A framework fostering commitment for endurance sport tourism in South Africa

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Thesis submitted for the degree *Philosophiae Doctor* in Tourism Management at the Potchefstroom Campus of the North-West University

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Graduation October 2017

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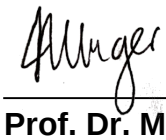
I, Esmarie Myburgh, identity number 90070190088084 and student number 21704724, hereby declare that this research submitted to the North-West University, for the PhD study: ***A framework fostering commitment for endurance sport tourism in South Africa,*** is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the North-West University; and has not been submitted before to any institution by myself or any other person in fulfilment of the requirements for the attainment of any qualification.

Esmarie Myburgh
Student



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Financial Assistance

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

Personal journey and acknowledgements

It all started with a winter holiday tradition in my household, watching Lance Armstrong overcoming one of the most challenging sport events in the world, Tour de France. Apart from the Tour de France, Wimbledon was an event we would never miss, even more so, after 2007 when Novak Djokovic made the first appearance in a quarter-final. These two sport events would not only unite our family but had led to my passion for sport and especially, individual performance in sport. To this day I am an avid Novak Djokovic fan, because of his sportsmanship, love for the game, and commitment to tennis. Apart from sport, tourism has always been my passion. The introduction to sport tourism in my honours studies opened a whole new world to me.

During my honours year of post-graduate studies, Prof Martinette Kruger proposed a theme for my honours mini-dissertation, which has unfolded in my academic career path in sport tourism. The focus of the mini-dissertation was on identifying the differences in motives of mountain bikers and road cyclists to participate. That first study opened my eyes to different sport events in South Africa and especially endurance events, it showed me that these events could benefit from research, especially from a marketing and management perspective. I realised how important sport events is to the South African tourism industry. While writing the mini-dissertation my love for research grew, and I realised that I had an urge for seeking new information and expanding on my current knowledge. Therefore, when Prof Martinette approached me with a suggestion of completing my Masters study, I knew this was the path I was meant to follow. After a turbulent start to my Masters study, we finally got the opportunity to conduct research at the Ironman South Africa event. At the same time as attending the event, my curiosity in endurance athletes and their interest in the sport, grew stronger. The Ironman event was one of the most inspiring events I have attended. Athletes at different ages and different physical capabilities participate in the event that not only thrusts people to their physical limits but is also so mentally challenging that only a handful of people can finish the event. My Masters study was one of the most clarifying experiences I have ever had. Not only did this study help me understand why people would participate in a grueling event, but it also showed me how my research could directly benefit the Ironman event. This led to my interest to further explore different endurance athletes and events in South Africa. We live in one of the most beautiful countries in the world, and these events are the perfect catalyst to market our country. After a successful Masters study, I knew that I needed to continue with my sport tourism research, but that I need to take it up a notch.

From both my previous studies, I realised that the endurance participant is a very distinctive market and although a large number of studies have focused on endurance participants in South

Africa, no study have answered the question, why do these participants continue? Why do these participants adapt every part of their lifestyle to participate? Prof Martinette had the same questions and suggested we look at the sport commitment of endurance athletes. From the very beginning, I knew this was not a cliché, but the perfect PhD topic for me to focus on.

My PhD marathon started with a bumpy road and some challenges along the way. Developing my questionnaire that measures the sport commitment model-predictors as well as additional aspects that influence endurance participation was a large obstacle during my marathon. This took me on a few reading pit stops where I, with every passing research article had to refine my questionnaire. The completion of my questionnaire was definitely one of my greatest milestones as I knew that the combination of different variables included have not yet been measured in previous studies and that the results could benefit various stakeholders within the sport tourism industry. One of the first things I realised that as an academic researcher you are entirely dependent on the cooperation of the tourism industry. The online survey was the biggest survey conducted on endurance athletes in South Africa. This was, however, one of the greatest challenges. Getting a representative sample required constant communication with event organisers, the inclusion of an incentive and adding sport clubs to the population. The online survey had taken a full year before we reached our target number. There was not a day that went by that I did not check the number of completed questionnaires. As each day pass, my hope of completing this marathon also became stronger.

After my research proposal was accepted and my thesis title registered, I decided, as many endurance athletes, to continue to a new section (discipline). My literature review can be compared with a long distance road cycling race, where although the end-destination seems far, as one passes each mile you are motived and encouraged to continue with the next. At the beginning of the literature studies, I underestimated the volume of reading and content, and I soon realised that if I want to complete this race on my own, I would need to adjust my pace like a cyclist when ascending a mountain pass. My literature chapters took many hours, many cups of coffee and endless music playlists. The completion of my literature chapters filled me with excitement and I was looking forward to the next challenge of taking all my newly gained knowledge and applying it to my results. The writing and completion of the empirical chapters can be described as a two-man canoe race. The large number of variables included in the questionnaire meant that different analyses would be possible. Consequently the data that the study presented, revealed a river full of results. I knew that I needed a partner in my canoe. These chapters were a team-effort of me recording my results and my promoters constantly supporting me in order to finish each analysis. During this stage the study expanded to a much greater extent than I could ever imagine. The results revealed so many significant differences and relationships that although with every passing table I wished the discussions would get shorter; the encouraging

thoughts that the findings could lead to valuable recommendations, kept me going. The last section of my canoe race was the development of structural equation models and mediation models, which led me and my promoters through very rough waters. Although it felt that some days we were back-paddling with a few boosts from our statistical consultant Dr. Surria Ellis, we finally got to the finish line. I felt a total sense of accomplishment when I finally understood the difference between a partial and full mediator and when I saw all my results summed up in two very lengthy chapters. After a few years of metaphorically running, cycling, and paddling and in some cases sinking, I had the final finish line in site.

In the end this PhD thesis made me feel like an independent female that could do anything she set her mind to. Well maybe anything apart from completing an Ironman event. I felt a bit closer to an endurance athlete throughout this thesis, for I had to make considerable lifestyle adaptions, I had to mentally prepare, went through days that I was physically exhausted; and most importantly, I learned to be committed. I can never truly say I know exactly how it feels to be an endurance athlete, but throughout this process, my admiration for these athletes has grown immensely. If my study can in some way benefit endurance sport and especially endurance sport tourism in South Africa, I will feel like I won the biggest race of all. My journey would have not been the same without the endless support I have received and I want to thank a few individuals that have played a crucial role in the completion of this thesis:

- To my heavenly father Jesus Christ, thank you for answering each prayer and thank you for giving me strength to endure; this would have not been possible without having you in my life.
- Occasionally in one's life-time a person crosses your path and changes everything. This person in my life is Prof. Martinette Kruger. She has played a momentous role in my academic career and has always pushed me to my full potential. I just want to thank her for her endless encouragement, support and motivation. She is just one of those people that take each challenge heads-on and this behavior is something that inspired me each day. There are not enough bottles of wine in the world to buy for me to express my gratitude; thank you for being the best supervisor.
- Prof. Melville Saayman for being my co-supervisor, Prof always has a way of turning something good into something exceptional. Thank you for all your inputs, encouragement and using your scissors to refine each chapter.
- If there is one person that has constantly had to listen to my moaning and groaning, then it has to be my loving boyfriend Nicol. I am so grateful that you are a part of my life, there has not been one day where you have not given me your full support. You go out of your way to constantly make me feel special and appreciated. Thank you for everything, you are the best.
- To my parents Esther and Murray, you have been my rock, you always pushed me to keep going and keep my head-up. Thank you, I am truly blessed with two incredible parents. To my

sister Ane, thank you for sharing a flat with me, I know it was not always easy. I also want to thank you for always keeping me positive in the toughest of times; you are truly one God's finest creations. To my brother Murray, thank you for always being there and motivating me to work harder just as you do.

- To my friends Marisa, Jannes, Hanneri, Maryke, Ruve, Anja and Armand, your support, love and endless admiration is something I am thankful for each day. Each of you is hard-working individuals that aspire to live out your dreams, which has inspired me to do the same. I am truly blessed to have each one of you in my life.
- A special thanks to my language editor Elmari Snoer. You have always gone out of your way to assist me and I am truly grateful for all your inputs and patience.
- My kindest regards to Clarina Voster for her assistance with my references.
- I extend my sincere gratitude to Dr. Suria Ellis, for assisting me with the statistical analyses. Thank you for always explaining even the toughest analysis in a simple way. Your kindness, patience and willingness to assist is truly appreciated.
- To Prof. Elmarie Slabbert and my other colleagues in the School of Tourism management and TREES thank you for always believing in me and giving me the opportunity to form part of a dynamic working environment.
- To all the endurance events and clubs that were willing to assist us with the survey, thank you. This study would not have been possible without your cooperation. Also a special thanks to each endurance athlete that completed the questionnaire.

