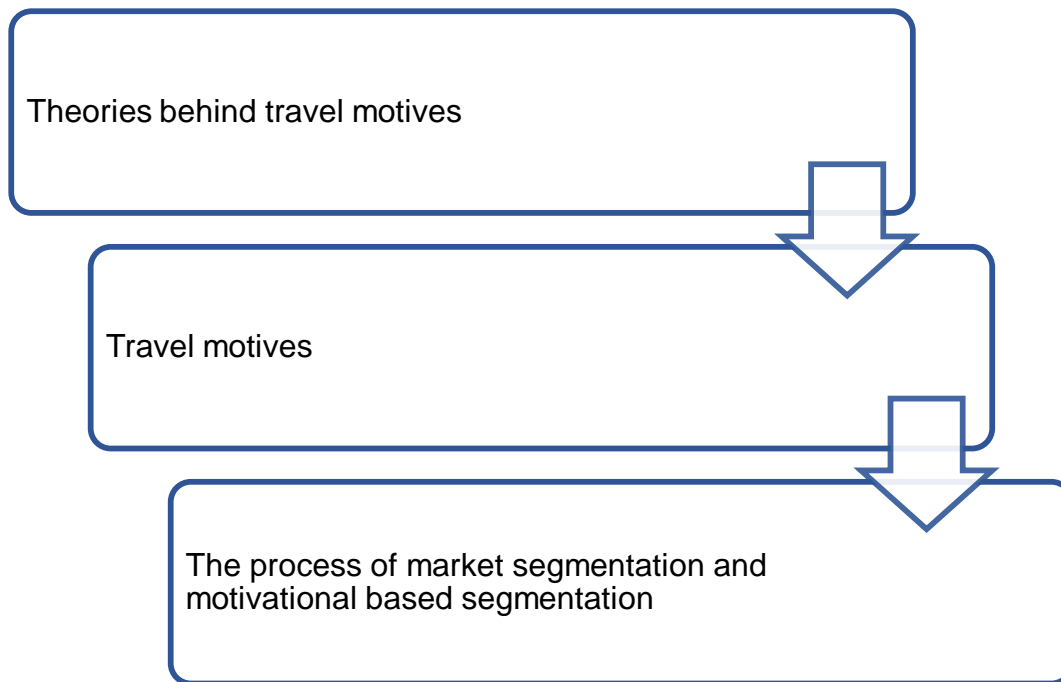


Figure 3. 1: Chapter 3's layout of literature review

Source: Author's own compilation

3.2 Theories behind travel motives

In the leisure and tourism literature, motivation is an important topic and early studies on motivation by Maslow (1943), Plog (1974) Crompton (1979) and Iso-Ahola (1989), for example, attempt to reveal the general meaning or force behind motivation. Maslow's hierarchy of needs, the push-and-pull theory, Iso-Ahola four-quadrant theory, Sunlust and Wanderlust and Plog's theory have been used in attempt to identify and explain reasons why people travel to a certain destination, and these are accordingly discussed below.

3.2.1 Maslow's hierarchy of needs

The theory of Maslow's hierarchy of needs explains human nature in such a way that most humans are familiar with themselves (Abulof, 2017). In the paper titled "A theory of human motivation" by Maslow (1943), he describes the general pattern of movement regarding motives. He also states that the first four layers in the five-layer pyramid (physiological, safety, love and belonging, and esteem) can be described as the "d-needs" (deficiency needs). The theory suggests that, before a person can focus his motivation on the higher level of needs, such as self-actualisation, the most basic levels must first be met (Figure 3.2). People also seek an optimal level of stimulation instead of an absence or excess thereof (Iso-Ahola, 1989; Crompton & McKay, 1997; Yoo, Yoon & Park, 2018:171).

The physiological need is the first or basic need in the hierarchy and refers to the physical requirements such as breathing, clothing, food, water, sleep and shelter, which are necessary for survival. The need for safety and security, in the second layer, is mainly to keep one from harm, because if a person does not feel safe in an environment, he will focus on satisfying that need before he feels the need to meet any higher level in the hierarchy (Datta, 2013; Cherry, 2018a). Safety, as well as security, includes financial security, health and well-being, and personal security. The third need of love and belonging focuses on family, friendships and intimacy. Maslow (1943) argues that whether in a small (such as family members or colleagues), or large group (such as sport teams or communities), humans have the need to love and be loved, feel that they belong and are accepted among social groups. The layer of esteem in the hierarchy covers needs such as ego or status. This stretches from respect and recognition from others to the need for self-respect, self-confidence, competence and self-esteem. It can be described as the desire or need to be valued and accepted (Maslow, 1943; Cherry, 2018a). Lastly, the desire for self-actualisation can be described on a basis of “*what a man can be, he must be.*” This refers to the full potential of a person and that person’s realisation thereof. Desires can differ from one individual to another; furthermore, it is the desire within to accomplish and to become the best that one can be. Seeking fulfilment of self-actualisation to intrinsically pursue goals, is defined as an explicit motive and can be described otherwise as a reward-based system (Maslow, 1943; NetMBA, 2010; Cherry, 2018a).

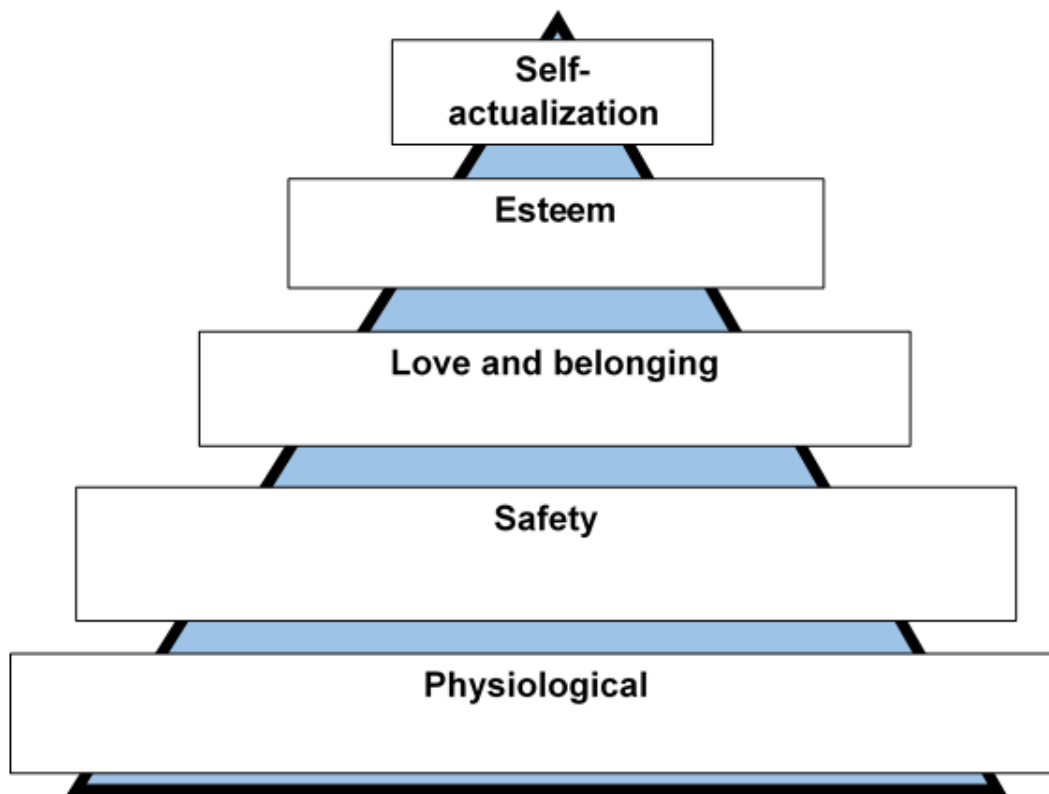


Figure 3. 2: Maslow's hierarchy of needs

Source: (Maslow, 1943)

3.2.2 Push-and-pull theory

There are seven socio-psychological motives that have been identified by Crompton (1979) as reasons why tourists travel, as opposed to the most basic motivation for travel of breaking away from routine. These seven motives include escaping from the everyday environment, facilitation of social interaction, discovery and evaluation of oneself, strengthening family ties, relaxation or recreation, regression and prestige (Crompton, 1979; Saayman, 2006; Caber & Albayrak, 2016).

Furthermore, a two-factor model consisting of push-and-pull factors is identified by Crompton, (1979). The push force, described as the intangible, intrinsic desire to go somewhere, includes all the factors that push the tourist away from his place of residence, such as the desire for adventure, escape or social interaction. The second force is identified as a region-specific lure, pulling the tourist towards a peculiar destination, consisting of tangible attributes related to the attractiveness of the destination itself, such as a destination's scenic beauty, historical sites or undisturbed nature. Identifying push-and-pull factors also enables researchers to answer the questions of when, where and how people travel (Kozak, 2001; Bansal & Eislet,

2004; Prayag & Ryan, 2011; Whyte, 2017:557). Travel motives as push and pull factors have been identified by Lundberg (1971) and correlate with research by Mehmetoglu and Normann (2013:4) on travel motives and activities in nature-based tourism, which includes factors that reflect educational motives such as visiting historical sites, ethnic motives where one visits a place of family residence, relaxation motives and pleasure seeking, where the tourist travels to have a good time. Table 3.1 provides the most identified push and pull factors.

Table 3. 1: Most identified push and pull factors

Push factors	Pull factors
Adventure	Beaches
Being entertained	Budget
Desire for comfort	Certain environment
Enhancement of relationships	Climate
Escape	Cultural resources and events
Exploring	Ease of access
Health and fitness	Experiencing a different culture
Hobbies	Historical sites
Novelty	Increase knowledge
Prestige	Recreational facilities and opportunities
Regression	Scenic beauty
Rest and relaxation	Undisturbed nature
Seeking novelty	
Self-esteem and self-evaluation	
Social interaction	

Source: (Adapted from Crompton, 1979)

Yoon and Uysel (2005:46) composed a hypothetical model (Figure 3.3). This illustrates that motives, either push or pull, or both, have an influence on a tourist's travel satisfaction, which, in turn, affect the destination loyalty of the tourist (Yoon & Uysel, 2005; Jang & Cai, 2009).

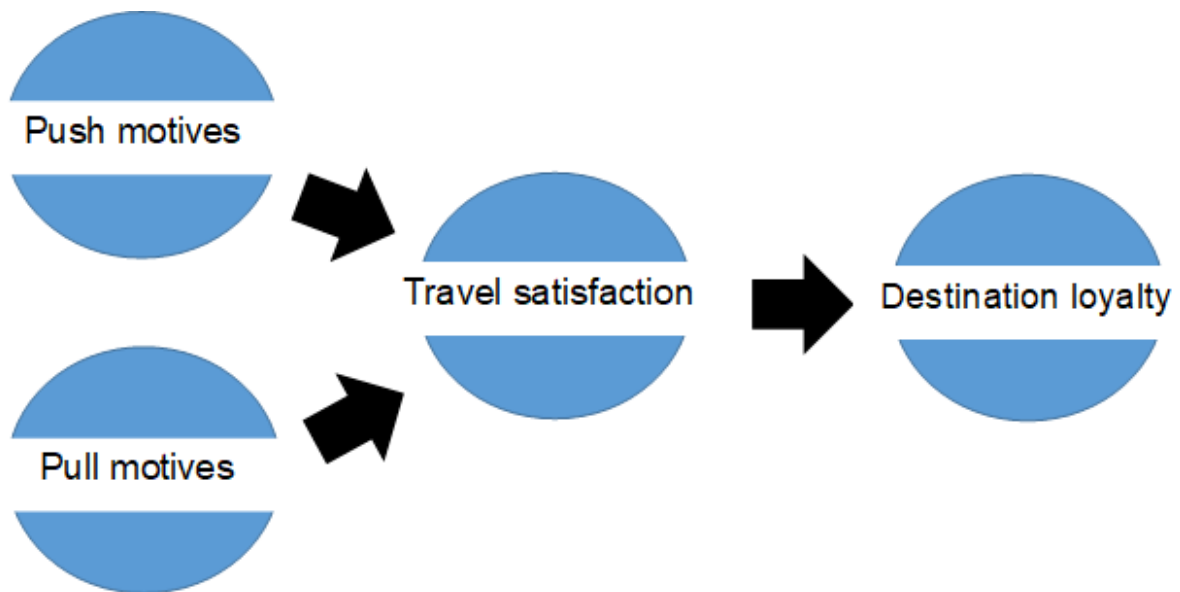


Figure 3. 3: Hypothetical model

Source: (Yoon & Uysal, 2005)

3.2.3 Iso-Ahola four-quadrant motivation theory

Escape motives are divided into two dimensions by Iso-Ahola (1982), namely personal and interpersonal dimensions. He also states that tourists are more likely to be motivated to escape their environment and seek personal rewards, for example escaping personal problems or stress and seeking relaxation, prestige or rest. Tourists also have the need to escape their interpersonal environment, such as friends, co-workers or family, seeking interpersonal rewards such as social interaction. The tourist can transform from one quadrant to another during a trip or between two different trips and this model (Figure 3.4) can therefore be seen as dynamic (Iso-Ahola, 1982; Saayman, 2006; Li, Zhang & Cai, 2016:105).

In general, tourists tend to have more of an escape-oriented motive for travel rather than a seeking-oriented motive for travel. These escape-oriented tourists usually travel to avoid life situations that are stimulating, either over- or under-stimulating. Tourists escaping from over-stimulation do not rate intrinsic rewards as important as those escaping from under-stimulation.

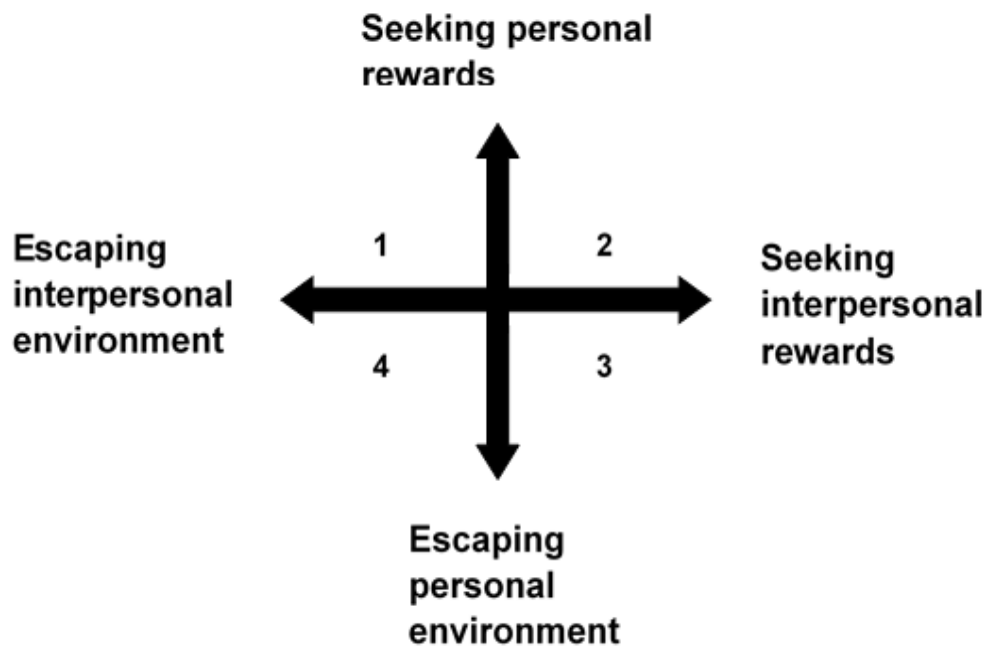


Figure 3. 4: Iso-Ahola four quadrant model

Source: (Saayman, 2006)

3.2.4 Sunlust and Wanderlust theory

The primary focus of the sunlust and wanderlust theory is that tourists are motivated to escape or break away from their normal everyday routines. Sunlust is described as factors or facilities that can be provided by a destination that are not necessarily at the tourist's own place of residence. The sunlust-seekers can be described as people with a strong desire to relax both psychologically and physically, escaping from their everyday lives. The wanderlust motive can be described as the desire to travel to the unknown, involving people with the desire for novelty (Mansfeld, 1992; Saayman, 2006; Hanai, 2016:90). Characteristics of both are provided in Table 3.2. According to Saayman (2006:27), there is a deciding difference between sunlust and wanderlust, which is the decision between international tourism or local tourism. Travelling from a sunlust motive is based on the tourist's home country, whereas travelling from a wanderlust motive suggests that the tourist tends to take part in international travel.