What you get by achieving your goals is not as important as what you become by achieving your goals – Henry David Thoreau -

Abstract

A framework fostering commitment for endurance sport tourism in South Africa

Endurance sport events form an important part of the sport tourism industry. Since these events act as a catalyst for tourism, it ensures economic benefits for the host destination and is more sustainable in the long-term. Endurance participants all share similar characteristics such as the will to excel, competitive nature, high levels of involvement, strong identification with the sport, willingness to adapt their lifestyle, perseverance, and determination. It can reasonably be anticipated that commitment forms the foundation of these athletes' participation in sport. However, the commitment of endurance athletes is complex to measure, and therefore the previous literature has shown that to fully understand their commitment one should review other methods, apart from the well-known Sport Commitment Model (SCM), to comprehensively measure sport commitment. Although commitment has been measured from different perspectives, which has led to different models and theories, it has not been measured in a South African sport tourism perspective and has not included variables such as lifestyle, event attributes and travel behaviour.

The aim of this study was therefore to develop a commitment framework for endurance sport tourism in South Africa. To achieve this aim, this study utilised an online survey targeting endurance athletes participating in South African events. The online survey was conducted from March to November 2015 where 498 questionnaires were collected. Furthermore, the aim of the study was realised by executing several objectives. The first five objectives were all achieved through literature reviews. The first objective was to analyse sport tourism by focusing on key stakeholders within the sport tourism industry and highlighting the importance of hosting sport events. The second objective was to examine the distinct characteristics of endurance sport events and athletes within a sport tourism context. Objective three entailed a critical analyses of the SCM, related theories and the complexity of sport commitment in an endurance sport context. The fourth objective was to analyse the current state of endurance sport tourism and events in South Africa. The fifth objective was to explore the methodological considerations applied in the study as well as to design a research framework for the study. The study's sixth objective and its four sub-objectives focused on the results from the survey which were used for the descriptive and multivariate analyses. The last objective was to draw conclusions, make recommendations concerning the results of the study, and to propose a commitment framework for sport tourism in South Africa.

The data from the results was analysed through SPSS software (SPSS version 23). Furthermore, AMOS, which is an added SPSS module, was used for the Structural Equation Modeling (SEM)

as well as mediation modelling. The results from the descriptive statistics revealed a detailed profile of endurance sport participants of various endurance events and disciplines in the country. Exploratory factor analyses determined the *commitment*, *lifestyle*, *event attributes* and *travel behaviour* factors of endurance athletes. The *t*-tests and ANOVAs revealed the specific determinants that either increased or decreased the commitment of endurance athletes. The first set of determinants were the internal influences which included *socio-demographics*, *sport and event preferences*, *participation frequency* as well as *travel behaviour*. The other three determinants were the behavioural factors and included *lifestyle*; *event attributes,* and *travel behaviour*. Each of these seven determinants had specific variables that had an effect on endurance athletes' commitment. SEMs determined which factors had the strongest unique relation to sport commitment. The SEM models showed that to increase the commitment of endurance participants, one should focus on *travel behaviour* and *lifestyle*. Additionally, mediation models revealed *travel behaviour* and *lifestyle* are both mediators for the relationship between *event attributes* and *commitment*.

This study has various contributions that are invaluable to sport tourism researchers, sport event organisers, sport destination managers, and sport governing bodies. This research firstly fills the gap in the endurance sport literature by proposing a commitment framework that considers various aspects within a South African sport context; but other developing countries can also implement this framework. The framework is ideal for researchers to better understand the complex nature of commitment among endurance sport participants. This research contributes to the sports tourism literature by giving results focusing on specifically endurance athletes and their sport commitment. This is also the first study to conduct a nationwide survey among endurance athletes in South Africa. In addition, the research fills the gap in the literature and provides insights on how commitment can be used to progress sport tourism.

From a methodological point of view, the measuring instrument applied in this research fills the gap in the current sport literature by integrating additional socio-demographic, behavioural, lifestyle or travel-related factors that may also play a role in athletes' commitment. Furthermore, the commitment to a particular event is also taken into account. This study lastly proposes a practical framework to foster sport commitment not only among participants but also amidst the greater population. This framework can be applied to all sporting types and disciplines and presents a comprehensive guideline to sport governing bodies, event organisers and sport destinations to help cultivate commitment among sport participants (individual and team-based) as well as supporters and spectators of sport. This framework can ultimately be used to foster a love for sport (commitment) among the broader public. Then, in addition, through commitment sport is made more accessible to every citizen irrespective of geographic location, gender, age, race and political background. Moreover, the framework provides guidelines to South African

Tourism on how to use the sport events hosted in South Africa in the marketing and branding campaigns of the country as these are aspects that can give South Africa a competitive advantage.

Keywords: sport tourism, endurance sport events, sport commitment, endurance sport participants, framework

Uittreksel

'n Raamwerk wat verbintenis tot uithouvermoë-sport toerisme in Suid-Afrika bevorder

Uithouvermoë-sportbyeenkomste maak 'n belangrike deel uit van die sport toerisme bedryf. Aangesien hierdie sportbyeenkomste as 'n katalisator vir toerisme dien, verseker dit ekonomiese voordele wat op langtermyn volhoubaar is vir die bestemming waar die sportbyeenkoms plaasvind. Uithouvermoë-sportdeelnemers deel almal soortgelyke eienskappe soos die wil om te presteer, mededingende geaardheid, hoë vlakke van betrokkenheid, sterk identifikasie met die sport, bereidwilligheid om hul lewenstyl aan te pas, deursettingsvermoë en vasberadenheid. Dit kan redelikerwys verwag word dat verbintenis tot die sport, die grondslag vorm van die atlete se deelname aan sport. Die verbintenis van uithouvermoë-atlete is egter ingewikkeld om te meet. Om hierdie rede toon literatuur dat uithouvermoë-atlete, anders as die bekende sportverbintenismodel (of soos meer bekend, in kort die “SCM”), dat sportverbintenis volledig gemeet moet word om atlete se verbintenis ten volle te verstaan. Alhoewel vorige studies verbintenis uit verskillende perspektiewe gemeet het, wat tot verskillende modelle en teorieë gelei het, is dit nie in 'n Suid-Afrikaanse sport toerisme-perspektief gemeet nie; en het dit nie veranderlikes soos lewenstyl, gebeurtenis kenmerke en reisgedrag ingesluit nie.

Die doel van hierdie studie was dus om 'n verbintenis-raamwerk vir uithouvermoë-sport toerisme in Suid-Afrika te ontwikkel. Om hierdie doel te bereik, het hierdie studie deur middel van 'n aanlyn-opname, uithouvermoë-atlete geteiken wat deelneem aan Suid-Afrikaanse sportbyeenkomste. Die aanlyn-opname is van Maart tot November 2015 uitgevoer, waartydens 498 vraelyste ingesamel is. Die oorhoofse doel van die studie is gerealiseer deur die onderskeie doelwitte wat gestel is, uit te voer. Die eerste vyf doelwitte is almal bereik deur die uitvoering van literatuurstudies. Die eerste doel was om sport toerisme te analiseer deur te fokus op die sleutel-belanghebbendes in die sport toerismebedryf en die belangrikheid van die aanbieding van sportgebeure te beklemtoon. Die tweede doel was om die onderskeie eienskappe van uithouvermoë-sportbyeenkomste en atlete binne 'n sport toerisme konteks te ondersoek. Doelwit drie het die kritiese ontleding van die SCM behels, asook verwante teorieë en die kompleksiteit van sportverbintenis in die konteks van uithouvermoë-sport. Die vierde doelwit was om die huidige stand van uithouvermoë-sport toerisme en gebeure in Suid-Afrika te analiseer. Die vyfde doelwit was om die metodologiese oorwegings wat in die studie toegepas is, te ondersoek, asook om 'n navorsingsraamwerk vir die studie te ontwerp. Die studie se sesde doelwit het vier sub-doelwitte bevat en het gefokus op die resultate van die aanlyn-opname. Dit is gebruik vir die beskrywende en multivariate ontledings. Die laaste doelwit was om gevolgtrekkings en aanbevelings te maak oor die resultate wat deur die studie bereik is; en om 'n verbintenis-raamwerk vir sport toerisme in Suid-Afrika voor te stel.

Die data van die resultate is geanaliseer deur SPSS sagteware (SPSS weergawe 23). Verder is AMOS, wat 'n bygevoegde SPSS-module is, gebruik vir die strukturele vergelyking modellering (SEM) sowel as bemiddelingsmodellering. Die resultate van die beskrywende statistiek het 'n gedetailleerde profiel van uithouvermoë-sportdeelnemers van verskeie uithouvermoë-sport en dissiplines in die land bekend gemaak. Verkennende faktor-analises het die *verbintenis*, *lewenstyl*, *sportbyeenkomste kenmerke* en *reisgedragsfaktore* van uithouvermoë-sport uitgewys. Die *t*-toetse en ANOVA's het die spesifieke bepalende faktore geopenbaar wat uithouvermoë-sportdeelnemers se verbintenis daartoe verhoog al dan nie. Die eerste stel bepalende faktore was interne invloede wat sosio-demografie, sport- en sportbyeenkomsvoorkeure, deelname frekwensie en reisgedrag insluit. Die ander drie bepalende faktore was die *gedragsfaktore* en *lewenstyl*; *sportbyeenkoms kenmerke*, en *reisgedrag*. Elkeen van hierdie sewe bepalende faktore, het spesifieke veranderlikes gehad wat 'n invloed op uithouvermoë-atlete uitgeoefen het. Die SEM's het bepaal watter faktore die sterkste, unieke verhouding tot sportverbintenis gehad het. Die SEM-modelle het getoon dat ten einde die verbintenis van uithouvermoë-sportdeelnemers te verhoog, op *reisgedrag* en *lewenstyl* gefokus moet word. Daarbenewens onthul bemiddelingsmodelle dat beide *reisgedrag* en *lewenstyl* bemiddelaars is vir die verhouding tussen sportbyeenkoms kenmerke en verbintenis tot deelname aan uithouvermoë-sport.

Hierdie studie bied verskeie bydraes tot waarde vir sport toerisme navorsers, sportbyeenkoms organiseerders, sport bestemmingsbestuurders, en sport beheerliggame. Eerstens, vul die navorsing die gaping in die literatuur aan rakende uithouvermoë-sport deur 'n verbintenis-raamwerk voor te stel wat verskillende aspekte binne 'n Suid-Afrikaanse sportkonteks oorweeg. Ander ontwikkelende lande kan egter ook hierdie raamwerk implementeer. Die raamwerk is ideaal vir navorsers om die komplekse aard van verbintenis onder uithouvermoë-sportdeelnemers beter te verstaan. Hierdie navorsing dra ook by tot die sport toerisme literatuur deur resultate te bied wat spesifiek op uithouvermoë-atlete en hul verbintenis tot sport fokus. Dit is ook die eerste studie om 'n landwye opname onder uithouvermoë-atlete in Suid-Afrika te doen. Daarbenewens vul die navorsing die gaping in die literatuur en bied insigte oor hoe verbintenis tot sport gebruik kan word om sport toerisme te bevorder.

Uit ‘n metodologiese oogpunt vervul die meetinstrument wat in hierdie navorsing toegepas is, die gaping in die huidige sportliteratuur deur addisionele sosio-demografiese, gedrags-, leefstyl- en reisverwante faktore te integreer wat ook 'n rol kan speel in atlete se verbintenis tot sportdeelname. Verder word ook die verbintenis tot 'n bepaalde sportbyeenkoms in ag geneem. Ten slotte, stel hierdie studie 'n praktiese raamwerk voor om sportverbintenis te bevorder, nie net onder deelnemers nie, maar ook onder die breër publiek. Hierdie raamwerk kan toegepas word op alle sportsoorte en dissiplines en bied 'n omvattende riglyn aan sportbeheerliggame, sport

klubs en sportbestemmings. Dit help ook om verbintenis tussen sportdeelnemers (individueel en spangebaseerd), ondersteuners asook toeskouers by sport te kweek. Die raamwerk kan uiteindelik gebruik word om 'n liefde vir sport (toewyding en verbintenis) by die breër publiek te bevorder. Daarbenewens word sport toeganklik gemaak vir alle mense, ongeag geografiese ligging, geslag, ouderdom, ras en politieke agtergrond. Die raamwerk bied riglyne aan Suid-Afrikaanse Toerisme vir sportbyeenkomste in Suid-Afrika en hoe om bemarkings- en handelsmerkveldtogte daarvoor toe te pas, aangesien dit aspekte is wat Suid-Afrika 'n mededingende voordeel kan gee.

Sleutelwoorde: sport toerisme, uithouvermoë-sportbyeenkomste, sport verbintenis, uithouvermoë-sport, uithouvermoë-sportdeelnemers, raamwerk

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1 INTRODUCTION, BACKGROUND TO THE PROBLEM, PROBLEM STATEMENT, GOALS AND OBJECTIVES AND METHOD OF RESEARCH

Courage is the commitment to begin without any guarantee of success – Johann Wolfgang van Goethe -

1.1 Introduction

In South Africa, the number of events, specifically sport events, are still on the increase (Saayman & Saayman, 2011:124; Giampiccoli, Lee & Nauright, 2015:229; Knott, Fyall & Jones, 2016:105). Globally, several reasons have led to this increase. In the first place, there is a greater emphasis on personal physical fitness and wellbeing that attract more people to sport events (Kruger, Botha & Saayman, 2012:109). Secondly, sport events are used to achieve specific objectives for example, to raise funds for charity. In the third regard, events are used to create a specific destination image, to attract people to a region/destination, to address seasonal fluctuations and to generate revenue (Kruger, Botha *et al.,* 2012:109; Connell, Page & Meyer, 2015:287; Getz & Page, 2016b:593; Fernández-Morales, Cisneros-Martínez & McCabe, 2016:172). Based on the proven economic benefits and impact that sport has delivered to South Africa, the government became increasingly supportive of further investments in and funding of sport (Binns & Nel, 2002:235; Houlihan, 2013:23). Although most of the relevant literature and economic studies of sports tourism focus on mega sport events (e.g. World Cups or Olympic Games), the significance of the economic and social success of smaller-scale sport events hosted in South Africa cannot be overlooked (Giampiccoli *et al.,* 2015:229). Annual supporters and participants regularly travel significant distances to watch and participate in their favourite sports (Department of Sport and Recreation [SRSA], 2012:7). Sport participants are passionate people, who spend considerable amounts of money to enjoy new sporting experiences, which are distinct and different from other sport events, ultimately leading to a huge challenge that requires a great deal of perseverance (SRSA, 2012:8).

One activity that exemplifies perseverance is endurance sport. Currently, endurance sport is becoming one of the most popular past times of many individuals globally (O'Neil & Steyn, 2007:99; Eitzen, 2016:21). Endurance sport can be defined as "a sport that requires the ability to perform for extended periods of time at low intensities" (Gastelu, 2006:1). Endurance sport include, but are not limited to marathon running, cross country running, road cycling, mountain biking, open water swimming, horse riding (for example Fauresmith Endurance Ride in South Africa), canoeing and kayaking (O'Neil & Steyn, 2007:100). Endurance events that accommodate these sports can be defined as "events where participants have the ability to withstand longer exertion, because of the distance, time and the level of anaerobic fitness/intensity requirements for successful completion that are considerably higher than when compared to other sport events" (O'Neil & Steyn, 2007:99). This definition is in line with previous authors' definitions, including Brook (1987:93), Mann and Schaad (2001:264) and Kellmann (2002:25). Endurance

participation, as a result, involves degrees of speed, strength, and power that are all evident through competitive involvement, pressure, commitment and the will to excel (Kurtzman, 2005:16; South African Sports Confederation and Olympic Committee [SASCOC], 2012:55). Endurance athletes therefore, exemplify a set of values, such as perseverance, determination and relentlessness. This set of values, cause endurance athletes to tailor their lifestyle according to their highly prioritised sport activities (Iwasaki & Havitz, 2004:48; Stebbins, 2007:176; SASCOC, 2012:55). These characteristics create the feeling of belonging to a particular circle of like-minded and physically active people who participate in endurance sports. Furthermore, two factors distinguish endurance athletes from 'non-endurance athletes'. The first factor is the desire to become familiar with everything relating to a selected sport; and secondly, these participants enjoy the fact that endurance sport is demanding and creates a challenge each time they participate (Willig, 2008:694).

The popularity of endurance sports can be attributed to the fact that these sport events present an authentic experience, as every event is a unique blend of duration, setting, management and participants (Getz, 1997:4; Hallmann & Breuer, 2010:216). According to Morgan (2014:1), South Africa is the ideal destination to host endurance sport events, because of the counties climate and contrasting landscapes. Davie (2014:1) states that South Africa is possibly the world's toughest endurance sport destination and attracts thousands of athletes of different ages and abilities in order to compete in some of the biggest races in the world. The country hosts a number of endurance events that fall into different categories. The first category refers to "On foot". there are two world-renowned ultra-marathons in this category, namely the Comrades Marathon and the Two Oceans Marathon (Morgan, 2014:1). The second category is, "On wheels". South Africa hosts the world's largest individually timed cycling event, the Cape Town Cycle Tour and also the 94.7 Cycle Challenge hosted in Johannesburg (Kruger & Saayman, 2014:137). The two larger mountain biking races, the Cape Epic as well as Sani2C also take place in this category. Both events attract large numbers of international participants (Morgan, 2014:1). The last category is "On and in water". This category includes three prominent canoe marathons, which include the Dusi, Fish and Berg River canoe-marathons. The Midmar Mile is also in this category as it is the world's largest open water swimming event, held over two days in Pietermaritzburg (Kruger, Saayman & Ellis, 2011:59; Morgan, 2014:1). It is clear that whether a participant enjoys participating on dry land or water; prefer wheels or feet; choose mountains or tar there is a large variety of endurance events hosted in South Africa (Morgan, 2014:1).