Table 3. 2: Characteristics of Sunlust and Wanderlust

Sunlust	Wanderlust
Visiting one country	Visiting more than one country
Looking for local attraction and facilities	Looking for different cultures and institutions
Natural characteristics, especially climate	Physical characteristics, climate less important
Rest and relax or very active	Tourist business
Refuge, vacation	More travelling is important
After arrival at destination, further travelling is an unimportant thought	

Source: (Saayman, 2006)

3.2.5 Plog's theory

The motivation theory of Plog (1974) is known to be a conceptual approach and this theory categorises a tourist as either allocentric or psychocentric. The tourists classified as allocentric are described as outward-looking people who are adventurous. These tourists tend to choose destinations that involve remote areas and are untouched. They are also interested in travelling to areas that make more involvement in the local culture possible for them (Mcintosh, Goeldner & Ritchie, 1995; Plog, 1974; Plog, 2001; Goeldner & Ritchie, 2003; Huang & Hsu, 2009; Yoo *et al.*, 2018). Psychocentrics are described as inward-looking people who are non-adventurous and self-assured. These types of tourists have more boundaries, tend to travel less and dislike the unfamiliarity that comes with visiting new destinations and prefer the comfort of destinations they are familiar with (Plog, 1974; Plog, 2001; Goeldner & Ritchie, 2003; Brown, 2005; Yoo *et al.*, 2018). According to Brown (2005), there is a third group, the midcentrics. These tourists have characteristics that include those of an adventurer, but who also want the comfort of home at the same time and are therefore a combination of the two types. According to Huang and Hsu (2009), Plog's model is evaluated by other researchers, but state that when the model is compared to other traveller typologies, Plog's model is still recognised to be better.

Push-and-pull factors have also been identified by Plog (1974:55-58). He states that the cultural, historical and natural attractions of a destination, the destination image and accessibility are the pull factors; the external environment. The push factors are seen as the origin, explained as the need to escape, excitement, prestige, relaxation, socio-demographics and socialisation as the push force behind a tourist, influenced by the tourist's internal characteristics, such as personality and attitude (Plog, 1974; Yoo *et al.*, 2018:169).

In closing, different motivational theories were discussed in attempt to answer the question of why people travel. The mentioned theories and models can form a basis of travel motives and are an asset in determining the travel motives of tourists, which guide their behaviour and decision-making (Šimková & Holzner, 2014:661; Whyte, 2017:558). In the next section, market segmentation in marketing will be discussed and where travel motives fit into market segmentation.

3.3 Travel motives of tourists

Tourism researchers and theorists see travel motives as fundamental reasons for travel behaviour as it forms an integral part thereof. It is important to understand travel behaviour, and more specifically, travel motives of tourists, because it may assist in improved marketing and product development and the creation of competitive advantage. This travel behaviour can be conceptualised as certain behaviour before, during and after travelling and is the direct result of interaction between certain personal and environmental variables (on a continuous basis). Therefore, travel behaviour can be defined as the behaviour of tourists according to their attitudes towards a certain product and their response by making use thereof (Crompton & McKay, 1997; Brown & Clarke, 2009).

Travel motives as an integral part of travel behaviour, are the starting point of decision-making and a key element for understanding it. What motivates tourists differs from one tourist to another. Some tourists may even know what their motives are, and some cannot explain their motivation for travelling. It facilitates target market planning, and with marketing as an investment, it has to show some in return (Crompton & McKay, 1997:425; Saayman, 2006:21; Brown & Clarke, 2009). Motives occur before experience, with satisfaction that comes after it. There are three reasons for investing in the understanding of travel motives, namely it is an element in designing product or service offers, the close relationship with satisfaction, and lastly, it is a key element in understanding the decisions of visitors (Crompton & McKay, 1997:426; Li, Zhang & Cai, 2016).

This topic of motivation is also of interest among researchers and psychologists and they have found that intrinsic and extrinsic motives have different effects on peoples' behaviour and how they pursue their goals (Cherry, 2018b). According to Bernazzani (2017), understanding why one is motivated to do something can help in staying motivated and motivate others too.

Driven by the enjoyment or interest in a task, the self-desire for what is new, new skills and challenging things, gaining knowledge and examining one's capacity can be seen as intrinsic motives, something that is self-sustaining and lasts long (Richard & Deci, 2000; Cherry,

2018b). Intrinsic motivation is something that exists within an individual, is personally rewarding and is therefore seen as a natural tendency. Examples of this type of motivation include activities such as reading a book and imagining the story, studying a certain subject because it is interesting, participating in sport for the fun thereof or building a puzzle because it is fun and challenging (Bernazzani, 2017; Cherry, 2018b).

Extrinsic motives include rewards as a result of desired behaviour or avoidance of punishment (Richard & Deci, 2000; Cherry, 2018b). According to Bernazzani (2017), extrinsic motivation can be the reason one engages in a behaviour to complete an activity or get a job done, when there is little to no internal motivation. Examples of extrinsic motives involve competing in an academic or sports contest to win a scholarship, competing in a certain sport to win an award, studying a specific subject because you want good grades or exercising because you want to lose weight (Bernazzani, 2017; Cherry, 2018b).

Therefore, it can be concluded that intrinsic and extrinsic motives are in contrast with each other, in terms of participating in an activity or satisfying a need for the enjoyment thereof, versus the value or competition concept thereof.

Pearce and Lee (2005) conducted research to adjust a concept called the travel career ladder (TCL) and its approach to travel motivation. They focused on the relationship between travel experience and travel motives as well as the relationship between these patterns. Findings revealed 14 factors out of 72 motive items, and these 14 factors with some of the 72 motives are listed in Table 3.3. From all the identified factors, the most important factors were *novelty, escape and relaxation* and *relationship*. These factors consist of motives such as *having fun, learning new things, rest and relax* and *experiencing something different*, and are also some of the identified factors in this study (see Chapter 4). *Recognition, nostalgia* and *romance* were rated as the least important factors in forming travel motives and consist of motives such as *showing others I can do it and having others know that I have been there*.

Table 3.3 also provide general travel motives of tourists to marine destinations and this include factors such as experience, personal achievement, escape and relaxation, the attractiveness of a destination, seeing marine species, socialisation, the climate and being in nature (Bansal & Eiselt, 2004; Saayman & Saayman, 2008; Saayman, Slabbert & Van der Merwe, 2009; Geldenhuys, 2018). It is clear that travel motives, in general, differ from travel motives of tourists visiting marine destinations, such as recognition, romance, and nostalgia, where tourists feel they don't have to prove anything or be recognised by others, having romantic relationships and thinking about past memories. Therefore, making research on travel motives

of specific markets or destinations important, to draw up the market profile and establish a unique marketing mix for the different markets.

Table 3. 3 Identified travel motives

Factor	Motive items
Novelty	Having fun Feeling the special atmosphere of the destination
Escape and relax	Being away from daily routine Getting away from everyday stress and pressure
Relationship (strengthen)	Do things with my companion/s Do things with family and friends
Autonomy	Independence Being obligated to no one
Nature	Being close to nature To view the scenery
Self-development (host-site involvement)	Learning new things Experiencing different cultures
Stimulation	Exploring the unknown The feeling of excitement
Self-development (personal development)	Developing personal interests Gaining a sense of accomplishment
Relationship (security)	Feeling safe and secure personally Being with respectful people
Self-actualise	Gaining new perspective on life Inner peace or harmony
Isolation	Avoiding interpersonal pressure and stress Experience peace and calmness
Nostalgia	Reflecting on past memories Thinking about previous good times
Romance	Having romantic relationship Being with the opposite sex
Recognition	Showing others, I can do it Being recognized by other people
Travel motive from tourists visiting marine destinations	
Factor	Motive items

Experience	For new experiences To experience thrill and excitement
Personal achievement	To overcome fear and risks Because it is challenging
Escape and relaxation	To break away from regular routine To relax and be free
Destination attractiveness	Variety of activities It is affordable
Marine species	To see marine species such as whales, dolphins and sharks To explore in tidal pools and between rocks
Socialisation	To explore a new destination To spend time with family and friends
Climate	Enjoy the warm weather
Nature	Experience calmness of nature

Source: (Compiled from Bansal & Eiselt, 2004; Pearce & Lee, 2005; Saayman & Saayman, 2008; Saayman, Slabbert & Van der Merwe, 2009; Geldenhuys, 2018)

Previous research on travel motives, specifically of scuba divers, was provided and discussed in chapter 1 and therefore not discussed again here. Therefore, it is clear that there are indeed similar travel motives among tourists participating in different activities and, from the results of this study (see Chapter 4), there is also a significant difference in the motives.

3.4 Market segmentation

The following section discusses the process of market segmentation.

3.4.1 Process of developing a market segmentation strategy

“A market segmentation strategy is a specialisation strategy in which you target and cater to a narrow type or group of customers” (Mortimer *et al.*, 2009:28). This strategy provides the advantage that allows one to tailor the product (or service) and one’s entire marketing effort to a clearly defined or smaller group with specific characteristics. McDonald and Dunbar (2004:34) define market segmentation as *“the process of splitting customers, or potential customers in a market into different groups or segments within which customers share a similar level of interest in the same, or comparable set of needs satisfied by a distinct marketing proposition.”* This process attempts to explain the differences of customers or consumers, to turn these differences into an advantage and to assist in determining the right

marketing mix. Segmentation is also a creative process with the purpose to satisfy customer needs and not those of the company or business. Through this, the identification of new opportunities for markets, products and services can happen (McDonald & Dunbar, 2004:39-40).

Whether a business should segment or not is a key consideration. They can either develop an undifferentiated approach, where marketers develop a product meeting the needs of the majority, or they can develop a differentiated approach, targeting specific market segments, developing separate offers for the different segments. Market segmentation lies at the core of successful marketing and can be referred to as a decision-making tool and key building block in the fundamental task of selecting target markets and designing a suitable marketing mix (McDonald, 2010; Dolnicar *et al.*, 2018:4). According to Dolnicar *et al.* (2018:7) and Holloway and Robinson (1995), market segmentation is also beneficial for businesses and organisations and can also help to achieve goals. This includes the following:

- Identify where a business currently stands, and where they want to be.
- It is a good reflection for highlighting what a business is good at (compared to their competition).
- Whether or not an existing product should be adapted and remodelled, or whether a new product should be presented.
- Gaining insights into the wants and needs of customers.
- Spending patterns of customers.
- Providing a better understanding of customers and their differences.
- Market dominance in the long term.

3.4.2 The process of market segmentation

Market segmentation can be described as a three-stage approach of segmentation, targeting and positioning, with the aim to conduct a market preparation framework. Segmentation includes the identification of the market to be segmented, the selection and application of the different segment bases, as well as the development of profiles. Evaluating each segment, identifying and selecting the segments that are to be segmented make up targeting. Thirdly, positioning is made up of the developing of a market programme or marketing mix (Perreault & McCarthy, 1999; Madhavaram & Hunt, 2008; Pride, Ferrell, Lukas, Schembri, Niininen & Cassidy, 2018). The market segmentation process is illustrated in Figure 3.5 and discussed below.

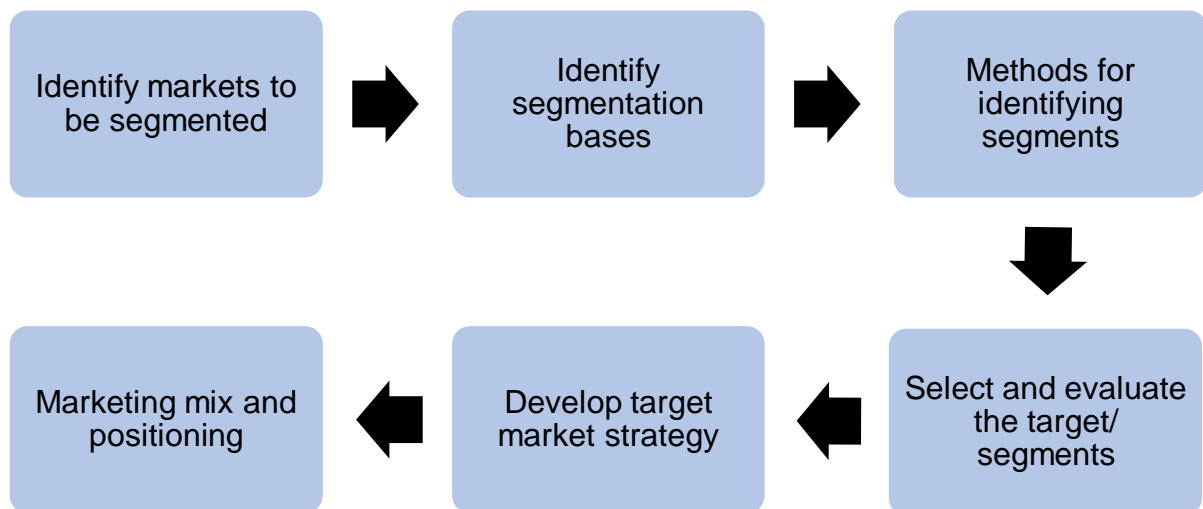


Figure 3. 5: Market segmentation process

Source: (Adapted from Kotler, Brown & Makens, 1999; Saayman, 2006; Gavett, 2014)

3.4.2.1 Identifying markets to be segmented

Defining the overall market in the early stages of segmentation helps to narrow down the market through the elimination of undesirable and unsuitable groups (McDonald & Dunbar, 1995; Saayman, 2006).

3.4.2.2 Identifying segmentation bases

Selecting appropriate bases is a key step in the process of market segmentation, and selecting suitable bases requires a simple understanding of the chosen market. Marketers should gather meaningful segments and are searching for minimum differences and maximum similarity within the segments; in other words, they want to achieve internal homogeneity (Sarin, 2010; Gavett, 2014; Wedel & Kamakura 2016). A variety of bases can be used in the identification and application of segments, and marketers can use a single base for the analysis, more than one base, or a combination of bases. The most common bases include demographic, geographic, psychographic and behavioural (Table 3.4) and will accordingly be discussed.

- **Demographic segmentation**

Typical criteria for demographic segmentation are broadly population statistics and include age, gender, marital status, education, occupation and income to name a few. It is believed that these factors are popular to use for market segmentation (Holloway & Robinson, 1995; Saayman, 2006; Dolnicar *et al.*, 2018:43); however, Yankelovich and Meer (2006) suggest that this does not represent the strongest base for segmentation, but can still be useful.

- **Geographic segmentation**

The information obtained from geographic segmentation is based on where people live and can be seen as the original criteria of market segmentation. It is an easy market to target, because customers or tourists can be assigned to geographical units such as country, climate zone, nation, city or region. Segmentation of a market can be measured on a large scale such as continents, or as narrow as postal codes (Kotler *et al.*, 1999; Saayman, 2006:92; Dolnicar *et al.* 2018:42).

- **Psychographic segmentation**

Psychographic segmentation, also called lifestyle segmentation, is more complex in nature than demographic or geographic (Dolnicar *et al.*, 2018:44). This is because it is difficult to come across a characteristic to provide more insight into this dimension. Tourists or customers are divided into different groups based on their social class and aim to provide an understanding of them in terms of the way they live, personalities, which external factors they respond to, what they consider as important and how they spend their leisure (Holloway & Robinson, 1995:57; Wedel & Kamakura, 2010; Dolnicar *et al.*, 2018:44).