Currently, an array of studies has been done to better understand the type of participant that takes part in South African endurance sport events. The majority of studies focused on the motives of participants. This collection of studies included: ***motives of road cycling participants*** (Streicher & Saayman, 2010:121-131; Kruger, Myburgh & Saayman, 2016:392), ***open water swimmers***

(Kruger *et al.,* 2011:59-79), ***ultra-marathon runners*** (Kruger & Saayman, 2013a:71-92; Kruger & Saayman, 2015:63-82), ***canoe participants*** (Kruger & Saayman, 2013b:1158-1173) and ***triathletes*** (Myburgh, Kruger & Saayman, 2014a:117-134). Other studies focused on the ***spending behaviour of endurance sport participants*** (Saayman & Saayman, 2012a:124-138), ***essential differences between participants*** (mountain bikers versus road cyclists) (Kruger & Saayman, 2014:137-152), ***first time versus repeat participants*** (Myburgh, Kruger & Saayman, 2014b:1010-1039), ***age as a segmentation base for triathletes*** (Myburgh, Kruger & Saayman, 2014c:1-22) and ***mountain bikers' intention to return to a particular event*** (Kruger, Saayman & Hallmann, 2016:95-111).

Collectively, these studies found that endurance athletes have distinct characteristics and motives for competing. However, while it is safe to assume that commitment forms the backbone of these athletes' participation in endurance sport events over the long run, this aspect has to date been neglected in a South African sport tourism context. Sport commitment is the motivation to persist in one's involvement in organised athletic or other physical activities (Weiss & Weiss, 2006:310). Correspondingly, it represents one's resolve, determination and desire to continue in a given activity or programme (Scanlan, Russell, Beals & Scanlan, 2003:377). Commitment can furthermore refer to the frequency or intensity of involvement in a sport. It can also refer to the willingness to spend money, time and energy in a pattern of sport involvement, namely participation in endurance events (Mullin, Hardy & Sutton, 2007:69). This psychological theory has led to the ideal research problem within sport tourism specifically for endurance events, as commitment can be a tool that events use to attract and attain the optimal committed market of participants to their specific event. Currently, many endurance events in the country cannot grow their participant numbers. For example, the Cape Town Cycle Tour can accommodate a maximum of 35 000 participants annually. The reason for this, is that more participants would put pressure on the existing infrastructure of the destination and lead to greater risk regarding the safety of the participants (Kruger, Myburgh *et al.,* 2016:381). Thus, in South Africa all endurance events employ the restricting of the number of participants as a management technique. The challenge therefore for organisers is to understand their current market to sustain the event while at the same time helping to expand the various disciplines of endurance sport and increasing tourism and especially sport tourism in the country. This can be done by focusing on the factors that lead to the commitment of endurance athletes and adapting the event according to these factors.

Knowledge of the factors that influence commitment is especially important in a South African context, as this will help expand participation in endurance sport, develop smaller events, sustain the competitiveness of larger endurance events and help market the country as an ideal endurance destination. However, to the researchers' knowledge, no studies have to date focused

on the aspects that influence sport commitment of endurance athletes in South Africa or how commitment towards sport can influence sport tourism. This study will, therefore, fill the gap in the current sport tourism literature by developing an endurance sport commitment framework to address these issues.

The outline of Chapter 1 is as follows: the background to the problem, the problem statement, followed by the goals and objectives of the study, the research methodology, definitions of key concepts and chapter classification.

1.2 Background to the study

To fill the knowledge gap regarding the commitment among endurance athletes in South Africa, as well as to develop a framework, three aspects need to be considered: commitment and related models and theories, factors that may influence commitment, and previous research about the topic. The next section deals with the literature relevant to these three aspects. It is notable that a detail discussion of each aspect follows in the literature review chapters.

1.2.1 The Sport Commitment Model and Involvement

This section, briefly discusses the Sport Commitment Model as it is the model and theory most renowned for measurements of sport commitment. The Sport Commitment Model also forms the foundation of this research. It is important to note that a detailed review on other theories and models is reserved for the literature chapters. These theories and models include, the Psychological Commitment to Team (PCT) scale (c.f. 4.9.6), Investment model (c.f. 4.4.1), the Social exchange theory (c.f. 4.4.2), Interdependence theory (c.f. 4.4.3), and the Involvement model (c.f. 4.2.1).

The Sport Commitment Model (hereafter referred to as SCM) is a widely accepted conceptual framework for understanding the commitment of different sport participants (Chu & Wang, 2012:756). The SCM is ideal to examine the motivational bases of continued or persistent, organised sport participation (Casper & Stellino, 2008:96; Wigglesworth, Young, Medic & Grove, 2012:236). The SCM is a modification of Rusbult's (1980:172) Investment model with influences from Kelley's (1983) theoretical thoughts, which include the Social exchange theory and the Theory of romantic relationships. Originally Scanlan, Carpenter, Simons, Schmidt and Keeler (1993:16-38) developed the SCM to account for unique characteristics within youth sport. The reason for this development was that they believed the Investment model could not fully describe sport commitment. The model was modified by substituting satisfaction with enjoyment as well as defining and operationalising each construct specifically to sport (Scanlan, Carpenter, Simons *et al.,* 1993:17). In totality, the original SCM had five determinants of commitment, which included sport enjoyment, involvement alternatives, personal investments, social constraints and

involvement opportunities. An additional predictor of commitment was revealed in more recent research supported in the SCM, that is social support (Carpenter, 1992:10; Scanlan, Russell, Beals *et al.,* 2003:380; Scanlan, Russell, Wilson & Scanlan, 2003:361).

The SCM hypothesises that enjoyment, personal investment, social constraints, involvement opportunities and social support act as attractors to keep individuals participating (strengthen commitment), whereas involvement alternatives decreases (weakens) commitment (Scanlan, Carpenter, Simons *et al.,* 1993:18; Weiss, Kimmel & Smith, 2001:133; Scanlan, Russell, Beals *et al.,* 2003:380; Casper & Stellino, 2008:97; Weiss, Weiss & Amorose, 2010:423; Chu & Wang, 2012:757; Wigglesworth *et al.,* 2012:237; Hall, 2013:4). According to the SCM, greater commitment is directly influenced by higher levels of enjoyment, involvement opportunities and social support. These are thus seen as attracting participants towards the sport. Higher levels of social constraints and personal investments are perceived as restraining athletes from participation where levels of attractive involvement alternatives attract athletes away from participation (Young & Medic, 2011:168). On the other hand, literature reporting on the SCM has found that the strength of the variables of the model alters over time (Hall, 2013:28). Therefore, SCM determinants can change over a season, and an athlete's commitment can fluctuate (Carpenter & Coleman, 1998:196; Weiss & Weiss, 2006:310). A behavioural index of commitment was not included in the initial SCM testing, but it is seen as theoretically intuitive to add behaviours such as continued participation, effort, intensity, lifestyle and perseverance as these are additional indicators of commitment in sport participants (Weiss *et al.,* 2010:425).

Although the SCM has clearly defined constructs and hypotheses of each of the constructs, researchers found that commitment is a multi-dimensional concept. Researchers such as Casper and Stellino (2008:99) state that there is a need to further understand commitment and the antecedents of commitment particularly regarding different sport participants. Hence, it is a complex term to understand. The complexity is also highlighted in the fact that endurance events attract a market with various types of participants that differ with regard to age, gender, nationality and level of expertise. Therefore, it can be hypothesised that the commitment of these participants will also not be the same. Participating in endurance events, such as marathons, cycling and triathlons, also requires considerable dedication and reflects a level of enduring involvement with the recreational activity (Funk, Toohey & Bruun, 2007:230). Another unique characteristic of endurance athletes is their set of values like perseverance, determination and relentlessness. These values leads to the adoption of a different lifestyle tailored to prioritise sport activities (Rauter, 2014:8). It is found that the uni-dimensional approach is beneficial for research of this regard as it provides an insight into the level of motivation linked with specific motives a person holds to continue participating in an endurance sport. Individuals participating in endurance sports who have high levels of endurance involvement tend to show an increased frequency of

participation in endurance events, overnight travel to endurance events, and spending on endurance related goods and services (McGehee, Yoon & Gárdenas, 2003:305; Funk *et al.,* 2007:230). It became clear that the SCM, as a single measurement tool, will not be sufficient for determining the commitment factors of endurance athletes. The most important aspects leading to this conclusion included that different participants take part in endurance events, and that endurance athletes adapt their lifestyle as well as their enduring involvement in endurance sports. Therefore, it was necessary to combine the SCM with other measurements to form an ideal framework for measuring commitment in a sport tourism context. Consequently, Involvement has also been considered in this research.