- **Behavioural segments**

Searching for behavioural similarities, patterns or reported behaviour is referred to as the behavioural approach in market segmentation. Behaviour variables include benefits required by the buyer, occasions, readiness to buy a product, user status, usage rates, loyalty status, motivation and attitude towards service or product (Strydom, Cant & Jooste, 2000; Wedel & Kamakura, 2010; Dolnicar *et al.*, 2018:44).

Customers can also be divided according to their level of loyalty (Wilson, Gillidan & Pearson, 1993; Wedel & Kamakura, 2010). There are four loyalty categories of importance that the customers or tourists can be divided into, namely *hard core* – these are the tourists who visit the same destination or attraction consistently; *soft core* – the type of tourists choosing from a moderate amount of attractions; *shiffters* – tourists shifting from one attraction to another; and *switchers* – these tourists do not show any loyalty to any attraction (Wilson *et al.*, 1993).

Table 3. 4: Segmentation bases

Segmentation base	Example
Demographic	Age Gender Race Marital status Education Occupation Income Nationality
Geographic	Country Region City Neighbourhood Climate
Psychographic	Interests Life styles Personality Leisure time spent
Behavioural	Occasion Readiness to buy product Responding to external factors User status Motivation Loyalty

Source: (Adapted from Kotler et al., 1999; Saayman, 2006; Wedel & Kamakura, 2010; Dolnicer et al., 2018)

3.4.2.3 Method for identifying segments

A variety of methods can be used to identify segments, and the cluster analysis technique serves as an example that is also used for the purpose of this study. There are different types of cluster variables (Table 3.5) and these can be classified as observable vs unobservable and general vs specific, and attention shifted from traditional general clustering to unobservable product-specific clustering (Sarstedt & Mooi 2014:277; Dolnicer et al., 2018:75). Observable clustering obtains variables that can be measured directly, and unobservable

variables are done through observation or self-assessments of respondents. General variables include the independence of a service or product and specific clustering is about the service and/or product and the customer (Randall, 2001; Sarstedt & Mooi, 2014:277).

Table 3. 5: Clustering variables

	General	Specific
Observable	Socio-economic Demographic Geographic Cultural	User status Usage frequency Brand loyalty
Unobservable	Psychographics Lifestyle Personality Values	Perceptions Intentions Attitudes

Source: (Dolnicer et al., 2018:277)

There are different procedures of clustering and each one determines how the clusters are formed. Procedures include hierarchical clustering, *k*-means clustering and two-step clustering (Sarstedt & Mooi, 2014:281). This research study made use of hierarchical clustering (see Chapter 4) and will therefore be further discussed.

The hierarchical clustering technique forms part of a category named *agglomerative clustering* and is well suited for analysing datasets of a few hundred (Sarstedt & Mooi 2014:281; Dolnicer et al., 2018:89). In this procedure, clusters are individually represented by each object, where after the clusters are merged according to similarities between them. It starts at the bottom of the hierarchy where the first two clusters with the most similarities are merged, forming a new cluster. The next level of the hierarchy is formed when another pair of clusters is merged according to their similarities, establishing the hierarchy from the bottom up, and is repeated until there are no more similarities (Sarstedt & Mooi, 2014:281).

Previous research on travel motives (Table 3.6), identified from clustering techniques, is discussed in the sub-section below.

- **Previous research on travel motives from clustering**

This sub-section discusses travel motives identified from using clustering as method for identifying segments. The identified clusters from the studies and the most important identified travel motives are provided.

Table 3. 6: Research on travel motives from clustering

Author/s	Place of study	Title
Wang, Chen & Prebensen (2018)	Arctic	Market analysis of value-minded tourists: Nature-based tourism in the Arctic
Geldenhuys (2018)	Hermanus, South Africa	A sustainable management framework for marine adventure tourism products
Bentz, Lopes, Calado and Deerden (2016b)	Azores, northeast Atlantic ocean	Understanding diver motivation and specialisation for improved scuba management
Amuquandoh (2017)	Ghana	Tourists' motivations for visiting Kakum National Park, Ghana
Chen & Chen (2015)		Push-pull factors in international birders' travel
Mehmetoglu (2007)	Northern Norway	Typologising nature-based tourists by activity – Theoretical and practical implications
Beh & Bruyere (2007)	Kenya	Segmentation by visitor motivation in three Kenyan national reserves

Source: Author's own compilation

Research conducted by Wang *et al.* (2018) fixated on the primary tourist markets in relation to perceptions of tourists visiting Norwegian Arctic destinations. Three clusters were identified (*escapist, utilitarian* and *nature-chaser*), from a value-related scale containing 19 indicators explaining the dimensions. The five identified dimensions were *functional value, emotional value, value for money, novelty value* and *social value* with functional being the most important value among the tourists. The study conducted by Geldenhuys (2018) identified six clusters for marine adventure participants, namely, *thrill seekers, risk takers, thalassophiles. Consorts,*

experience seekers and adventure junkies. From all the clusters the results indicate that experiences and marine species are the two highest rated motives. Research from Bentz *et al.* (2016b) on scuba divers' motives and specialisation, identified four clusters namely, *socialisers, shark and manta divers, biodiversity seekers* and *explorer divers*. Findings show that the socialisers wanted to spend time with family and friends, seek adventure and expand their knowledge, while the other clusters were motivated to dive by the presence of marine life such as sharks and manta rays, rock formations, abundance of fish species and the underwater visibility. *Knowledge/relaxation seekers, adventure seekers* and *all-encompassing seekers* were three identified clusters, and *adventure, education, social interaction* and *escape/relaxation* were the identified motives in the study of Amuquandoh (2017) on travel motives of visitors to Kakum National Park, Ghana. From the results, the adventure motive was rated the highest and most important factor. Chen and Chen (2015) categorised respondents into similar groups according to relating levels of bird-watching specialties, namely *committed birders* and *active birders*. From overall findings, it is clear that the bird-related factors (seeing new species, seeing as many as possible bird species and enjoying the stimulation thereof) were the most important motives. Research conducted by Mehmetoglu (2007) classifies nature-based tourists in Northern Norway into three clusters, namely *culture and pleasure activity oriented, nature activity oriented* and *low activity oriented*. The nature activity-oriented and culture and pleasure activity-oriented segments were mostly motivated by physical activity (engaging in nature-based activities, engaging in challenging activities), while novelty and learning (experience something new, mentally relax, visit new places) were the most important motivators in the low activity-oriented segment. Lastly, Beh and Bruyere (2007) examined visitor motives in Kenyan National Reserves. *Escapists, learners and spiritualists* were the three identified clusters and all three rated nature and general viewing as the most important motives for visiting the reserves.

It is clear that cluster analysis is an effective method made use of to identify travel motives and different markets. From the above mentioned studies, clustering was conducted in nature-based tourism, as well as marine tourism, but not to the knowledge of the researcher no studies have been done that made use of clustering (as segmentation method) to identify travel motives of scuba divers in particular. Therefore, it is important to expand efforts in conducting research on travel motives of scuba divers, by means of cluster analysis.

3.4.2.4 Select and evaluate the target/segments

Selecting and evaluating the segments require profiling of the market that is usually the demographic information and, focusing on variables that express the clusters' relevance, such

as wants and needs. Clusters can be identified based on the degree of importance of a certain travel motive or based on their loyalty to service or product (Sarstedt & Mooi, 2014:299-300; Kruger, Van der Merwe, Bosch & Saayman, 2018).

3.4.2.5 Develop target market strategy

Aimed at improving image and uniqueness, marketing strategies can be determined by identifying opportunities and the long-term goals and objectives (Foster, 1985). Depending on what strategy has been decided or agreed on, a marketing policy will follow. Policies are action programmes (shorter-term) that contain detailed applications of effort and control of all the operations. If the strategy and policy integrate all the activities, such as research, management of products and marketing, the communication distribution and mix, and the pricing, the outcome should be successful (Foster, 1985; Dolnicer *et al.*, 2018).

A good marketing strategy is characterised by three elements, namely a clear market definition, good match between corporate strengths and needs, and performance. One can say that a marketing strategy aims to satisfy the needs of the target market by offering them a specific marketing mix (Jain 1997; Dolnicer *et al.*, 2018:245-246). Marketing strategies deal with the interplay of the customer, the competition and the corporation, and it requires three decisions, namely where to compete, how to compete and when to compete (Jain, 1997). Saayman (2006) and Dolnicer *et al.* (2018) suggest a variety of approaches that can be used as a marketing strategy, namely:

- Awareness strategy: By doing more effective advertising, the aim is to increase the tourist's awareness and willingness to visit a destination.
- Trust strategy: The goal of this strategy is to gain trust in the market place so that tourists will return to and sell the destination, product or service by means of word of mouth.
- Reaction strategy: To condition tourists as a result of the competitor strategy (or negative activities).
- Maintenance strategy: Increasing the status quo with the aim *"to maintain the market by maintaining satisfaction and loyalty"*.
- Diversified strategy: Depending on the type of market, the different marketing strategies can be combined and applied.
- Needs-stimulation strategy: This strategy, which is also referred to as a niche strategy, has one main goal and that is to fulfil needs.
- Market penetration strategy: The aim is to attract tourists at a low rate/tariff so that the number of tourists can increase.

- Spending-versus-volume strategy: This strategy has a goal or is aiming to attract a low volume of tourists who are higher spenders than the average tourist.

Strategic marketing includes a SWOT analysis, which is an acronym for strengths, weaknesses, opportunities and threats of a business (Hudson, 2008:92; Dolnicar *et al.*, 2018:4). According to Kotler *et al.* (1999:96-97) and Pike (2008:121), strengths are described as the abilities or resources that give a tourism destination that competitive advantage, but weaknesses such as poor management must also be taken into count. A business has to some degree control strengths and weaknesses such as stakeholders and customers. Furthermore, opportunities are the destination’s potential favourable conditions and threats are challenges posed by trends that are unfavourable. The business does not have control over customers’ or competitors’ actions; however, they do have control over the segments they choose to target. Pike (2008:131) states that a SWOT analysis is “*a useful framework*” or “*an effective tool*” for designing strategic goals, and is based on matching resources with opportunities. He also argues that a SWOT analysis of just a list that identifies the strengths, weaknesses, opportunities and threats, is not enough and that it should form a SWOT matrix. This includes offensive strategies with the aim to maximise the strengths corresponding with the opportunities and defensive strategies corresponding with the threats (Pike, 2008:122). Table 3.7 provides a SWOT checklist and Figure 3.6 illustrates the SWOT matrix.

Table 3. 7: SWOT-checklist

Strengths	Weaknesses
Competitive	Obsolete facilities
Marketing skills	Poor marketing image
Cost advantages	Below-average marketing skills
Complete product line	High operating costs
Ability to innovate	Lack of management depth
Brand name recognition	Low research and development capability
Financial strength	Lack of financial muscle
Reputation/ image	Shaky reputation/ image
Distribution system	Low brand name identity
Opportunities	Threats
Improve technology	Weakening economy
Improve buyer/ supplier relationships	Adverse demographic changes
Improve regulatory/ legal climate	Unfavourable regulatory environment

Diversity to broaden risk	Changing needs of customer
Expand product line	New competitors
Enter new markets	Slowing market growth
Favourable demographic changes	Legislation and government policy

Source: (Adapted from Bennet, 2000:147; Saayman, 2006:205)

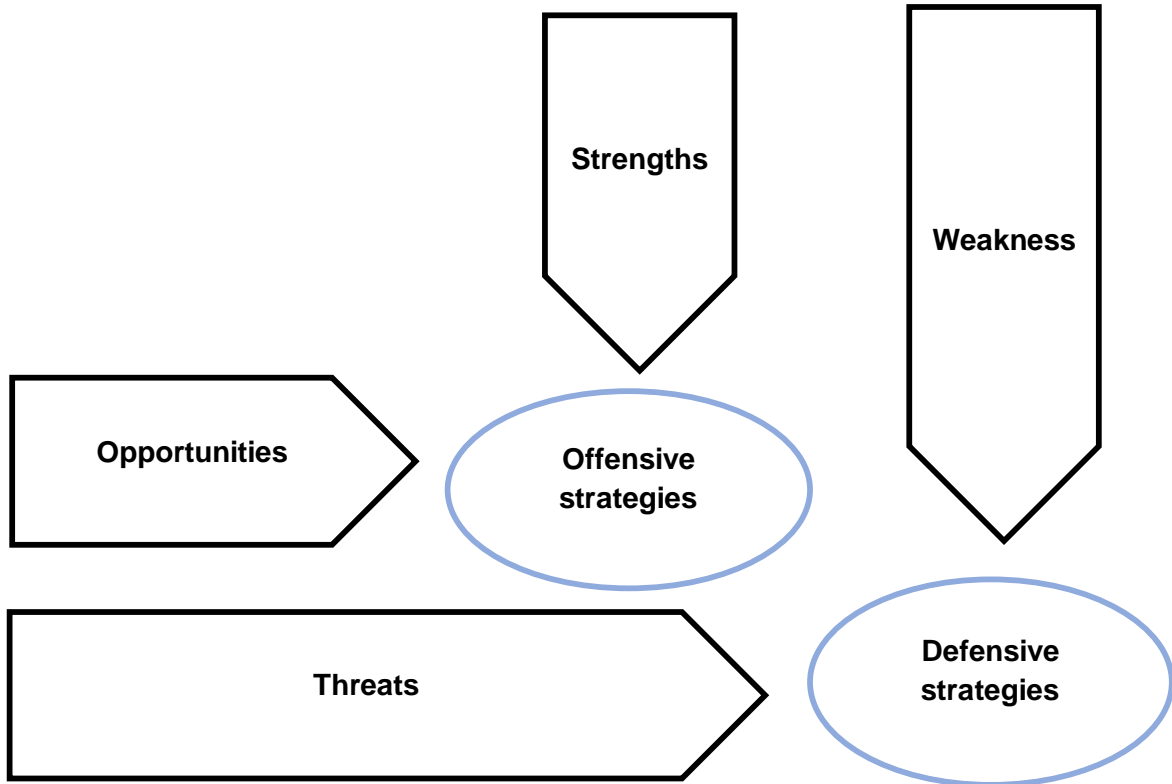


Figure 3. 6: SWOT-matrix

Source: Pike (2008).

3.4.2.6 Marketing mix and positioning

Market segmentation is typically conducted from the 4P's point of view and is briefly discussed below. The information gathered during market segmentation guides the business in adjusting or developing the marketing mix best suited for the target market (Dolnicer *et al.*, 2018:246-247).

- **Product**

This is the most essential ingredient in the marketing mix and refers to what the business has to offer, either a physical product, a service, or both (Conrad, 2017; Dolnicer *et al.*, 2018:247). Specifying the product in view of the customer needs is one of the fundamental decisions and also includes naming and branding of the product, packaging of the product, investments, quality and design (Dolnicer *et al.*, 2018:247). The product is also referred to as the essence of a business (Conrad, 2017).

- **Price**

Deciding whether or not the business is going to offer discount, special offers or payment methods are some of the typical decisions in the price dimension. Price is also part of the cost to satisfy customers' needs, cost of time and effort required to deliver a service or product (McClean, 2012; Dolnicer *et al.*, 2018:247). Price fairness has an influence on the satisfaction of customers. Price assessments are comparative and can either be implicit or explicit. In an implicit comparison, the price judgement is based on a single price that is being compared to another expected, but unspecified price that is lower. When the comparison is explicit, the price is compared with another price or a range of prices (Xia, Moore & Cox, 2004; Mutanga, Vengesayi, Chikuta & Muboko, 2017).