Authors suggest that participants' involvement level can be a direct predictor of their commitment, because if participants increase their time of practice, it is a direct reflection of their commitment (Funk *et al.,* 2007:230; Fernandes, Correia, Abreu & Biscaia, 2013:4). Therefore, events must aim to increase participation frequency (involvement level) as this is an indication of a participant's personal investment in the sport. This again is reflected in personal resources such as time, effort and money. Commitment through involvement level can therefore, predominantly be measured through examining four different behaviour patterns of sport participants, including media consumption, participation frequency (repeat consumption), sporting good consumption (spending) and behavioural intentions (Fernandes *et al.,* 2013:9; Kim, James & Kim, 2013:180).

To emphasise further the complexity of commitment within the market of endurance sport and the participant, as well as the importance to consider additional factors, the next section evaluates different factors that can have an influence on sport commitment.

1.2.2 Factors influencing commitment to sport

The sport commitment literature has revealed various factors that can have an influence on sport commitment. This section only discusses the most notable and relevant factors to the current study context. However, commitment in a sport context is not limited to these factors only.

Socio-demographic influences such as **gender** (Funk *et al.,* 2007:233; Scanlan, Russell, Magyar & Scanlan, 2009:702; Getz & McConnell, 2011:328; Stamm & Lamprecht, 2011:16; Rauter, 2014:8), **spending** (Spotts & Mahoney, 1991:24; Davies, 2002:83; Kastenholz, 2005:557; Bloom, Grant & Watt, 2005:38; Legohérel & Wong, 2006:16; Wicker, Breuer & Pawlowski, 2010:214) and **age** (Augaitis, 2005:10; Casper & Stellino, 2008:100) have been identified in various sport literature. Altough not in a sport context Scott, Baker and Kim (1999:50-67) did a study of birdwatchers attending a festival and found that **behavioural measures** of involvement were substantially more useful in predicting intentions than social-psychological measures of involvement and commitment. Behavioural measures can include frequency of participation,

spending, distance travelled, ability or skill, ownership of related equipment, memberships to clubs, the extent of information and product search (Getz & McConnell, 2011:328). Other behavioural predictors include participants' **motivation** (Trail & James, 2001:111; Weiss *et al*., 2010:423; Williams, 2013:36; Kim *et al*., 2013:174; Vallerand & Young, 2014:340), **level of sport participation** (Baker, Côté & Deakin, 2005:64) and also **physical activity involvement** (Iwasaki & Havitz, 2004:48; Stebbins, 2007:176; Beaton & Funk, 2008:55).

The endurance event can furthermore have a direct influence on sport commitment. An event can influence both the initiation and continuation of participation through its impact on attitude formation and change that occurs during the event (Funk & James, 2001:120). Consequently, endurance events can serve as a catalyst to increase attitudes toward physically active leisure that would correlate to increased behavioural activity and participation (White, 2008:342; Wilhelm Stanis, Schneider & Russell, 2009:290). Theoretically, if an endurance event can promote positive and stronger attitudes toward physical activity, it could play an influential role in developing two significant consequences, that is increasing psychological commitment to a specific sport and growing intentions to engage in general exercise activity and event participation (Funk & James, 2001:120; Funk, Jordan, Ridinger & Kaplanidou, 2011:251; Beaton, Funk, Ridinger & Jordan, 2011:130). Beyond fostering higher sport commitment, the endurance event can also influence attitudes toward engaging in regular exercise behaviour.

Previous research has shown that **event satisfaction** is also a key predictor of both future intentions to exercise and commitment to sport (Funk *et al.,* 2011:254). This is important because, if an individual has a positive event experience through the quality of services encountered it will contribute to the development of optimistic attitudes toward physically active leisure (Arnould & Price, 1993:30; Tian-Cole, Crompton & Willson, 2002:5; Funk *et al.,* 2011:254). The perception of the sport event experience would form the basis of satisfaction (Oliver, 2014:12). Satisfaction with the sport event experience, therefore, has the potential to foster the development of positive attitudes toward sport commitment and future participation intentions (Filo, Funk & O'Brien, 2008:502).

Apart from the aforesaid factors, **social and economic predictors** also greatly influence sport commitment. Friends, acquaintances, family members, as well as educational institutions, societies, clubs and different organisations can shape a person's views on sport activities and have an influence on one's commitment towards a specific sport (Côté, 1999:395). Apart from social influences to help understand sport engagement, research on economic influences (Godbey, Caldwell, Floyd, & Payne, 2005:150-158) can also be applied to examine disengagement and more importantly, negotiation of barriers to participation (White, 2008:343). Mass participant sport events, such as marathons, can be both time consuming and expensive.

Lower socio-economic groups are more likely to be less physically active and have less time for social participation (Lindström, Hanson & Östergren, 2001:441). The cost of registration for these events can furthermore exceed $100 (approximately R1100), which does not include the additional training-related costs (e.g. shoes, sport gear) and travel (Lindström *et al.,* 2001:441). It is, therefore, clear that participants have different socio-economic backgrounds and that cost and time can have a direct effect on commitment and future intentions to participate.

In addition, Stamm and Lamprecht (2011:15) established that among adults, **health related goals** are among the most common reasons for engaging in different sports. However, it should be noted that health related goals are not always sufficient to motivate someone to practice sport over a longer period (Rauter, 2014:7). Engaging in a sport in the long term leads to the health-related reasons often becoming less important and are replaced by acceptance of challenges and enjoying the sport (Rauter, 2014:7). A **lifestyle,** in which sport is the main focus, mostly include motives like satisfaction and enjoyment, developing abilities, establishing friendships and overcoming the challenges inherent in a sport activity (Chen, 2006:5; Rauter, 2014:8). The intertwining of all these motives results in feelings of enjoyment that can drive people to become committed to a sport, invest more energy in the sport and ultimately the sport become a way of life (Rauter, 2014:8). Shipway and Jones (2007:373) report that such sport enthusiasts also demonstrate a specific type of consumption for example they share a similar style of dressing and usually only wear those brands that are renowned and popular in a specific sport. Committed endurance athletes often consider such sport equipment a status symbol (Rauter, 2014:8). The leading sport equipment not only part creates an 'image' but also helps the athletes' self-confidence and enhance their feeling of competence while engaging in a selected endurance sport. From this point of view, having the most up-to-date and trendy sport equipment is of utmost importance to them (Bridel, 2010:224).

Another factor prominent to sport tourism is **travel behaviour of participants/visitors**. However, the direct link between commitment and the influence of commitment on travel choice and behaviour has to date not been researched. Kruger and Saayman (2013a:87) nevertheless did a study focusing on the influence of participation in sport on participants' (marathon runners competing in the Comrades Marathon) holiday choice and travel behaviour. The study identified that participation in sport *sometimes* influenced holiday selection and travel behaviour while some participants preferred to take a holiday to a destination other than the destination where they had to participate. Results about different types of runners revealed that more serious runners based their travel choices regularly on their event participation (Kruger & Saayman, 2013a:87-88). Runners that are more serious also visited tourist attractions in the area coincidentally during the event (Kruger & Saayman, 2013a:87-88). These results are relevant as it shows that sport

participation can have an influence on travel behaviour and that more serious participants (those that are more committed) combine their holidays and event participation.

In view of the different factors that can influence sport commitment of athletes, it becomes apparent that research is needed to understand which of these factors and combination of factors is relevant and has an influence on the South African endurance participant market. The research is also relevant since these factors derived from different sport perspectives and not just specifically from endurance sport that requires higher levels of commitment. Therefore, the study also contributes by identifying the factors prominent to specifically the endurance sport context. The next section summarises the findings from different studies that have implemented the SCM as well as other methods to measure the commitment of different athletes.