- **Place**

Where and how the product is exposed to customers are part of the foundation of successful marketing (Conrad, 2017). It can either be the physical location of the business or the distribution channels (direct or indirect) the marketers use to reach their markets. This dimension also includes retail outlets, catalogues, logistics, market location and geographical distribution (Dolnicer *et al.*, 2018:250). According to Conrad (2017), how to make it easier to find the product is an important question. It can mean that a display in a store to a pop-up ad on the internet, in other words, where the product or advertisement appears, is important.

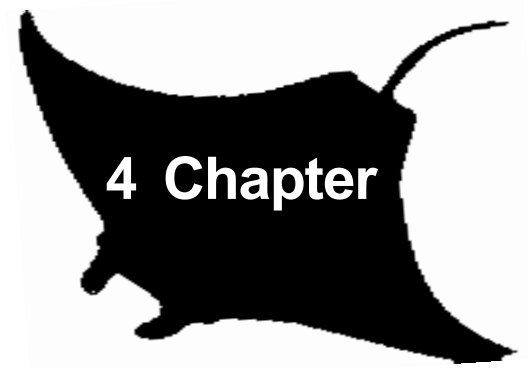
- **Promotion**

Promotion covers the communication tactics and is called "the fun P". This includes the development of the advertising message, and identifying the most suitable and effective way of communicating between the buyer and seller, brand awareness, sponsorships and social media marketing (McClean, 2012; Conrad, 2017; Dolnicer *et al.*, 2018:251). This is basically any interaction from the company's side regarding the product and is active communication and also closely related to place, which is about passive visibility (Conrad, 2017). According to Tiago and Veríssimo (2014) one of the biggest changes in human interaction is the use of online social networks, and the movement into this dimension include benefits such as the sharing of knowledge, dialogues amongst different cultures, entertainment and the enhancing

of marketing efforts. In other words, the use of social media as a marketing tool, connects people and tourists around the globe, making communication and marketing easier as before.

3.5 Conclusion

The objective of this chapter was to analyse literature on the concept of travel motives and market segmentation. The literature also reveals several theories on what the possible driving force behind a motive is. Theories included Maslow's hierarchy of basic needs, Iso-Ahola's four-quadrant model, the push-and-pull theory, Plog's theory of psychocentrics and allocentrics, as well as the sunlust and wanderlust theory. Research on travel motives has identified several contributing factors as reasons why people travel, but escaping from everyday routines and socialisation and relaxing were the most identified motives. Furthermore, literature on market segmentation has been analysed as a method of conducting market research and identifying specific target markets. Different segmentation bases were identified, such as demographic, geographic, psychographic and behaviour, which can be used to draw up a profile of the selected target market and segments within. Therefore, understanding the behaviour of travel motives and using it in market segmentation, the business can identify the wants and needs of their customers.



“In every walk with nature one receives far more than he seeks” - John Muir

“The ocean stirs the heart, inspires the imagination and brings eternal joy to the soul” –
Robert Wyland

Empirical results

4.1 Introduction

The aim of this study was to use motivation as a basis for segmentation of the scuba divers to Ponta do Ouro, Mozambique. In this chapter, objective 3 will be met by analysing the data gathered on scuba divers at Ponta do Ouro. The data is discussed in three sections; firstly, the socio-demographic results, which include aspects such as education, gender, marital status and level of education to name a few. The second section of the results will focus on further analyses to determine divers' travel motives through factor analysis by making use of Oblimin-Kaiser normalisation. In section 3, a one-way analysis of variance (ANOVA) was conducted on the travel motives, after which a hierarchical cluster analysis was performed to identify and describe the clusters according to their motives.

4.2 Section A: Socio-demographic results

This section contains the discussion regarding gender, age, education, occupation, marital status, country of origin, whether it was the respondents' first visit and the number of their previous visits and number of nights staying in the area. The rest of the discussion pertains to how many people the respondents were paying for, level of dive certification, the respondents' preferred diving discipline, including how many years they have been diving, how many dives they have logged and the number of dives they perform per year. The following section discusses the results from the captured data.

4.2.1 Gender

The majority of the respondents were male (64%), while 36% were female, as indicated in Figure 4.1. This is in accordance with the findings of a study done in the Florida Keys by Meisel-Lusby and Cottrell (2008:6), who identified that the majority of scuba divers are male (78%). Geldenhuys *et al.* (2014:98) who conducted research at Sodwana Bay, South Africa, found that 62% of divers visiting Sodwana Bay are male. It is clear from these findings that scuba diving is a male-dominated adventure activity.

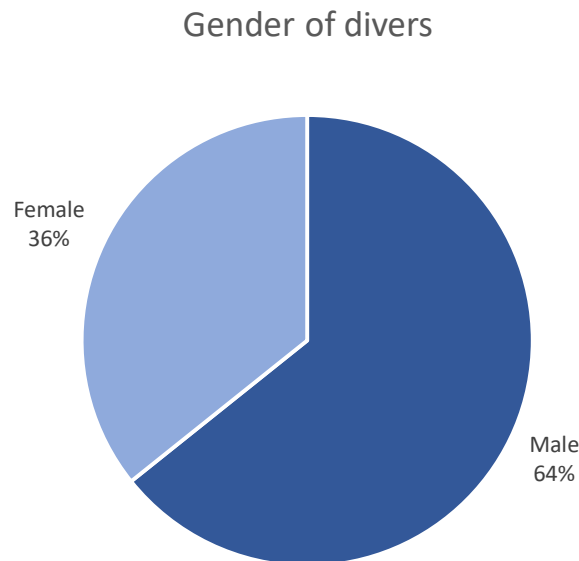


Figure 4. 1: Gender of divers

4.2.2 Age of respondents

As illustrated in Table 4.1, the younger adults between the ages of 20 and 30 years accounted for the highest percentage (40%) and this is in accordance with the study of Giddy (2018) where the majority of the respondents were in the same age group, i.e. 20 to 29 years (66%). The second highest age group was 31 to 40 years (29%), followed by respondents between 41 and 50 years (15%) and divers older than 50 years accounted for 14%. The findings of Seymour (2012) showed that the average scuba diver in Sodwana Bay, South Africa is 34 years of age, which was also found by Meisel-Lusby and Cottrell (2008) at the Florida Keys as well as Schoeman *et al.* (2016). The results of this study, where the average age was 36 years, are therefore in correspondence with these just-mentioned studies.

Table 4. 1: Age of respondents

Age group	Frequency
<20 years	2%
20-30 years	40%
31-40 years	29%
41-50 years	15%
50 + years	14%
Average age	36 years

4.2.3 Education

Regarding the level of education, the majority of the respondents have a degree (36%), diploma (27%) or were postgraduates (19%). This can be compared with the study of Seymour (2012), whose findings show that 32% of the respondents have a diploma or degree and 14% have a post-graduate degree, and those of Bentz *et al.* (2016b), where 62.4% have a university degree (Bachelor’s degree, 8%; and post-graduate degree, 41.3%) and 18% who have finished school. Therefore, one can conclude that scuba divers are well educated.

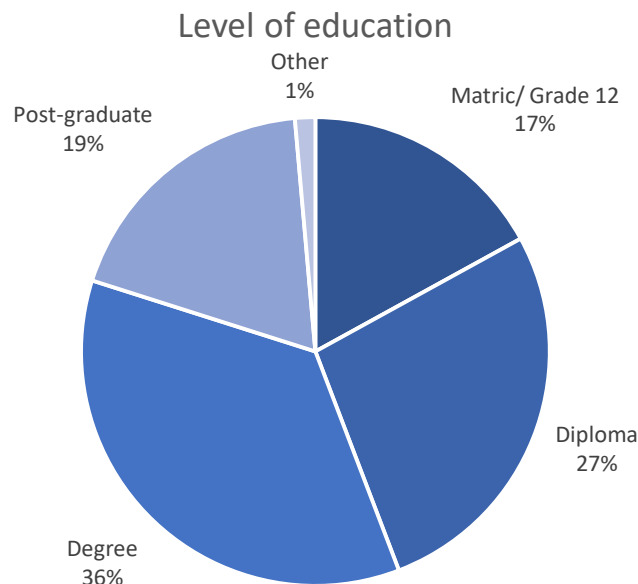


Figure 4. 2: Level of education

4.2.4 Occupation

As seen in Table 4.2, the majority of the respondents work in civil service (43.6%) and these include teachers, technicians, lawyers, developers and nurses to name a few. 9.1% were managers in their field of occupation, and 8.8% of the respondents were self-employed, while students take up 9.8% of the respondents.

Table 4. 2: Respondents' occupation

Occupation	Frequency
Arts	3.7%
Civil service	43.6%
Farmer	1.7%
Manager	9.1%
Retired	1.4%
Self-employed	8.8%
Student	9.8%
Tourism industry	4.7%
Other: Pilot, Wine maker, House wife, Athlete, Au pair, Networker, Researcher	17.2%

4.2.5 Marital status

Fifty-two percent of the respondents were married, followed by 47% who were not married. This is in accordance to the findings of Schoeman *et al.* (2016), who also found that 46% of their respondents were unmarried, with a lower percentage of thirty-nine who were married. Findings of Saayman and Saayman (2018) differed slightly, as results show that 38.2% of the respondents diving in Italy were married, 5.9% were separated and 54.7% were single or not married. Therefore, a large percentage of scuba divers are unmarried.

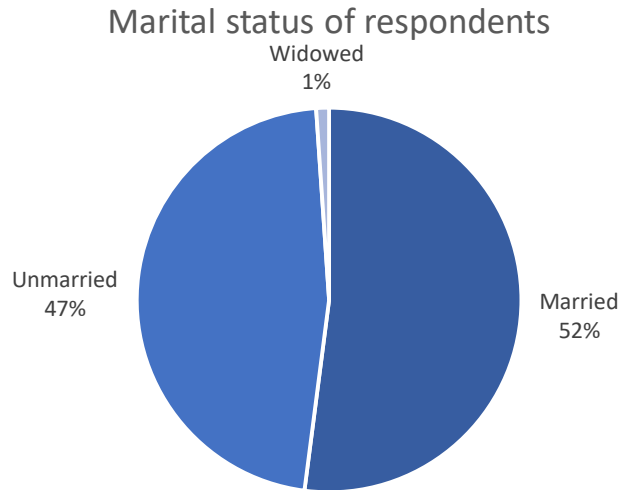


Figure 4. 3: Marital status of respondents

4.2.6 Country of origin

Eighty-one percent (81%) of the respondents reside in South Africa, as indicated below in Figure 4.4, while nine percent (9%) are from European countries such as Austria, France, Germany, the Netherlands, Norway, Portugal, Scotland, Spain and Switzerland. Only four percent (4%) were from countries such as Mexico, the United States of America and Canada.

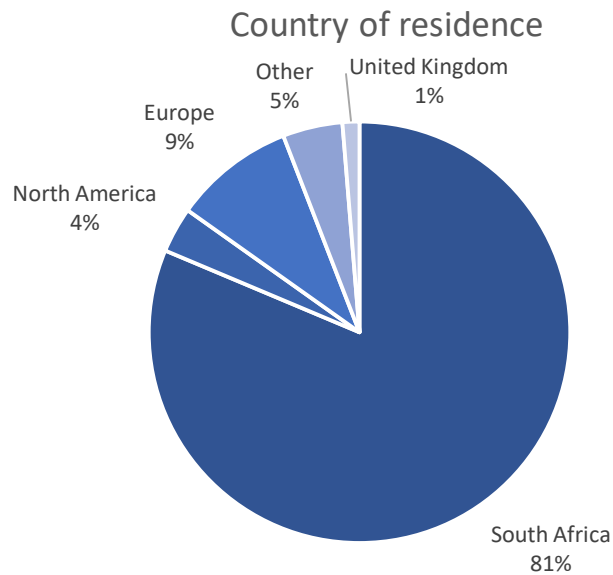


Figure 4. 4: Country of residence

4.2.7 First visit

Fifty-one percent (51%) of the respondents have visited Ponta do Ouro for scuba diving before and will also suggest the dive site to other divers. Forty-nine percent (49%) indicated it was their first time visiting Ponta do Ouro. This can be an indication that a large percentage of divers are loyal to Ponta do Ouro as a diving destination. It also shows that Ponta attracts a large number of new divers. This finding was confirmed by Geldenhuys *et al.* (2014), who indicated that scuba divers have a tendency to be loyal to their favourite dive sites.

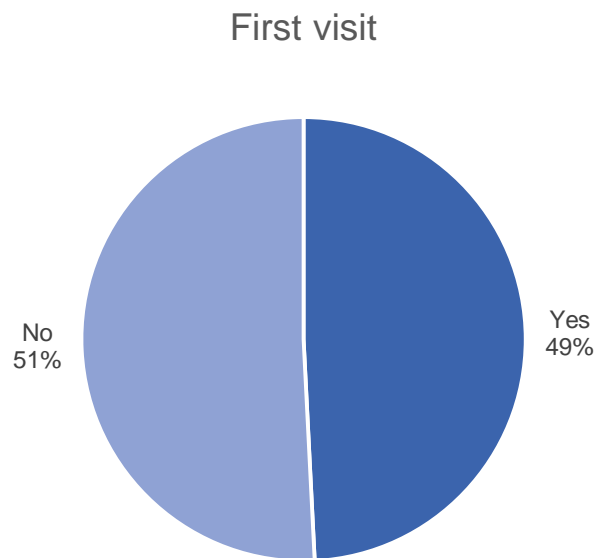


Figure 4. 5: First visit

4.2.8 Number of previous visits

Seventy-nine percent (79%) of the respondents have visited Ponta do Ouro between one and five times before, while only 4% have visited between 11 and 20 as well as 20+ times. The average number of previous visits is high, with seven previous visits, compared to the findings of Schoeman *et al.* (2016), which were 3.9 previous average visits to Sodwana Bay. This again confirms that the divers are loyal to this dive site.

Table 4. 3: Number of previous visits

Number of previous visits	Frequency
1-5	79%
6-10	13%
11-20	4%
20+ visits	4%
Average number of previous visits	7 times

4.2.9 Number of nights in the area

The majority of the respondents stayed anything from one to five nights (64.1%), with only 1% who stayed for more than 15 nights. The average number of nights the respondents spent were 5.4 nights. This is similar to the findings of Seymour (2012), who found that the average number of nights scuba divers stayed in Sodwana Bay (South Africa) is 5.1 nights, which is more than the findings of Saayman and Saayman (2018) of 2.92 nights.

Table 4. 4: Number of nights in the area

Number of nights	Frequency
1-5	64.1%
6-10	29.4%
11-15	5.5%
15+ nights	1%
Average number of nights	5.4 nights

4.2.10 Number of people paying for during the trip

More than half of the respondents were paying for one to three persons (59.5%) during their time of stay, while 0.7% paid for a group of ten people or more and 24.8% of the respondents did not pay for themselves. The average number of people that the respondents paid for was 1.7 and can be compared to the findings of Geldenhuys *et al.* (2014), whose findings show that the group payment size was ranged from one to three people, and two people (1.84) from the findings of Saayman and Saayman (2018).

Table 4. 5: Number of people paying for during the trip

Number of people paying for	Frequency
0 / free trip	24.8%
1-3	59.5%
4-9	15%
10+	0.7%
Average number of people	1.7

4.2.11 Level of certification

The majority of the respondents were open water divers (36%) with the next certification level of advanced divers with 33.5%. The findings of Hammerton (2017) show that 38% of respondents were open water divers and 23.5% advanced divers. 12% of the respondents of this study were a qualified dive master, which means that they can lead a group of divers and 4.1% were instructors themselves, which makes them qualified to train and certify new or level-up divers. Results from Hammerton (2017) also show that 9.8% were qualified dive masters and 8.5% qualified instructors. This shows that the divers have been well trained and have the necessary skills required to participate safely and enjoy their dives.

Table 4. 6: Level of certification

Level of dive certification	Frequency
Open water	36%
Advanced	33.5%
Dive Master	12%
Instructor	4.1%
Other: photographic (1.2%), night (1.5%), cave (0.6%), rescue (0.3%), rebreather (0.3%), free (2.9%), combination (20.5%)	14.4%

4.2.12 Preferred dive discipline

Forty-five percent (45%) of the respondents preferred to practise recreational diving above the other dive disciplines, and 0.4% did not prefer a specific discipline. This can be because Ponta do Ouro does not have shipwrecks to dive and the weather conditions that cannot be controlled have to be perfect for successful night diving. 33.9% of the respondents indicated that they prefer another discipline or a combination of more than one.

Table 4. 7: Preferred dive discipline

Preferred dive discipline	Frequency
Reef / recreational	45%
Drift	1%
Deep	4%
Technical	1.5%
Shark	6.2%
Wreck	8%
Any	0.4%
Other: photographic (1.2%), night (1.5%), cave (0.6%), rescue (0.3%), rebreather (0.3%), free (2.9%), combination (20.5%)	33.9%

4.2.13 Number of years diving

The majority of the respondents have been diving for one to five years (55.3%), whereas 3.7% of the respondents have been diving for over twenty years. 6.4 years were the average number of years the respondents have been diving, and is also significant as it shows further dedication to the sport and is the category (6-10 years) in which the average falls. This is in correspondence with findings of Hammerton (2017), whose results show the average number of years diving for scuba divers in Eastern Australia are seven years. Saayman and Saayman (2018) found that divers visiting the MPA of Portofino have been diving on average for more than ten years; therefore, experienced divers.

Table 4. 8: Number of years diving

Number of years diving	Frequency
<1 year	5.3%
1-5 years	55.3%
6-10 years	20.3%
11-15 years	9.3%
16-20 years	6%
20+ years	3.7%
Average number of years	6.4 years

4.2.14 Numbers of dives logged

Twenty-seven percent (27.9%) of the respondents have logged one to 20 dives and 3.4% of the respondents have between 300 and 500 dives logged; with 11.7% of the respondents having between 100 and 200 dives and 11.4% of divers with over 500 dives logged. The average number of previous dives for the respondent group was 259 dives. Hammerton (2017) suggests that the average numbers of dives logged for scuba divers in Eastern Australia are 213, compared to divers in the MPA of Portofino, Italy, with 401 dives (Saayman & Saayman, 2018).

Table 4. 9: Number of dives logged

Number of dives logged	Frequency
1-20	27.9%
21-40	12.4%
41-60	9.4%
61-80	9.4%
81-100	6.7%
100-200	11.7%
201-300	7.7%
300-500	3.4%
500+ (500-5 000)	11.4%

Average number of dives logged	259 dives
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4.2.15 Number of dives per year

The majority of the respondents do between one and 20 dives per year (60.1%), while 3.2% do more than 100 dives per year. The average number of dives per year is 30.7, and is in correspondence with results by Saayman and Saayman (2018), with an average number of 31.23 dives per year.

Table 4. 10: Number of dives per year

Dives per year	Frequency
1-20	60.1%
21-40	18.1%
41-60	7.8%
61-100	10.7%
100+ (100-300)	3.2%
Average number of dives per year	30.7 dives

4.2.16 Descriptive statistics of scuba diver motives

Respondents were asked to rate their level of motives for diving at Ponta do Ouro on a five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. As indicated in Table 4.11 the majority of the respondents rated their level of motive above neutral as either 'agree' or 'strongly agree', with the aspect *Ponta do Ouro offers beautiful scenic beauty* having the highest mean value (4.12) and *to participate in a diving course* (3.63) with the lowest mean value. The following motives were identified as having the highest mean values:

- Ponta do Ouro offers beautiful scenic beauty (4.12)
- Good weather and climate (4.10)
- Ponta do Ouro has quality beaches (4.10)
- To experience the exotic atmosphere of Ponta do Ouro (4.08)
- To spend time with friends and family (4.08)
- Ponta do Ouro offers a unique diving experience (4.07)
- To dive in a MPA (4.05)
- Dive operators adhere to safety regulations (4.04)
- To experience peace and tranquillity (4.01)

- Diving sites are easy accessible (4.01)
- To rest and relax (4.00)
- To enhance my knowledge as a diver (4.00)
- Diving here is value for money (4.00)

The general response rate of the divers was positive and as indicated in Table 4.11 all mean values range between 3.63 and 4.12, suggesting a relatively small variance between the aspects and also indicating equal importance to the divers.

Table 4. 11: Descriptive statistics of scuba diver motives

Motives	Percentage (%)					Mean	Std. deviation
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
To learn more about specific marine species	1.0	3.3	23.9	51.6	20.3	3.87	0.803
To experience the exotic atmosphere of Ponta	-	0.3	19.2	52.8	27.7	4.08	0.691
To experience peace and tranquillity	1.6	1.3	19.2	50.5	27.4	4.01	0.816
The marine life is well protected in Ponta	0.3	2.0	26.5	47.1	24.2	3.93	0.782
I never know what to expect from each dive	1.0	2.6	29.4	46.4	20.6	3.83	0.816
To rest and relax	0.3	2.6	20.5	50.2	26.4	4.00	0.778
Ponta offers a unique diving experience	-	2.3	15.6	54.5	27.6	4.07	0.720
It was on my 'bucket list' to dive here	2.9	7.2	24.5	40.2	25.2	3.77	1.001

Good weather and climate	-	1.3	16	53.7	29.0	4.10	0.702
Ponta is a world class diving site	-	2.3	25.2	46.4	26.1	3.96	0.778
To escape from routine	0.6	3.9	17.2	51.9	26.3	3.99	0.807
To enhance my knowledge of a diver	0.3	2.6	21.8	46.9	28.3	4.00	0.798
Dive operators adhere to safety regulations	0.7	1.3	18.9	51.5	27.7	4.04	0.759
To socialise with other divers	2.0	4.9	25.2	44.6	23.3	3.82	0.911
Ponta offers good shopping opportunities	6.8	13.4	31.6	31.3	16.9	3.38	1.121
To find relief from everyday tension	1.6	2.6	21.1	47.4	27.3	3.96	0.857
To explore a new destination	1.3	2.6	21.3	46.9	27.9	3.97	0.846
Ponta has quality beaches	-	1.6	17.3	50.2	30.9	4.10	0.734
To dive in a MPA	-	0.7	20.8	51.8	26.7	4.05	0.708
Ponta offers beautiful scenic beauty	-	0.7	16.4	52.8	30.2	4.12	0.691
To meet new people	2.3	9.1	24.8	40.7	23.1	3.73	0.990
To develop my diving skills and abilities	1.0	5.2	21.4	45.1	27.3	3.93	0.883
To participate in a diving course	5.2	7.2	30.3	34.5	22.8	3.63	1.072

To spend time with friends and family	1.6	1.6	16.9	47.1	32.8	4.08	0.839
Diving here is value for money	-	1.9	21.1	48.4	26.6	4.00	0.759
Ponta offers quality restaurants	0.3	6.5	27	49.8	16.3	3.75	0.815
There are a variety of attractions to visit	1.3	10.7	25.4	44.6	17.9	3.67	0.935
Diving sites are easy accessible	0.3	2.3	18.6	53.4	25.4	4.01	0.750

4.2.17 Descriptive statistics of scuba diver loyalty

The respondents were asked to evaluate the following statements according to a five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. Respondents had to evaluate the extent to which certain aspects had an influence on their loyalty to Ponta do Ouro as a scuba diving destination, as indicated in Table 4.12. The highest rated aspect was, *I would recommend others to visit Ponta as a diving site* (4.32) and *Ponta is now my first choice among diving destinations* (3.85), and the following aspects were identified as having the highest mean values:

- I would recommend others to visit Ponta as a diving site (4.32)
- My choice to dive at Ponta was a wise one (4.31)
- I enjoyed my dive/s (4.31)
- I will visit Ponta in the future (4.30)
- The diving experience made me happy (4.30)
- I will make use of this dive operator again in the future (4.28)
- I feel safe with the dive operator (4.27)
- The dive operator has the resources & experience to do a good job (4.26)
- I am in general satisfied with my diving experience (4.26)

Respondents' evaluation regarding their loyalty was positive in general and as indicated in Table 4.12 the majority of the respondents rated their level of motive above neutral as either

'agree' or 'strongly agree'. With mean values ranging between 4.32 and 3.85, this suggests a small variance between the aspects and also indicating equal importance to the divers.

Table 4. 12: Descriptive statistics of scuba diver loyalty

Loyalty	Percentage (%)					Mean	Std. deviation
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
I would recommend others to visit Ponta as a diving site	0.3	-	9.4	47.6	42.7	4.32	0.669
I will visit Ponta in the future	-	0.3	11.4	46.3	42	4.30	0.677
Ponta is now my first choice among diving destinations	1.0	5.2	27.5	40.2	26.1	3.85	0.902
I will say positive things about this diving site	-	1.3	15.7	46.7	36.3	4.18	0.736
I would recommend others to use this dive operator	-	1.0	13.4	48.2	37.5	4.22	0.707
I will make use of this dive operator again in the future	-	1.3	10.1	48.0	40.5	4.28	0.695
This dive operator is now my first choice among dive operators	0.3	3.3	16.4	46.6	33.4	4.10	0.808

I will say positive things about this dive operator	-	1.0	16.0	42.8	40.2	4.22	0.744
The information offered by the dive operator/s is honest	-	0.3	15.1	45.7	38.8	4.23	0.708
In general the dive operator/s fulfils their commitment	0.3	0.3	15.7	45.4	38.2	4.21	0.735
The dive operator is concerned about their divers' needs	-	1.6	12.1	49.0	37.3	4.22	0.716
The dive operator has the resources & experience to do a good job	0.3	2.0	9.5	48.2	40.0	4.26	0.735
I feel safe with the dive operator	-	2.3	10.5	45.4	41.8	4.27	0.738
My choice to dive at Ponta was a wise one	-	-	11.1	46.2	42.6	4.31	0.663
I enjoyed my dive/s	-	0.3	11.4	44.8	43.5	4.31	0.682
The diving experience made me happy	-	0.7	12.7	42.5	44.1	4.30	0.711
The dive/s was an unique experience	-	2.6	18.0	43.0	36.4	4.13	0.796

Diving at Ponta fulfilled my expectations	-	1.0	13.7	47.4	37.9	4.22	0.713
All contact made with the dive operators	-	1.3	15.7	46.2	36.7	4.18	0.738
I am in general satisfied with my diving experience	-	1.0	13.5	44.4	41.1	4.26	0.722

The next section will focus on travel motives and loyalty of scuba divers obtained from the factor analysis that has been conducted.

4.3 Section B: Travel motives and loyalty of scuba divers

This section discusses the results obtained from the factor analysis of travel motives and loyalty of scuba divers at Ponta do Ouro. According to Pietersen and Maree (2007:219), a factor analysis' objective is to identify the items that are answered similarly, measuring the same factor and putting them together in clusters according to their characteristics.

4.3.1 Factor analysis on the travel motives of scuba divers

In order to determine the travel motives of scuba divers, a factor analysis was conducted by means of a principal component analysis with Oblimin-Kaiser normalisation. Five factors were identified from 28 concepts, labelled *destination attributes*, *dive site attributes*, *personal interest*, *socialise and relaxation* and *ease of access*. These factors accounted for 59.53% of the total variance explained. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.924, which is highly acceptable and the Cronbach's alpha coefficient range from 0.699 to 0.886. This indicates that all five factors have an adequate construct reliability ($\alpha > 0.6$) (Field, 2009; Hair *et al.*, 1995; Pietersen & Maree, 2007:216). The inter-item correlations range from 0.413 to 0.471 and the mean values from 3.7284 to 4.0373 with Factor 1 as the lowest and Factor 5 as the highest. Therefore, as indicated in Table 4.13 and discussed below, all factors are statistically acceptable and are a summation of the most important reasons for scuba divers visiting Ponta do Ouro.

Factor 1: Destination attributes

This factor is made up of *Ponta offers good shopping opportunities, there are a variety of attractions to visit, Ponta offers quality restaurants, to meet new people, to participate in a diving course, to socialise with other divers, it was on my "bucket list" to dive here, I never know what to expect from each dive and to explore a new destination*. The Cronbach's alpha is 0.886 and with a mean value of 3.7284, this factor is ranked as the least important motivation for scuba divers when visiting Ponta do Ouro.

Factor 2: Dive site attributes

Dive site attributes consist of the following constructs: *The marine life is well protected in Ponta, to dive in an MPA, Ponta offers beautiful scenic beauty, Ponta is a world-class diving site and to learn more about specific marine species*. These factors relate to findings of Geldenhuys *et al.* (2014) in terms of scuba diving at a specific dive site. The mean value for this factor is 3.9858 and the Cronbach's alpha is 0.793, making this factor the fourth most important factor for scuba divers.

Factor 3: Personal interest

This factor comprises the following: *to enhance my knowledge as a diver, to escape from routine, to develop my diving skills and abilities, dive operators adhere to safety regulations, good weather and climate and Ponta offers a unique diving experience*. Motives to scuba dive are similar to some identified by Meisel-Lusby and Cottrell (2008), such as “to develop skills”, “for relaxation”, “to experience tranquillity” and “to forget pressures of daily work”, which are similar to the motive *escape from routine*. “Personal challenge” as motive has also been identified by Todd, Graefe and Mann (2002). This factor scores a Cronbach’s alpha of 0.842 and a mean value of 4.0238. This is the third most important factor for scuba divers when visiting Ponta do Ouro as a dive destination.

Factor 4: Socialise and relaxation

Socialise and relaxation as a factor consists of constructs including, *to rest and relax, to experience peace and tranquillity, to find relief from everyday tension, to experience the exotic atmosphere of Ponta and to spend time with friends and family*. The mean value for this factor is 4.0252 and the Cronbach’s alpha is 0.777, making this factor the second most important factor for the divers. This factor has also been identified as a travel motive among scuba divers done in other research studies (Bentz *et al.*, 2016b; Geldenhuys *et al.*, 2014).

Factor 5: Ease of access

This factor is made up of three constructs, namely *diving sites are easy accessible, diving here is value for money and Ponta has quality beaches*. This factor is the most important factor for scuba divers and has a Cronbach’s alpha of 0.699 and mean value of 4.0373, which is highly acceptable. “Accessibility to the site is good” has been identified by Seymour (2012:104), but from the findings of Bentz *et al.* (2016b), Geldenhuys *et al.* (2014), and Meisel-Lusby and Cottrell (2008), there is little evidence of ease of access (diving sites are easy accessible, diving here is value for money and quality beaches) being a contributing factor as motive for visiting a specific area for diving.