1.2.3 Previous research on sport commitment

Collectively, the analysis of previous research regarding sport commitment confirms the following main findings:

- Level of experience (Chu & Wang, 2012:757) as well as skill level (Jeon & Ridinger, 2007:1; Casper & Stellino, 2008:93) can have an influence on commitment and also shows differences within commitment;
- Research has demonstrated that differences in commitment is based on the age of athletes (Casper & Stellino, 2008:93; Chu & Wang, 2012:757);
- Most studies found that enjoyment is the strongest predictor of commitment (Jeon & Ridinger, 2007:1; Casper & Stellino, 2008:93; Krinanthi, Konstantinos & Andreas, 2010:41; Wigglesworth *et al.,* 2012:236; Chu & Wang, 2012:755);
- SCM variables as well as overall commitment varies according to gender (Casper & Stellino, 2008:93; Wigglesworth *et al.,* 2012:236);
- There is a positive association between sport commitment and intrinsic motivation (Jeon & Ridinger, 2007:1; Krinanthi *et al.,* 2010:41);
- Sport commitment can directly predict participation frequency (Jeon & Ridinger, 2007:1);
- There are contradicting studies with regard to the influence of commitment on participation behaviour (Jeon & Ridinger, 2007:1; Casper & Stellino, 2008:93);
- Personal, social and monetary variables directly contribute to commitment (Casper & Stellino, 2008:93);
- Athletes can be categorised into different groups parallel to SCM variables (Weiss & Weiss, 2006:316); and
- Events have the capacity to both sustain and increase attitudes toward physical activity leisure and future event participation (Funk *et al.,* 2011:263).

As seen from the summary of the findings with regard to sport commitment, several factors can be influenced and can have an influence on sport and by sport commitment. However, to the researchers' knowledge, no previous studies have focused specifically on the different types of endurance athletes and no similar study has been done in a South African context. It is furthermore evident that sport commitment has been researched combining different variables and focusing on various athletes, which has led to various benefits. These benefits include a decrease in sport ***withdrawal*** (Dishman, Jackson & Nakamura, 2002:569; Krinanthi *et al.,* 2010:42; Williams, 2013:36; Hung & Lu, 2014:353), an increase in an overall ***healthier lifestyle*** (Barnett & Weber, 2008:5; Hall, 2013:2), ***loyalty and continuous participation*** (Iwasaki & Havitz, 2004; Casper & Stellino, 2008:96; Lee, 2011:895), ***increase in product-related consumption*** (Casper, Gray & Stellino, 2007:255; Jeon & Ridinger, 2009:326; Fernandes *et al.,* 2013:10; Hungenberg, Gould & Daly, 2013:314), ***effective event marketing*** (Kotler, 2003:132; Hofmeyr & Rice 2000:15; Casper & Stellino, 2008:97;) as well as ***sport event enhancement*** (Weiss & Weiss, 2006:322; Hall, 2013:6). It is clear from these benefits that the developing of a framework for endurance sport commitment is of very high importance. The next section further highlights the significance of this study by reviewing the problem that this research attempts to resolve.

1.3 Problem statement

Based on the preceding sections, the following key issues necessitate this research. Firstly, there is still a lack of research that focuses on sport commitment, especially concerning endurance athletes that take part in South African events. Few studies combine commitment (psychology) and tourism (social sciences) to the benefit of not only the event, but also the destinations that host these events. Secondly, the Sport Commitment Model on its own is not sufficient in measuring endurance athletes' commitment. The model needs to be applied in conjunction with other models and theories as well as different influential aspects such as lifestyle, event attributes and travel behaviour. It therefore becomes vital to comprehend what combination of factors will have an influence on an endurance athlete's sport commitment. This is another aspect that has to date been neglected in South African sport research.

Thirdly, the correlation between travel behaviour and commitment to sport participation has not empirically been researched, which is vital as it can be used to progress sport tourism within a specific destination. Lastly, endurance sport participants have a very specific lifestyle and sport involvement. However, the problem is that limited research focuses on how endurance athletes adjust their daily schedules and their lifestyle to accommodate leisure and sport activities. A framework is needed which combines the above-mentioned aspects and consequently can be used to increase the number of successful endurance sport events. Ultimately, such a framework will help with the goal to market South Africa as an ideal sport destination. Therefore, the research

question that this study aims to answer is: What are the specific factors that should be included in a commitment framework for endurance sport in South Africa?

1.4 Goals and objectives

The following section provides the primary and secondary objectives of the study.

1.4.1 Aim of the study

The overall aim of the research study is to develop a framework that fosters commitment for endurance sport in South Africa.

1.4.2 Objectives and sub-objectives of the study

The following objectives, as well as sub-objectives, were set to reach the overall aim of the study:

- **Objective 1**

To conduct a literature analysis on sport tourism, by defining sport tourism, classifying sport tourism and sport events, identifying the key stakeholders within sport tourism and highlighting the importance of the sport events in the sport tourism industry.

- **Objective 2**

To examine the distinct characteristics of endurance sport events and athletes within a sport tourism context by means of a literature review.

- **Objective 3**

To critically analyse commitment, the Sport Commitment Model, related theories and the complexity of sport commitment in an endurance sport context by means of a literature review.

- **Objective 4**

To analyse the current state of endurance sport tourism and events in South Africa by means of a literature review.

- **Objective 5**

To explore the methodological considerations applied in the study as well as to design a research framework for the study by means of a literature review.

- **Objective 6**

To present and discuss the results from the survey by means of an empirical analyses.

- **Sub-objective 6.1**

To determine the demographic profile, event preferences and participation frequency of endurance athletes that take part in endurance events hosted in South Africa based on the results of the survey through descriptive statistics.

- **Sub-objective 6.2**

To determine the commitment, lifestyle, event attributes and travel behaviour factors of endurance athletes by means of exploratory factor analyses.

- **Sub-objective 6.3**

To determine if there are statistically significant differences based on respondents' socio-demographic, event and sport discipline preferences, participation frequency and travel patterns with the commitment, lifestyle, event attributes and travel behaviour scores by making use of *t*-tests and ANOVAs.

- **Sub-objective 6.4**

To show the relationship between commitment, lifestyle, event attributes and travel behaviour by means of Structural Equation Modelling (SEMs) in order to determine which factors have a unique relation to sport commitment.

- **Objective 7**

To draw conclusions, make recommendations concerning the results of the study, and to propose a commitment framework for endurance sport in South Africa.

1.5 Method of research

The research followed a quantitative approach by means of a survey that followed a non-probability sampling method. Different types of endurance athletes (e.g. mountain bikers, marathon runners, triathletes, canoeists, trail runners, road cyclists, etc.) were sent a link to a questionnaire. Hence, a convenience or availability sample was applied to gather data. The research method is further discussed in the (i) literature review and (ii) empirical survey.

1.5.1 Literature review

The literature study was based on the following specific keywords: *sport tourism, endurance sport events, sport commitment, endurance sport participants* and *framework*. The theoretical framework of commitment focuses mainly on the Sport Commitment Model, other commitment theories and models, different factors that influence sport commitment as well as studies that applied the sport commitment model. The theoretical framework also analyses sport tourism in a South African context as well as endurance events and endurance participants. The literature study was done by examining articles, theses, dissertations, newspaper articles, books and other tourism-related literature as well as sources on the largest endurance sport events in South Africa. Information searches were conducted mainly through library catalogues and indexes, as well as

the Internet. Scientific databases such as Google Scholar, Ebscohost, Sabinet and SA ePublications were utilised to search for the most recent, relevant publications and information. Through these sources, a complete analysis was done on commitment and endurance events to examine the potential factors that may influence an endurance athlete's commitment. This information was used to develop a commitment framework (c.f. 6.2) with the view that it can be used to benefit sport events and sport tourism in the country. Both primary and secondary data were applied, considering that intensive literature studies were implemented as well as an empirical survey (which was facilitated through an online-based questionnaire).

1.5.2 Empirical survey

The following section explains the methods chosen to conduct the empirical analysis.

1.5.2.1 Research design and method of collecting data

An electronic survey was developed by way of Google Forms. This questionnairre was distributed to different endurance athletes in the country. This was done by providing a "link" of the questionnaire that was posted on the websites and social media networks of different endurance events and sport clubs. Endurance athletes were advised to follow the link and complete the questionnaire voluntarily. Jansen, Corley and Jansen (2006:5) highlight the benefits associated with online-based surveys including the fact that it can reach a large number of potential respondents, promptly. It also provides the use of multiple-question formats and direct database connectivity. Consequently, this allowed for data quality checking, customised instrument delivery and guaranteed confidentiality. The aforesaid suggests that online surveys can serve to improve the reliability of the data (Jansen *et al.,* 2006:5). The link was displayed on some of the following endurance events' websites: Ironman South Africa, Dusi Canoe Marathon, Sani2C, 94.7 Cycle Challenge and the Comrades Marathon. Endurance sport clubs across the country were also approached to share the link on their websites or via email. The clubs included trail running, cycling, mountain biking, canoeing and triathlon clubs. The sampling method and survey is further discussed in detail in Chapter 6 (c.f. 6.3). The survey link was shared on most on the websites by the beginning of March 2015 as this is the ideal period when participants visit the websites to register for the events. The survey ran until November 2015.