Table 4. 13: Factor analysis for travel motives of scuba divers

Factor label	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Destination attributes	Dive site attributes	Personal interest	Socialise and relaxation	Ease of access
Ponta offers good shopping opportunities	0.832				
There are a variety of attractions to visit	0.743				
Ponta offers quality restaurants	0.651				
To meet new people	0.628				
To participate in a diving course	0.605				
To socialise with other divers	0.495				
It was on my "bucket list" to dive here	0.474				
I never know what to expect from each dive	0.454				
To explore a new destination	0.398				
The marine life is well protected in Ponta		0.688			
To dive in a MPA		0.557			
Ponta offers beautiful scenic beauty		0.547			
Ponta is a world class diving site		0.519			
To learn more about specific marine species		0.424			

To enhance my knowledge as a diver			-0.689		
To escape from routine			-0.686		
To develop my diving skills and abilities			-0.663		
Dive operators adhere to safety regulations			-0.649		
Good weather and climate			-0.479		
Ponta offers a unique diving experience			-0.454		
To rest and relax				-0.732	
To experience peace and tranquillity				-0.662	
To find relief from everyday tension				-0.520	
To experience the exotic atmosphere of Ponta				-0.490	
To spend time with friends and family				-0.474	
Diving sites are easy accessible					-0.656
Diving here is value for money					-0.577
Ponta has quality beaches					-0,401
Cronbach alpha	0.886	0.793	0.842	0.777	0.699
Mean value	3.7284	3.9858	4.0238	4.0252	4.0373
Inter-item correlation	0.464	0.436	0.471	0.413	0.436

**Extraction method: Principal component analysis with Oblimin-Kaiser normalisation*

***Total variance explained: 59.53%*

4.3.2 Factor analysis on scuba divers' loyalty

To determine the loyalty of scuba divers to Ponta do Ouro, a factor analysis was conducted with Oblimin-Kaiser normalisation, and from 20 concepts, two factors were identified, namely *satisfaction and intention to return* and explained a total variance of 61.049% as indicated in Table 4.14. The Kaiser-Meyer Olkin (KMO) measure of sampling adequacy was 0.994 and the Cronbach's alpha coefficient ranges between 0.686 and 0.957. Both of the values are above average ($\alpha > 0.60$), which makes the construct reliability adequate (Pietersen & Maree, 2007:216). Therefore, all factors described below are statistically acceptable (Field, 2009; Hair *et al.*, 1995 & Pietersen & Maree, 2007:216).

Factor 1: Satisfaction

This factor comprises 17 concepts, namely *the dive operator is concerned about divers' needs, the dive operator has the resources & experience to do a good job, in general, the dive operator/s fulfil their commitment, all contact made with the dive operators and staff were satisfactory, information offered by the operator/s is honest, my choice to dive at Ponta was a wise one, I feel safe with the dive operator, I will say positive things about the dive operator, in general I am satisfied with my diving experience, the diving experience made me happy, I enjoyed my dive/s, diving at Ponta fulfilled my expectations, I will make use of this operator again in the future, the dive/s was a unique experience, I would recommend others to use this dive operator, I will say positive things about this diving site and this dive operator is now my first choice among dive operators*. This factor has a Cronbach's alpha of 0.957 and a mean value of 4.2293. The findings are in comparison to the factor labelled 'Satisfaction' in the research study of motivations and expectations of scuba divers in Florida Keys conducted by Meisel-Lusby and Cottrell (2008).

Factor 2: Intention to return

Intention to return as a factor consists of three concepts, namely *Ponta is now my first choice among diving destinations, I will visit Ponta in the future and I would recommend others to visit Ponta as a diving site*. The mean value for this factor is 4.1585 and a Cronbach's alpha of 0.686. From the findings of Bentz *et al.* (2016b), Dearden, *et al.* (2006), Edney (2012), Geldenhuys *et al.* (2014) and Meisel-Lusby and Cottrell (2008), there is little evidence that these identified motivations are a contributing factor as to why scuba divers visit a dive site.

Table 4. 14: Factor analysis on scuba diver loyalty

Factor label	Factor 1	Factor 2
	Satisfaction	Intention to return
The dive operator is concerned about divers' needs	0.922	
The dive operator has the resources & experience to do a good job	0.883	
In general, the dive operator/s fulfil their commitment	0.876	
All contact made with the dive operators and staff were satisfactory	0.829	
Information offered by the operator/s is honest	0.815	
My choice to dive at Ponta was a wise one	0.804	
I feel safe with the dive operator	0.789	
I will say positive things about the dive operator	0.770	
In general I am satisfied with my diving experience	0.728	
The diving experience made me happy	0.696	
I enjoyed my dive/s	0.663	
Diving at Ponta fulfilled my expectations	0.656	
I will make use of this operator again in the future	0.656	
The dive/s was an unique experience	0.631	
I would recommend others to use this dive operator	0.617	
I will say positive things about this diving site	0.600	
This dive operator is now my first choice among dive operators	0.552	

Ponta is now my first choice among diving destinations		0.747
I will visit Ponta in the future		0.668
I would recommend others to visit Ponta as a diving site		0.558
Cronbach alpha	0.957	0.686
Mean value	4.2293	4.1585
Inter-item correlation	0.568	0.456

**Extraction method: Principal component analysis with Oblimin-Kaiser normalisation*

***Total variance explained: 61.049%*

From the above mentioned, it can be concluded that travel motives for scuba divers to Ponta do Ouro correlate well with research done on scuba divers' travel motives from Bentz *et al.* (2016b), Geldenhuys *et al.* (2014), Meisel-Lusby and Cottrell (2008), Kler and Tribe (2012), Lucrezi *et al.* (2013:55), Todd *et al.* (2002), to other diving destinations in the world. Lucrezi *et al.* (2013:55) state that scuba diving is characterised by a mixture of extrinsically- and intrinsically-related purposes and these are: challenge, excitement, social interaction, fun, adventure, experiencing and viewing marine life, learning, stature, escape and relaxation. With mean values so close to each other it can be concluded that scuba divers take into consideration the destination attributes, dive site attributes, personal interest, socialise and relaxation, and ease of access when visiting a dive destination. Therefore, all five factors must be considered important travel motives. As for the divers' satisfaction, the most important concepts are the fact that the dive operators are concerned about the divers' needs and that the operators use their resources well to do a good job and fulfil their commitment to the divers. This contributes to the loyalty of the scuba divers, making them return in the future.

The next section will focus on the results obtained from the cluster analysis of the scuba diving participants.

4.4 Section C: Results obtained from the cluster analysis

This section discusses results from the cluster analysis of the scuba diving participants and contributes to achieving objective 3 and aims to draw conclusions and make recommendations in the sector of scuba diving tourism. A cluster analysis is used to identify homogenous groups called clusters. The different clusters are similar in the characteristics they share and allow the researcher to identify the segments as well as the differences between them. There are three popular approaches, which are easily computed using SPSS, in market research, namely hierarchical method, partitioning method (*k*-means) and two-step clustering (Sarstedt & Mooi, 2014:275). The hierarchical method was used for the purpose of this study, and during this method, clusters are merged according to their similarity. It starts with each object representing its own cluster, then the two clusters that are most similar are merged together at the bottom of the hierarchy to form a new cluster. Step by step, more pairs of clusters are merged and formed on a higher level in the hierarchy (Sarstedt & Mooi, 2014:281).

4.4.1 Cluster analysis

A hierarchical cluster analysis was conducted using Ward's method of Euclidian distances and Turkey's honest significance test. As indicated in Figure 4.6, a five-cluster solution was selected, and the results were used to identify these clusters, as well as the significant differences ($p < 0.05$). This identifies groups with similar profiles of motivation strengths.

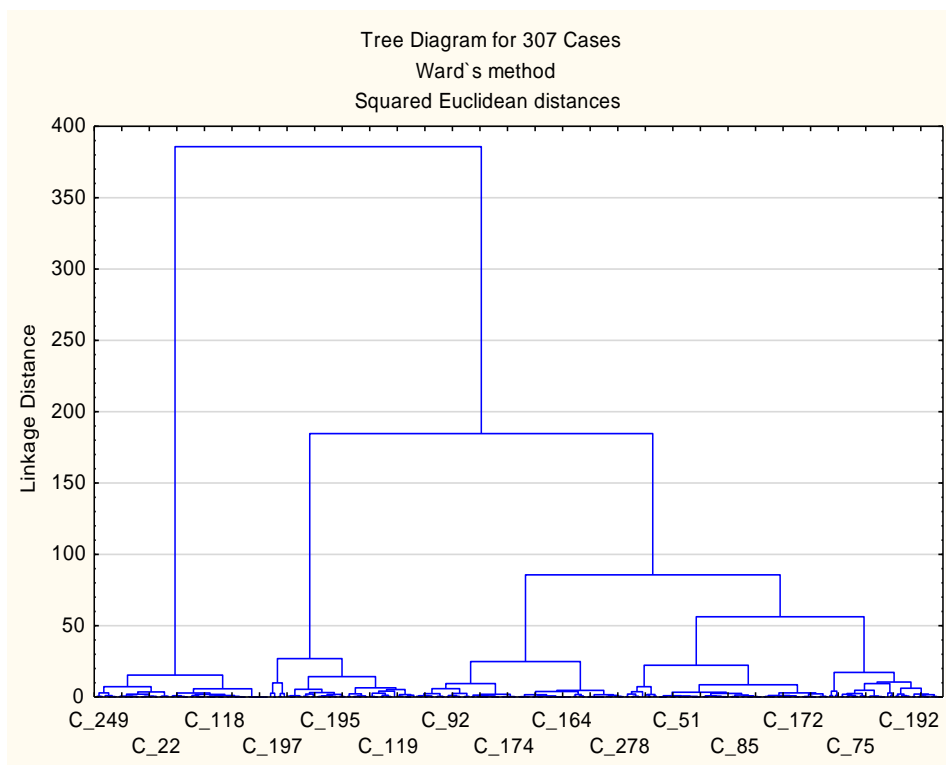


Figure 4. 6: Five-cluster solution: Ward's method

The first cluster, named *Advanced loyal divers*, identifies *satisfaction* (4.4316) and *socialisation and relax* (4.4314) as the most important factors and the *destination attributes* (3.1473) factor as the least important factor. The *advanced loyal divers* are mostly male (69.8%), originate from South Africa (90.7%) and are also married (51.2%). These visitors tend to stay for almost a week (6.38) and pay for two people (2.38) (Table 4.15). They are *loyal divers*, because they have been diving for an average of nine years (9.138), have logged 102 dives and do approximately 16 dives per year (Table 4.16). It also was not their first visit to Ponta do Ouro (74.4%), and they have an advanced diver qualification and are therefore referred to as *advanced loyal divers*. This indicates that the divers like to visit Ponta do Ouro for the scuba diving, while enjoying each other's company and the relaxation thereof, while what the town has to offer is not as important for them. From cluster analyses by Saayman and Saayman (2018), Smith *et al.* (2014) and Bentz *et al.* (2016b), little evidence of satisfaction was found; however, satisfaction (Meisel-Lusby & Cottrell, 2008) and socialisation (Bentz *et al.*, 2016a; Meisel-Lusby & Cottrell, 2008:7-8) were identified.

To attract the advanced loyal diver, it is suggested having a place where divers can get together after a dive, or between dives, to relax and/or socialise with some beverages available (as some operators already do), but perhaps with the possibility of something to eat, only found locally, maybe even start a tradition of something specific to eat and or drink (this can contribute to all the clusters that identified socialisation and relaxation as an important factor). Because socialisation is also an important factor for this cluster, another suggestion is creating a place for a photo booth or photo corner, unique to the dive operator, where visitors can take their picture, which can contribute to this factor.

The second cluster, *Novice enthusiast diver*, rated *intention to return* (4.3117) as the highest contributing factor; *satisfaction* (4.3096) with dive operators as the second highest contributing factor for visiting Ponta do Ouro; and *socialisation and relax* (4.0622) as the lowest contributing factor (Table 4.16). This is because these divers were visiting Ponta do Ouro for the first time (52%), are mostly male (60.3%) and have open water dive qualifications (37.2%) and originate from South Africa (90.7%) (Table 4.15). The novice enthusiasts are 36.48 years of age, stay for five nights and also pay for two people (1.61) during their time of stay. They have been diving for five years, have logged an average of 167.61 dives, and the majority complete 24 dives per year (Table 4.16), which indicates that they are enthusiastic about scuba diving. Little evidence of intention to return is found from cluster analysis research by Saayman and Saayman (2018), Smith *et al.* (2014), Bentz *et al.* (2016b) and Meisel-Lusby and Cottrell (2008); however, satisfactory items include friendly staff members, good equipment, and competent staff.

It is suggested to comprise a special diving offer for the enthusiast diver. An example can be a “nine to five” special, where divers who stay for five nights and do eight or nine dives during their time of stay, will get x-percent discount or an extra dive. Because satisfaction with the dive operator is an important factor, introducing a loyalty system can also be of assistance where divers get an x-amount discount for every x-number of dives they do with the specific operator, or the loyalty system can work on the same principle than those of a Clicks club-card or Pick n Pay smart shopper. The loyalty card (or point system) should be unique to the dive operator.

The third cluster is mostly male divers (63.5%), with a degree (45.1%), and are also married (47.3%), originating mostly from South Africa (81.1%) and work in civil service (45.9%), are named *Novice participant diver*. This name was allocated to this specific cluster, because these divers have an open water (35.1%) diving qualification and were visiting Ponta do Ouro for the first time (64.8%), as indicated in Table 4.15. As seen in Table 4.16, they have only been diving for four years, which is the shortest period of time compared to the other clusters. They are 36.61 years of age, spend five nights (5.33) in the area, while also paying for two people (1.58). The novice participants are completing 28 dives (28.28) per year and have logged an average of 118.08 dives. *Satisfaction* (3.9291) with operators and *intention to return* (3.8153) were the highest-rated factors, while *destination attributes* (2.9256) rated the lowest (Table 4.16). This indicates that divers were satisfied with the dive operator and want to return to Ponta do Ouro in the future to scuba dive. Meisel-Lusby and Cottrell (2008) identified satisfaction among divers, which includes friendliness of staff and feeling safe.

To attract divers of this cluster, it is recommended to put a special offer together for divers who wish to level-up their diving skills, which works on the same principal as a Discover Scuba Diving and Open Water qualification works, which operators already have. Another suggestion to attract these divers is to create a project, where they make use of voluntary divers as extra help. The project can be based either on a research principle, conservation principle or both, where the participation of divers contributes to the project. Projects will work under the go-ahead of reserve authorities and can be anything from tagging and collecting information on certain fish species (whales or turtles as well), to coral conservation.

The fourth cluster named *Advanced fanatic diver* indicated the lowest scores for all factors. Table 4.16 identifies participants with an average age of 38.11 years, also staying for five nights (4.79) and are paying for two people (1.80). These divers have been diving for 11 years (10.569), have logged 708 dives on average and do 46 dives per year (Table 4.16). This was not their first visit, with 63.5% who have visited Ponta do Ouro before and are advanced divers (39.6%), indicating that these are experienced and skilled divers (Table 4.15). Once again,

the two factors of *satisfaction* (3.8812) and *intention to return* (3.7372) rated the highest, with *destination attributes* (2.9256) as the least important contributing factor, indicating that these are people who come to Ponta do Ouro for the scuba diving. The majority of the participants are male (71.7%), are married (41.5%), have a diploma (35.4%) and also work in civil service (32.1%), and compared to the other clusters, this cluster also originates from South Africa, but with the lowest percentage of 69.8 %. Divers from this cluster may also contain dive masters, instructors and other specialty divers, as well as diving fanatics from international origin. This cluster can be seen as those divers who visit the dive destination and just want to dive and can be identified with the “Sharks and manta rays” cluster with active and committed divers, identified by Bentz *et al.* (2016b), where the tourists just want to dive and enjoy the presence of marine life.

A loyalty system is also suggested for the advanced fanatic diver, as well as the “nine to five” type of special offer. Because these divers spend more time under water than the others, a different kind of special offer can be introduced for them. Divers who have logged more than an x-number of dives and can prove it, for example, more than 600 dives, can either get a discount or a free dive. Once again, the detail of the suggestion is the operator’s choice. Working with reserve authorities and getting their approval, to lower a shipwreck in the Ponta do Ouro bay (with the bottom) to be at a maximum depth of 30m, making this an advanced dive and a new attraction for diving. If the shipwreck is approved, it will also serve as a type of artificial reef over time.

Novice fanatic diver, the fifth cluster, ranked *socialisation and relax* (4.7483) and *personal interest* (4.7119) as two factors that stood out the most, with *destination attributes* (4.5857) as the lowest factor. Therefore, high value is placed on enjoying each other’s company and the relaxation effect of scuba diving, enhancing diving skills and abilities and to be part of the unique experience diving at Ponta. They are open water (39.6%) qualified divers, visiting Ponta do Ouro for the first time. Even though they are only open water divers, they are classified as fanatic divers because they have been diving for five and a half, almost six years (5.536), have logged 317.58 dives and complete quite a number of dives per year (40.84) (Table 4.16). The novice fanatics are once again male (57.6%), have a diploma (37.9%) and work in civil service (45.8%). They are a balanced cluster regarding marital status with 45.8% being married as well as 45.8% being single and come from South Africa (74.6%) (Table 4.15). Furthermore, participants are 36 years of age, tend to stay for almost a week, six nights (5.68) and only pay for themselves (1.38) (Table 4.16). Findings from this cluster, such as socialise, identify with the “Socialisers” cluster from Bentz *et al.* (2016b), who also consist mainly of active and committed divers.

For the divers who indicated socialisation and relax as a highly important factor such as this cluster, a suggestion for operators is to create a pin board system, and there can be more than one board, for example the early morning dives and dives after ten o'clock. This is a board with all the reefs in the reserve, with colour coded pins of fish species, pinned on each reef, indicating the most common species found at that specific reef, or expected species to be found, and rare sightings (such as a pineapple fish or whaleshark). The same suggestion is given in cluster one, the advanced loyal diver, because these participants are fanatic divers, but only novice, once again, creating an offer for divers who wish to level-up their diving skills. This offer can work on the same principal as a Discover Scuba Diving and Open Water qualification works. The goal of the suggestions is to enhance visitor enjoyment, stir up the need in divers to do one or more dives extra during their stay, increase repeat visitation and to encourage divers to keep participating in the sport of scuba diving.

From the results above, it is clear that all the clusters are predominantly male with an average age in their thirties, married, from South Africa and working in civil service. Divers tend to stay for just under a week and can be interpreted as either families or friends, and it was also noticed by the researchers while conducting the research that diving schools were bringing first-time dive students to Ponta do Ouro. The cluster analysis also shows a strong relation between first-time visitors and diver certification (Table 4.15). In all the clusters where it was the participants' first visit (clusters 2, 3 and 5), the divers had an open water qualification, whereas in clusters 1 and 4, the divers are return visitors and had an advanced diver (or higher) qualification, indicating that they are skilled and competent divers. The factors of *satisfaction* (with dive operators), *intention to return* and *socialisation and relax* rated the highest among participants, indicating that participants feel safe with the dive operator, feel that they received quality service, enjoyed their dives with the operator they made use of, would suggest it to other divers and have strong intentions to return in the future. They also enjoy the atmosphere of friends and family being together, share diving, find relief from their everyday tension, experience peace and tranquillity, as well as the atmosphere of Ponta.

Table 4. 15: Cross-tabulation with Ward's method results for scuba divers at Ponta do Ouro

	Cluster 1 Advanced loyal divers	Cluster 2 Novice enthusiast diver	Cluster 3 Novice participant diver	Cluster 4 Advanced fanatic diver	Cluster 5 Novice fanatic diver	Pearson's Chi-square	Sig p-value
Gender	Male: 69.8%	Male: 60.3%	Male: 63.5%	Male: 71.7%	Male: 57.6%	3.496	0.478
Education	Matric 33.3%	Degree 45.8%	Degree 45.1%	Diploma 35.4%	Diploma 37.9%	39.128	0.001 *
Marital status	Married: 51.2%	Married: 42.3%	Married: 47.3%	Married: 41.5%	Married: 45.8% Single: 45.8%	23.469	0.492
Occupation	Civil service: 30.2%	Civil service: 46.2%	Civil service: 45.9%	Civil service: 32.1 %	Civil service: 45.8%	58.370	0.030 *
Country	SA: 90.7%	SA: 89.7%	SA: 81.1%	SA: 69.8%	SA: 74.6%	19.290	0.082
First visit	No: 74.4%	Yes: 52%	Yes: 64.8%	No: 63.5%	Yes: 55.2%	20.899	0.001 *

Dive certification	Advanced: 39.9%	Open Water: 37.2%	Open Water: 35.1%	Advanced: 39.6%	Open Water: 39.6%	40.455	0.145
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Table 4. 16: ANOVA and Turkey's post hoc multiple comparison results for scuba divers at Ponta do Ouro with effect sizes

	Cluster 1 Advanced loyal diver	Cluster 2 Novice enthusiast diver	Cluster 3 Novice participant diver	Cluster 4 Advanced fanatic diver	Cluster 5 Novice fanatic diver	F-ratio	Sig	1 & 2	1 & 3	1 & 4	1 & 5	2 & 3	2 & 4	2 & 5	3 & 4	3 & 5	4 & 5
Age	34.56	36.48	36.61	38.11	36.02	0.454	0.769	0.16	0.16	0.27 **	0.12	0.01	0.12	0.04	0.11	0.05	0.16
Nights in area	6.38	5.33	5.11	4.79	5.68	1.725	0.144	0.32 **	0.38 **	0.48 **	0.19	0.07	0.16	0.09	0.10	0.15	0.24 **
People paying for	2.38	1.61	1.58	1.80	1.38	2.040	0.089	0.39 **	0.40 **	0.29 **	0.51 ***	0.02	0.10	0.12	0.12	0.11	0.23 **

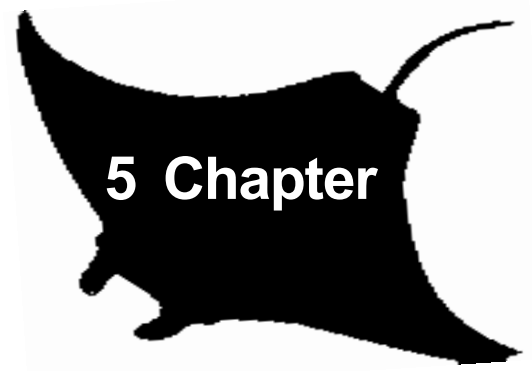
Years diving	9.138	5.219	4.088	10.569	5.536	9.870	0.001 *	0.48 ***	0.61 ***	0.14	0.44 **	0.21 **	0.52 ***	0.06	0.63 ***	0.29 **	0.49 ***
Dives logged	101.75	167.61	118.08	708.38	317.58	7.099	0.001 *	0.11	0.09	0.49 ***	0.30 **	0.08	0.44 **	0.21 **	0.47 ***	0.27 **	0.31 **
Diver per year	15.65	24.31	28.28	46.13	40.84	4.869	0.001 *	0.31 **	0.39 **	0.57 ***	0.52 ***	0.12	0.41 **	0.34 **	0.33 **	0.26 **	0.10
Destination attributes	3.1473	4.1077	3.5578	2.9256	4.5857	206.48 6	0.001 *	1.92 ****	0.82 ****	0.44 **	2.87 ****	1.91 ****	2.80 ****	1.43 ****	1.50 ****	3.07 ****	3.93 ****
Dive site attributes	4.0233	4.1391	3.7723	3.2726	4.6644	127.26 7	0.001 *	0.26 **	0.57 **	1.71 ****	1.46 ****	0.94 ****	2.22 ****	1.35 ****	1.42 ****	3.36 ****	3.97 ****
Personal interest	3.9186	4.3013	3.7230	3.3553	4.7119	123.74 5	0.001 *	0.80 ****	0.41 **	1.17 ****	1.65 ****	1.79 ****	2.05 ****	1.27 ****	0.80 ****	3.07 ****	2.93 ****
Social & relax	4.4314	4.0622	3.5973	3.4340	4.7483	158.40 7	0.001 *	0.94 ****	2.13 ****	2.11 ****	0.81 ****	1.31 ****	1.33 ****	3.12 ****	0.34 **	3.24 ****	2.78 ****

Ease of access	4.1512	4.2137	3.8063	3.3270	4.6497	82.387	0.001 *	0.15	0.81 ****	1.57 ****	1.17 ****	1.09 ****	1.69 ****	1.14 ****	0.91 ****	2.20 ****	2.52 ****
Satisfaction	4.4316	4.3096	3.9291	3.8812	4.6692	29.402	0.001 *	0.22 **	0.90 ****	0.94 ****	0.42 **	0.75 ****	0.73 ****	0.84 ****	0.08	1.46 ***	1.35 ****
Intention to return	4.3643	4.3117	3.8153	3.7372	4.6215	35.094	0.001 *	0.11	1.07 ****	0.07 ****	0.52 ***	0.97 ****	0.98 ****	0.66 ***	0.13	1.57 ***	1.51 ****

4.5 Conclusion

The focus of this chapter was to analyse the results obtained from the quantitative research conducted and this was done by surveys conducted at the different dive operators in Ponta do Ouro. Socio-demographic results identified that the average scuba diver is 36 years old, with a degree and is mostly employed in civil service, originating from South Africa and has an open water qualification. Furthermore, five clusters were identified according to the motives, namely advanced loyal diver, novice enthusiast diver, novice participant diver, advanced fanatic diver and novice fanatic diver. The cross-tabulation and ANOVA results also suggest differences between the clusters based on their dive qualification and motives for diving.

Per conclusion, this relates with the goal of this study of the segmentation of scuba divers according to their motives, and can be used by operators to improve (target) marketing.



“The best way to observe a fish is to become a fish” - Jacques Yves Cousteau

Conclusions and recommendations

5.1 Introduction

The goal of the study was to conduct a motivation-based segmentation of scuba divers at Ponta do Ouro, and Chapter 5 aims to provide the conclusion and recommendation of the results of this study according to the objectives set in Chapter 1.

Objectives 1 and 2 aimed at conducting a literature analysis on the relevant topics. Marine tourism and scuba diving, as an objective, were achieved in Chapter 2, and travel motives along with travel motives as a segmentation basis were met in Chapter 3. To discuss and formulate a clear understanding of the mentioned concepts, relevant literature was identified and the objectives were met.

Objective 3 was achieved in Chapter 4 by collecting primary data and conducting a survey, where the results were analysed and discussed in three sections, namely socio-demographic profile, factor analysis on travel motives and scuba diver loyalty, and thirdly, a cluster analysis according to the motives. Scuba divers at the different dive operators in Ponta do Ouro were approached before or after their dive and asked to complete a questionnaire after their dives, pertaining to their travel motives and loyalty to Ponta do Ouro as a diving destination.

Objective 4 was the last objective and is met in this chapter. Its aim is to draw up conclusions regarding the findings and to make recommendations pertaining to the literature review and to identify comparisons or differences between the literature and results. Furthermore, recommendations for future studies and research will be revealed.

The purpose of this chapter is, therefore, to draw conclusions on the empirical results and literature discussed; the importance and limitations of the research will be noted, as well as recommendations to the field of marine tourism and future research.

5.2 Conclusions regarding the research

The sub-sections below discuss conclusions that can be drawn from the literature review as well as the empirical results. Conclusions regarding marine tourism and scuba diving are drawn first; secondly, conclusions on travel motives and market segmentation; and lastly, of empirical results.

5.2.1 Conclusions regarding the literature analysis on marine tourism and scuba diving

This section provides the most important conclusions from Chapter 2, i.e. the literature analysis on marine tourism and scuba diving.

- The marine environment is one of the tourism industry's largest components, and while only just one sector in the industry, it is of significant value (c.f. 2.1).
- Marine tourism is defined as those recreational activities that involve travelling from one's place of residence to a place with a primary focus on the marine environment (waters that are saline and tide-affected) (c.f. 2.1).
- The industry has developed and expanded from focusing on the four 'S' slogan of tourism, namely sun, sea, sand and sex (c.f. 2.2).
- Marine tourism comprises different sectors, namely, aquatic, beach, cruise, island, marine ecotourism and marine events (c.f. 2.2).
 - Aquatic tourism: Moved from only showcasing parts of the underwater world to conservation, education and research as well.
 - Beach tourism: Is the most popular form of marine tourism and comprises sun, sand and surf.
 - Cruise tourism: Multi-centre holiday, identified as "floating entertainment centres".
 - Island tourism: Travelling to an island to participate in marine activities, relaxation and rejuvenation.
 - Marine ecotourism: Responsible travelling to natural marine environments, enjoying water resources and supporting conservation efforts.
 - Marine events: Business, sport or social events taking place in marine settings.
- The marine environment is a perfect host for activities, in, under or on the water, which is seen as a form of recreation, with people engaging in different activities in their free time (c.f. 2.2.1).
- These activities can be divided into four categories, namely water-based: motorised, water-based: non-motorised, shore-based and non-specialist-leisure pursuits (c.f. 2.2.1).
- Exploring of the underwater world, centuries ago, where people originally were diving for food, pearls and sponges (c.f. 2.3.1).

- Scuba diving started in the 16th century, when a diving bell was stationed below the surface, where people used captured air to breathe. The development of scuba diving picked up speed by the 1800s, from where numerous improvements in diving technology were made. The history of scuba diving provides information on several inventions and discoveries that contributed to the sport of scuba diving as it is known today (c.f. 2.3.1).
- Some essential gear elements are necessary for participating in the sport of scuba diving, which include a wetsuit, mask, fins, weight belt, buoyancy compensator (BC), regulator, submersible pressure gauge (SPG) and cylinder (c.f. 2.3.2).
- Four of the most well-known and worldwide recognised agencies in scuba diving are, CMAS, NAUI, PADI and SSI (c.f. 2.3.3).
- Additional training and other scuba diving activities are categorised into three sections or specialties, namely recreational specialties, environmental specialties and technical specialties (c.f. 2.3.4).
 - Recreational specialties: For leisure and to safely enjoy life beneath the surface.
 - Environmental specialties: Scuba diving in different environmental locations, including reefs, ice and different altitudes.
 - Technical specialties: Diving 30 to 40 metres and beyond that requires the use of expanded equipment and technology, a variable mixture of gas and decompression.
- Central elements in the scuba diving tourism system (SDTS) include, the marine environment, scuba divers, the scuba diving tourism industry and the host community (c.f. 2.4).
- Services within the SDTS include scuba diving operators, charter operators, scuba diving education and training as well as associated tourism and services industries (c.f. 2.4).
- Other research studies conducted on scuba divers comprises topics such as economic benefits, the impact of scuba diving on coral reefs and shipwrecks, impacts on marine parks, underwater behaviour of scuba divers and monitoring and promoting environmentally sustainable scuba diving. From these studies, it is clear that diving activities do have an impact on the marine environment, stating the value of research in the industry as well as the importance of conservation of marine environments (c.f. 2.6).

5.2.2 Conclusions regarding the literature analysis on travel motives and market segmentation

The following conclusions are drawn from Chapter 3 regarding travel motives and market segmentation.

- Without customers, there can be no business; therefore, making marketing of a business a key factor (c.f. 3.1).
- Tourism is about lifestyles, attitudes and people practising travelling; whether the reason is for business or pleasure, it is closely linked to the understanding of the driving force behind the motivation to do so (c.f. 3.1), because what motivates one tourist, differs from another (c.f. 3.3).
- Travel motives are a topic of interest among researchers and there are a variety of theories attempting to identify these motives (c.f. 3.2). These theories include Maslow's hierarchy of needs (c.f. 3.2.1), the push-and-pull theory (c.f. 3.2.2), Iso-Ahola four-quadrant motivation theory (c.f. 3.2.3), the sunlust and wanderlust theory (c.f. 3.2.4), and lastly, Plog's theory (c.f. 3.2.5).
- Researchers also identified that intrinsic and extrinsic motives have an effect on a person's behaviour and how one pursues one's goals (c.f. 3.3).
- Intrinsic motivation is personally rewarding and a natural tendency, where extrinsic motivation is rewarding either from a desired behaviour or the avoidance of punishment (c.f. 3.3).
- General research conducted on travel motives has identified novelty, escape and relax, and strengthen relationships as the top three motives for people to travel (c.f. 3.3).
 - Novelty: Having fun and experiencing the destination's atmosphere
 - Escape and relax: To break away from daily routines and relief from everyday stress
 - Strengthen relationship: To do things with loved ones and friends
- The process of market segmentation is used to divide a market into smaller groups or segments, according to a specific topic (c.f. 3.1), and a marketing mix can be developed for each identified segment (c.f. 3.1 & c.f. 3.4.2.6).
- Market segmentation is described as a three-stage approach and consists of (c.f. 3.4.2);
 - Segmentation: identification of the market, selection and application of segmentation bases (c.f. 3.4.2.1 & c.f. 3.4.2.2).
 - Targeting: evaluation, identification and selecting of segments to be used (c.f. 3.4.2.4).
 - Positioning: development of marketing mix and market programme (c.f. 3.4.2.5 & c.f. 3.4.2.6).