1.5.2.2 Sampling method

The study made use of Krejcie and Morgan's (1970:608) formula to calculate the sample sizes of the endurance participants:

$s = X^2 * N * P * (1-P) / d * 2 * (N-1) + X^2 * P * (1-P)$.

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

There is currently no available statistics on the exact number of endurance sport participants in the country. However, considering endurance sport events, the larger endurance events such as The Cape Town Cycle Tour can accommodate a maximum of 35 000 cyclists, while the largest marathon in the country, namely the Comrades Marathon, draws 20 000 runners per year. Additionally, there are smaller endurance events such as the Dusi Canoe Marathon that attracts between 1600 to 2000 paddlers, the Sani2C that accommodates 4,350 mountain bikers and Ironman African Championships with 1,856 triathletes that take part each year. Given the number of endurance events and the average number of participants that each of these events can accommodate, the researcher can approximate that there is about 100 000 endurance athletes in the country. Apart from the number of athletes that take part in events, it is very difficult to take into account the number of athletes that form part of endurance clubs and athletes (besides Ironman participants) that take part in more than one endurance sport. Thus, 100 000 is the most appropriate population size to apply. According to the formula of Krejcie and Morgan (1970:608) the appropriate sample size for this research is then calculated at 384. The sample size was, however increased to 400 to take into account the importance of precision and completeness. As seen in Table 1.1, the total number of complete questionnaires that were collected was 498 and exceeded the required sample. One of the main goals of the survey was to distribute the questionnaires between participants of different types of endurance sports, equally. This was a difficult task, and in some cases, the link of the questionnaire was removed on specific endurance events' websites (e.g. Sani2C) to ensure that a similar sample size of each sport was reached.

Table 1-1: Questionnaires distribution among endurance events

Endurance event	Endurance type	Number of questionnaires
Sani2C	Mountain biking	179
The Dusi Canoe Marathon	Canoeing	28
Ironman African Championship	Triathlon	64
Comrades Marathon	Marathon running	14
Amashova Durban Classic	Road cycling	9
947 Cycle Challenge	Road cycling	4
Cape Town Cycle Tour	Road cycling	1
Endurance sport clubs		

Adventure racing	Trail running	24
Canoeing South Africa	Canoeing	38
Massive Adventures	Mountain biking and trail running	11
Triathlon South Africa	Triathlon	45
Ultra-trail Cape Town	Trail running	50
Potchefstroom Cycling Club	Road cycling	14
Sun City Cycling Club	Road cycling	1
Vortex Cycling Club	Road cycling	2
Did not specify	N/A	14
Total number of questionnaires		**498**

1.5.2.3 Development of the questionnaire

In Chapter 6, a detailed discussion follows on the references that were applied to develop the questions in all the sections of the questionnaire (c.f. 6.2.1). In this regard, Chapter 6 shows the reliability and validity of the measuring instrument that was applied in the study. The questionnaire was further based on the research framework, which combines the different elements from the background of the survey as well as from relevant literature and is also comprehensively discussed in Chapter 6 (c.f. 6.2). The questionnaire was divided into seven sections (*see* Appendix A). Section A captured demographic details (gender, home language, age, gross annual income, home province and country of origin). Section B captured information regarding endurance disciplines and the events that participants take part in. Section C focused on the participation frequency, which is measured in training hours, years of participation, number of events, participated in number of expected event participation. Section D is the primary part of the questionnaire and is based on the Sport Commitment Model. It measured 23 items on a five-point Likert scale, where 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree. Section E obtained information regarding participants' lifestyle, financial commitment and media consumption. Section F looked at the influence of sport commitment on travel behaviour. This was measured on a five-point Likert scale, where 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree. Section G was the last section and evaluated the event attributes that are important for participants. This was done by measuring 19-event attributes on a Likert-scale where 1 = not at all important; 2 = slightly important; 3 = neither important nor less important; 4 = important; 5 = extremely important.

1.5.3 Data analysis

The data was captured by Google Forms and exported to Microsoft Excel®. Thereafter the Statistical Services at the North-West University, Potchefstroom Campus, assisted in the processing of the data through SPSS software (SPSS version 23, 2016). For the purpose of the study a variety of statistical techniques were used in order to ensure the best results. The data

analysis involved initial data analysis (descriptive statistics) in order to determine the profile of the respondents (c.f. 6.4.1.1- c.f. 6.4.1.20). Using SPSS, the statistical analyses further included: factor analyses, *t*-tests, ANOVA analysis and Spearman's Rank Order correlation analysis. Furthermore, AMOS, which is an added SPSS module, was used for the Structural Equation Modeling (SEM). In the next section, a brief description of each of the statistical analyses techniques that was applied, follows.

1.5.3.1 Factor analysis

A factor analysis can be described as a multivariate technique that identifies whether there are correlations between a set of observed variables. These variables stem from the relationship with one or more latent variables in the data gathered (Pallant, 2007:179; Field, 2009:177). Factor analyses were primarily used to analyse the Likert-scale questions in the questionnaire (Sections D-G) (c.f. 7.2.3.1- 7.2.3.4).

1.5.3.2 *T*-tests

A *t*-test is a statistical examination of two population means (e.g. males and females) or two sets of data (e.g. before and after) where the mean score is compared on some continuous variable (Pallant, 2007:103). This study made use of independent sample *t*-tests to measure whether two samples were different. This is commonly used when the variances of two normal distributions are unknown (Pallant, 2007:103). *T-tests* were used for example to distinguish the differences regarding *commitment, travel behaviour, event attributes* and *lifestyle adaption* between two groups as measured by the questionnaire (c.f. 7.3.1- 7.3.9).

1.5.3.3 ANOVA analysis

Another name for ANOVA is the *f-test,* and it shares many similarities with the *t-test.* However, the significant difference between these analyses is the fact that *t-test* assesses the difference between the means of two groups, whereas ANOVAs measure the difference between more than two groups. Thus the ANOVA analysis can be described as the analysis that tests whether there are significant differences in the specific population means of more than two groups (Eiselen, Uys & Potgieter, 2005:119). In the case of this study, ANOVAs were used to identify any statistically significant differences between more than two groups of variables (c.f. 7.4.1- 7.4.18).

1.5.3.4 Spearman's Rank Order Correlation analysis

When using SPSS, Spearman's Rank Order Correlations will calculate two types of correlations, firstly a *bivariate correlation* (between two variables) and zero-order correlation. This will allow researchers to explore the relationship between two variables, while controlling another variable; this is known as partial correlation (Pallant, 2007:126). Correlation analyses were applied in the present study to determine the relationship between the various factors (c.f. 7.5.2.1- 7.5.2.4).

1.5.3.5 Structural equation modelling

Structural equation modelling (furthermore referred to as SEM) is a very broad statistical modelling tool that is mostly used in the behavioural sciences (Hox & Bechger, 1998:354). It can be seen as a combination of a confirmatory factor analysis and a regression analysis. The relationship between the theoretical construct is represented by regression or path coefficients between the factors. Researchers are often interested in multivariate relationships among independent, dependent and unobserved variables in a specified model. SEM provides a viable statistical tool for exploring all of these relationships (Burnette & Williams, 2005:143). In the current study, a SEM model was used to show the relationship between *commitment*, *lifestyle, travel behaviour* and *event attributes* (c.f. 7.6.2- 7.6.5).

The results from the analyses mentioned above were combined to develop the commitment framework for endurance events in South Africa proposed in Chapter 8 (c.f. 8.6).

1.6 Defining the key concepts

The following concepts were used throughout the thesis and therefore need some clarification.

1.6.1 Sport tourism

Sport is regarded as the world's largest social phenomenon, while tourism is predicted to become the world's biggest industry in the next century (Kurtzman & Zauhar, 2003:41; Telfer & Sharpley, 2015:243). Standeven and De Knop (1999:12) define sport tourism as "all forms of active and passive involvement in sporting activity, participated in casually or in an organised way for non-commercial or business/commercial reasons that necessitates travel away from home and work locality". Hall (1992:10) also notes that sport tourism consists of two categories, firstly to travel to participate in sport and secondly to travel to observe sport. According to the World Tourism Organisation, sport tourism is defined as "travel outside one's usual environment for the primary purpose of active or passive engagement in high performance sport or recreational sport" (SRSA, 2012:3). Sport tourism in the context of the current study can be defined as participants travelling to participate in endurance events where they spend money in the hosts' destination either before, during or after the event has taken place.

1.6.2 Sport events

Similarly, in the definition of sport tourism explained above, events can also be categorised into three distinct areas, namely sport events, sport attractions and recreational pursuits (SRSA, 2012:3). These events can relate to the event tourists who travel as a spectator or as a participant in an organised sport event; examples include the Currie Cup or the Comrades Marathon. The

classification of events is usually divided into international mega events, international major events, other international events, continental events and domestic events (SRSA, 2012:3).