- There are different segmentation bases that can be used to identify and profile the market. This study made use of demographic, geographic and behavioural segmentation bases, with an emphasis on behavioural segmentation (c.f. 3.4.2.2).
- The technique of cluster analysis was used as the method to identify the different segments according to their travel motives (c.f. 3.4.2.3).
- Previous research on travel motives from clustering was analysed to support the effectiveness of the clustering method to identify travel motives among tourists (c.f. 3.4.2.3).

5.2.3 Conclusions regarding the empirical results

These conclusions can be seen as the most important information derived from the primary information collected for this quantitative research study on scuba divers.

- Scuba diving participants of Ponta do Ouro are male (c.f. 4.2.1), with an average age of 36 years (c.f. 4.2.2), who have completed a degree (c.f. 4.2.3) and work in civil service (c.f. 4.2.4).
- Participants are mostly married (52%) (c.f. 4.2.5), and come from South Africa (c.f. 4.2.6). The majority (51%) have been to Ponta do Ouro before (c.f. 4.2.7), about seven times (c.f. 4.2.8), while for the rest of the respondents it was their first visit (c.f. 4.2.7).
- Visitors (79%) have visited Ponta do Ouro previously mainly between one and five times before (c.f. 4.2.7) and stay for an average of 5.4 nights (c.f. 4.2.9), where 59% payed for one to three people during their trip (c.f. 4.2.10).
- While 4.1% of the respondents are scuba diving instructors, 36% have an open water certification (c.f. 4.2.11).
- The majority (55.3%) have been diving between one to five years (c.f. 4.2.13) and have logged one to 20 dives. The average number of dives logged is 259 dives (c.f. 4.2.14) and 45% of the participants prefer the reef/recreational dive discipline (c.f. 4.2.12).
- Most of the part-takers (60.1 %) do between one and 20 dives per year, while only 3.2% do over a 100 dives per year (c.f. 4.2.15).
- A factor analysis has been conducted on the travel motives of scuba divers and the following factors have been identified: Destination attributes, dive site attributes, personal interests, socialise and relaxation, ease of access (c.f.4.3.1).
- The factors that affect the scuba diver's loyalty have also been analysed and the following two factors have been identified: Satisfaction and intension to return (c.f. 4.3.2).
- From a hierarchical cluster analysis using Ward's method of Euclidian distances and Turkey's honest significance test, the following clusters were identified, namely advanced

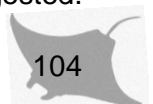
loyal divers, novice enthusiast diver, novice participant diver, advanced fanatic diver and the novice fanatic diver cluster (c.f. 4.4.1).

- Therefore, it can be stated that the average scuba diver is loyal to Ponta do Ouro as a diving site, because of the ease of access (Factor 5) (c.f. 4.3.1), have intentions to return and is satisfied with the overall diving experience (c.f. 4.3.2).

5.3 Recommendations from the research

The following recommendations can be made from the research.

- It is recommended that the market focus should be primarily on South Africans for Ponta do Ouro as this is the main market.
- Based on the above finding, it also indicates that the European market is largely untouched, and therefore efforts can be made to attract more European divers. It is suggested to have marketing agents abroad, permanently, whose responsibility it is to sell the product, and also marketing packages to South Africa and Mozambique.
- Dive operators should include in their marketing message that Ponta do Ouro is from now on more accessible because of the tar road that is finished, making it accessible for all kinds of vehicles to access Ponta do Ouro.
- As identified in Chapter 4, to attract divers who are still in the beginner phase (novice enthusiast diver, novice participant and novice fanatic diver), suggestions include a pin board system. This is a board with all the reefs in the reserve, with colour coded pins of fish species, pinned on each reef, indicating the most common species found at that specific reef, or expected species to be found, and rare sightings (like a pineapple fish or whaleshark).
- The option for beginner divers to level-up diving skills that work on the same principle of a DSD, and also research projects, which will make use of voluntary divers as extra help, which will contribute to conservation and assist reserve authorities and/or operators in control.
- To attract the more advanced divers (advanced loyal diver and advanced fanatic diver), a loyalty system is suggested, as well as the “nine to five” type of dive offer, where divers who stay for five nights and do eight or nine dives during their time of stay, will get x-percent discount or an extra dive, introducing a loyalty system, which will be unique to the dive operator. This will work on the same principle as a Clicks club-card or Pick n Pay smart shopper card. Divers get an x-amount discount for every x-number of dives they do with the specific operator (c.f. 4.4.1). This loyalty system will only be for experienced divers who have i.e. more than 600 completed dives, and details of this offer are the operator’s choice. Lastly, because these divers just want dive, to lower a shipwreck in the bay is suggested.



This will provide a brand new site to dive, attract advanced divers and encourage other divers to keep participating in the sport and enhance visitor enjoyment (c.f. 4.4.1).

- It is further suggested to create a place for a photo booth or photo corner, unique to the dive operator, where visitors can take their picture, and either take it home or share on social media, which, in turn, counts as marketing for the operator.
- Social networks such as Facebook and Instagram are powerful mediums, and among the most effective in the modern day, to use as communication and to spread the marketing message. One of the biggest changes in human interaction is the use of online social networks, and the movement into this dimension include benefits such as the sharing of knowledge, dialogues amongst different cultures, entertainment and the enhancing of marketing efforts. In other words, the use of social media as a marketing tool, connects people and tourists around the globe, making communication and marketing easier as before (c.f. 3.4.2.6). This can be done through regular updates of offers, as well as photos of videos of recent sightings under water and other divers enjoying. Satisfied customers can also spread the message through word-of-mouth.

5.4 Recommendations for future research

The following recommendations can be made for future research

- Similar research should be conducted, if possible, in other dive destinations in Mozambique, i.e. Ponta Malongane, Bara, Inhambane, Guinjata Bay, and Inhaca island to name a few. To determine whether the clusters differ, or whether it is the same market as Ponta.
- The opportunity exists to conduct further research on the influence of specific seasons (whale season, turtle breeding), or marine sightings such as the sardine run, on scuba diver motives.
- Research can be conducted to analyse the relationship between scuba diver motives and their loyalty to a specific dive site, the perceived value of the industry, the influence of financial capabilities to travel and pay for the sport of scuba diving have on the actual amount of tourists visiting a specific dive site.

5.5 Limitations to the study

The following section discusses the limitations to the study

- The survey was only conducted during South African school holidays, where it was noticeable by the researchers that the majority of divers were from South Africa. However,

from more social conversations between researchers and dive instructors, it came to light that international divers tend to visit more regularly, but over different periods of time and not necessarily in South African school holidays.

- Because the survey was only during vacation times and there are many return visitors, it became more difficult to identify divers who have not yet completed, and who are willing to complete a questionnaire.
- The study only focused on scuba divers in Ponta do Ouro and not on scuba divers visiting other popular dive destinations in Mozambique.

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IMO **see** International Maritime Organisation

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WTO **see** World Tourism Organisation

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Appendix A

SCUBA DIVER SURVEY
SECTION A: VISITOR PROFILE & MEDIA USAGE

1. Gender?

M	1
F	2

2. What year were you born?

3. What is your highest level of education?

Matric/Grade 12	1
Diploma or equivalent	2
Degree	3
Post-graduate degree	4
Other (Specify):	5

4. Marital status: _____

5. Occupation: _____

6. Which country do you originate from?

7. How many nights are you staying in the area?

Number of nights in the area	<input style="width: 50px;" type="text"/>
------------------------------	-------------------------------------------

8. How many people, including yourself, are you paying for during the trip?

9. How many years have you previously scuba dived in this destination?

201% is my first visit	YES	NO
Number of previous visits	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>

10. What is your highest level of diving certification?

11a. How many YEARS have you been diving?

Number of years:

11b. How many dives have you logged?

Number of dives logged:

11c. How many dives per year do you log?

Number of dives logged:

12. Estimate how much you spent on the following during this trip:

Scuba dives (i.e. only the dive, plus boat lift)	R
Dive courses and/or additional training	R
Accommodation	R
Transportation (air and ground travel)	R
Shopping	R
Food and beverages	R
Diving insurance/Renewal of dive credentials	R
Buying new scuba diving equipment/gear	R
Hiring scuba diving equipment / gear	R
Other activities (e.g. boat trips)	R
Other expenses not listed, specify	R

13. Please indicate the disciplines or type of recreational diving your prefer e.g. cave diving.

14. Would you recommend this area as a diving destination to others?

Yes, definitely	1
Unsure	2
No, definitely not	3

15. I would or do make use of social media such as facebook to:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Book diving holidays/dives	1	2	3	4	5
Enquire about a booking	1	2	3	4	5
Review exclusive dive offers	1	2	3	4	5
Obtain more information about the dive site	1	2	3	4	5
Obtain contact information of a specific dive operator	1	2	3	4	5
Do research about a specific dive site	1	2	3	4	5
Collect information about a specific dive site	1	2	3	4	5
Benefit from a wide range of knowledge about dive sites	1	2	3	4	5
Share my experiences diving at specific sites	1	2	3	4	5
Compare dive destinations	1	2	3	4	5
Write a review of a specific dive destination	1	2	3	4	5
Interact with other divers or dive operators	1	2	3	4	5
Ask for dive site advice	1	2	3	4	5
Read the reviews written by others	1	2	3	4	5
Obtain information about courses	1	2	3	4	5
Post photo's, video's etc of specific diving experiences	1	2	3	4	5

SECTION B: MOTIVATIONS FOR DIVING AT PONTA DO OURO

16. Main reasons for diving at Ponta do Ouro:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
To learn more about specific marine species	1	2	3	4	5
To experience the exotic atmosphere of Ponta do Ouro	1	2	3	4	5
To experience peace and tranquility	1	2	3	4	5
The marine life is well protected in Ponta do Ouro	1	2	3	4	5
I never know what to expect from each dive	1	2	3	4	5
To rest and relax	1	2	3	4	5
Ponta do Ouro offers a unique diving experience	1	2	3	4	5
It was on my 'bucket list' to dive here	1	2	3	4	5
Good weather and climate	1	2	3	4	5
Ponta do Ouro is a world class diving site	1	2	3	4	5
To escape from routine	1	2	3	4	5
To enhance my knowledge as a diver	1	2	3	4	5
Dive operators adhere to safety regulations	1	2	3	4	5
To socialise with other divers	1	2	3	4	5
Ponta do Ouro offers good shopping opportunities	1	2	3	4	5
To find relief from everyday tension	1	2	3	4	5
To explore a new destination	1	2	3	4	5
Ponta do Ouro has quality beaches	1	2	3	4	5
To dive in a marine protected area	1	2	3	4	5
Ponta do Ouro offers beautiful scenic beauty	1	2	3	4	5
To meet new people	1	2	3	4	5
To develop my diving skills and abilities	1	2	3	4	5
To participate in a diving course	1	2	3	4	5
To spend time with friends and family	1	2	3	4	5
Diving here is value for money	1	2	3	4	5
Ponta do Ouro offers quality restaurants	1	2	3	4	5
There are a variety of attractions to visit	1	2	3	4	5
Diving sites are easy accessible	1	2	3	4	5

SECTION C: LOYALTY TO PONTA DO OURO AS DIVING SITE

17. Loyalty to Ponta do Ouro as diving site	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I would recommend others to visit Ponta do Ouro as diving site	1	2	3	4	5
I will visit Ponta do Ouro in the future	1	2	3	4	5
Ponta do Ouro is now my first choice among diving destinations	1	2	3	4	5
I will say positive things about this diving site	1	2	3	4	5
I would recommend others to use this dive operator	1	2	3	4	5
I will make use of this dive operator again in the future	1	2	3	4	5
This dive operator is now my first choice among dive operators	1	2	3	4	5
I will say positive things about this dive operator	1	2	3	4	5
The information offered by the dive operator/s is honest	1	2	3	4	5
In general the dive operator/s fulfils their commitmen	1	2	3	4	5
The dive operator is concerned about their divers' needs	1	2	3	4	5
The dive operator has the resources & experience to do a good job	1	2	3	4	5
I feel safe with the dive operator	1	2	3	4	5
My choice to dive at Ponta do Ouro was a wise one	1	2	3	4	5
I enjoyed my dive/s	1	2	3	4	5
The diving experience made me happy	1	2	3	4	5
The dive/s was an unique experience	1	2	3	4	5
Diving at Ponta do Ouro fulfilled my expectations	1	2	3	4	5
All contact made with the dive operators and staff were satisfactory	1	2	3	4	5
I am in general satisfied with my diving experience	1	2	3	4	5



Appendix B



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL
ADMINISTRAÇÃO NACIONAL DAS ÁREAS DE CONSERVAÇÃO
Credencial de Investigação e Levantamento de Dados

Apenas para uso oficial:	
N.º da Credencial	27/2018
Tipo de actividade	Recolha de dados sem amostras
Validade	07/11/2018 à 07/10/2019
Data	07/11/2018

Eu, Mateus José Mutemba, na qualidade de Director Geral, confirmo por este meio que foi concedida a Senhora Marna Herbst, MA Tourism Management estudante na, North — West University (South A frinca), uma credencial para o seguinte projecto: Motivation-based segmentation of scuba divers at Ponta do Ouro.

Área de estudo: Reserva Marinha Parcial da Ponta do Ouro

Igualmente, por este meio solicito que as autoridades do Reserva Marinha Parcial da Ponta do Ouro, facilitem o desenvolvimento de quaisquer actividades relacionadas com este tema, obviamente no total respeito pelas normas e orientações científicas das Áreas de Conservação.

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Atenciosamente

Mateus José Mutemba
(Director Geral)



Appendix C

Cecile van Zyl
Language editing and translation
Cell: 072 389 3450
Email: Cecile.vanZyl@nwu.ac.za

To whom it may concern

26 November 2018

Dear Mr / Ms

Re: Language editing of dissertation: **Motivation-based segmentation
of scuba divers at Ponta do Ouro**

I hereby declare that I language edited the above-mentioned dissertation by Miss Marna Herbst (24499528).

Please feel free to contact me should you have any enquiries.

Kind regards



Cecile van Zyl

Language practitioner

BA (PU for CHE); BA honours (NWU); MA (NWU)
SATI number: 1002391

Appendix D

Gerrit Dekkerstraat 1

POTCHEFSTROOM

2531

24 November 2018

Me Marna Herbst

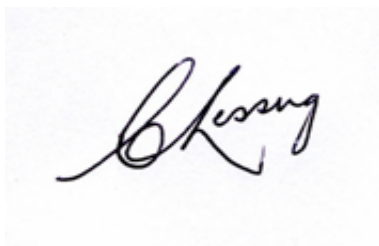
Noordwes-Universiteit

POTCHEFSTROOM

VERKLARING: NASIEN VAN BRONNELYS

Hiermee verklaar die ondergetekende dat hy die Bronnelys vir die studie van me. Marna Herbst, volgens die nuutste voorskrifte van die Senaat van die Noordwes-Universiteit tegnies nagesien en versorg het.

Die uwe

A handwritten signature in black ink, appearing to read 'CJH Lessing', written in a cursive style.

Prof CJH LESSING