1.6.3 Endurance sport and endurance events

According to Gastelu (2006:1) endurance can be defined as "the ability to continue physical activity without undue discomfort", while endurance sport can be defined as "a sport that requires the ability to perform for long periods of time at low intensities, such as triathlons". Endurance events that accommodate these sports can be defined as the "event where participants have the ability to withstand longer exertion, caused by the distance; time and the level of anaerobic fitness/intensity requirements for successful completion are considerably higher than when compared to other sport events" (Brook, 1987:94; Mann & Schaad, 2001:265; Kellmann, 2002:25; O'Neil & Steyn, 2007:99). The uniqueness of an endurance event is settled in the physical and mental challenges it presents, the great deal of preparation it requires and the necessity that the participant overcomes extreme challenges to the body and mind to finish (O'Neil & Steyn, 2007:99, 100). Extreme environmental conditions also contribute to the physical and mental pressures on the athlete (Dettweiler, 1991:10; Anthony, 1996:25; Mann & Schaad, 2001:265). Endurance sports include marathon running, cross country running, road cycling, mountain biking, open water swimming, endurance horse riding, triathlons, canoeing and kayaking (O'Neil & Steyn, 2007:100).

1.6.4 Commitment

Commitment can be seen as an individual's decision to sustain involvement in a focused behaviour (e.g. job, relationship or sport) (Young & Medic, 2011:168). Commitment is therefore based on a person's equivalent appraisal of three forces, namely forces that attract them to the activity, forces attracting them to alternative activities, and lastly forces restraining them from being involved in the activity (Young & Medic, 2011:168). Scanlan, Carpenter, Schmidt, Simons and Keeler (1993:7) firstly defined sport commitment as "the desire and resolve to continue sport participation over time". Therefore, sport commitment can be seen as "the desire and determination to keep playing" and was supplementary defined as "a psychological state representing the desire and resolve to continue participation in a particular athletic programme, specific sport or sport in general" (Scanlan, Carpenter, Schmidt *et al.,* 1993:6). This definition works at various levels of specificity including general, a specific sport or a specific team (Scanlan, Russell, Scanlan, Klunchoo & Chow*,* 2013:529).

1.6.5 Framework

A framework is the researcher's position on the problem and gives direction to a topic under study. It may be an adaptation of a model used in a previous study, with modifications to suit the inquiry. Aside from showing the direction of the study, through the research framework, the researcher

can demonstrate the relationships of the different constructs under investigation (Dick & Basu, 1994:99). This research framework which is developed in the current study is fundamental in a South African context seeing that sport commitment has not been measured in from both an endurance and tourism perspective.

1.7 Preliminary chapter classification

This study consists of eight chapters. The following section gives a brief outline of each chapter.

Chapter 1: Introduction, background to the problem, problem statement, goals and objectives and method of research

This chapter sets the background through the introduction. The problem statement follows with its envisaged contribution, aims and objectives. The chapter explains the method of research and definitions of key concepts. The aim of this chapter is to give an overview of sport commitment, and focus specifically on endurance events. It is, however, also reasoned within the broader understanding of factors that can influence commitment.

Chapter 2: A literature overview of sport tourism

This chapter presents definitions and the classification of sport tourism. The classification and typology of sport events, as well as the key stakeholders within sport tourism, are also analysed. Furthermore, focus is placed on the importance of sport events within sport tourism and specifically the importance of smaller-scale sport events. This section serves as an introduction to Chapter 3, which is an analysis of endurance sport.

Chapter 3: A literature analysis of endurance sport

Chapter 3 entails the evolution and characteristics of endurance sport and endurance athletes. It examines endurance sport as part of sport tourism closer. The chapter reviews the benefits of endurance events from both a supply and demand perspective. The last section in this chapter looks closely at the aspects that influence endurance sport participation including motivation, demographic variables as well as relevant sport models and theories. A section of Chapter 3 briefly reviews sport commitment, yet a more extensive evaluation on commitment follows in Chapter 4.

Chapter 4: A literature assessment of commitment in the context of endurance sport

This chapter reveals the analysis that was done on sport commitment in an endurance sport context. It discusses the literature on commitment and what it entails as well as the development of sport commitment by way of different theories. The chapter deals with a further literature review on the role that commitment specifically plays in sport. The chapter then follows with an extensive review of the Sport Commitment model and how this model has been used in previous studies to

measure sport commitment. Other models and theories about sport commitment are also briefly evaluated to highlight the complexity of measuring sport commitment. Chapter 4 also discusses the findings of different commitment studies, the benefits of measuring sport commitment as well as the importance of sport commitment.

Chapter 5: Endurance sport tourism and events in South Africa

The chapter has a strong emphasis on the South African sport tourism industry considering the current state and strategy of sport and sport tourism within the country. This chapter examines endurance events within South Africa with specific focus on the history and current research regarding these events. In its last section, Chapter 5 discusses the profile and motives of various endurance athletes that take part in endurance events hosted in South Africa, as previous studies have identified.

Chapter 6: Method of research and descriptive results

This chapter reviews the research framework that was developed from relevant literature. Furthermore, making use of the framework, the chapter examines the variables included in the questionnaire, as well as sources that were consulted. The chapter considers the sampling method as well as the survey. The last section of Chapter 6 focuses on the initial statistical analysis, including the descriptive results of the respondents' profiles.

Chapter 7: Results of the multivariate analyses

Chapter 7 presents the results from the multivariate analyses. The results specified in this chapter include results of the factor analyses, *t*-tests, ANOVAs, Spearman Rank Order Correlation analyses as well as Structural equation modelling. These analyses were used to show the relationship between sport commitment, lifestyle, travel behaviour and event attributes. These results are used to outline a research framework to foster commitment among endurance sport athletes in South Africa.

Chapter 8: Conclusions and recommendations

The final chapter summarises the conclusions based on the previous chapters. The chapter also formulates recommendations based on the results of the study and proposes a framework to foster sport commitment among not only participants but also the greater population. The chapter ends with suggestions and focus for future research.

2 A LITERATURE OVERVIEW OF SPORT TOURISM

The man who has no imagination has no wings -Muhammad Ali -

2.1 Introduction

This chapter proceeds as an introduction and background for the next two literature chapters. The goal of this chapter is to give an extensive summary of sport tourism. It will firstly provide an overview of sports tourism by defining the concept. After that sport tourism and sport events are classified, key stakeholders in sport tourism is discussed and lastly the importance of sport events within the sport tourism industry is highlighted.

Tourism is one of the largest industries in the world. In 2008, however, the industry the global financial crisis had hit the industry hard with the travel and tourism gross domestic product (furthermore referred to as the GDP) shrinking with 4.8% by 2009. Nevertheless, 2016 was the seventh consecutive year of sustained growth following the 2009 global economic and financial crisis (United Nations World Tourism Organisation [UNWTO], 2017:1). As a result, 300 million more tourists that are international travelled the world in 2016 compared to the pre-recession record in 2008 (UNWTO, 2017:1). Emerging economies remain the main drivers of this recovery for the tourism sector (UNWTO, 2016:1). In 2016, international tourism to Africa also grew by 8%, which is a strong rebound after two weaker years (UNWTO, 2017:1).

South Africa aims to attract 15 million foreign visitors annually and for the tourism industry's contribution to Africa's largest economy to more than double to R499 billion ($63 billion) by 2020 (Baran, 2010:1). In the leisure sector, many view sport as the number one industry. It forms an integral part of people's culture and although it is seen as a separate activity, it is indissolubly linked to tourism (Department of Sport and Recreation South Africa [SRSA], 2012:3). Sport, as a result, is regarded as one of the most important attractions of the broader tourism industry (SRSA, 2012:3; Knott, Fyall, & Jones, 2016:106). The larger numbers of people engaging in a variety of sports in their leisure time, as well as the changing mind-set of individuals regarding physical activity reflect the growth of sport tourism worldwide (Rauter, 2014:6). People are becoming more aware of the positive aspects of an active lifestyle and individuals regard the participation in a sport as a good way to spend their leisure time. For the keenest enthusiasts, sport has become a way of life (Rauter, 2014:6). Hinch and Higham (2011:5) as well as Saayman (2012:7), furthermore highlight the following contemporary trends that have led to sports tourism becoming a widely held subject matter:

- The expanding demographic profile of participants in sport;
- Heightened awareness of health and fitness benefits of sports participation;
- Increasing demand for active engagement in recreational activities during tourist holidays;

- Growing attention to the distinct roles played by sports and sports events in urban renewal and urban imagery as well as the potential that sports events offer to leverage more tourism opportunities;
- Popularity of local, national and international events and a realisation of the economic value of these events;
- A greater variety of sport events all over the world; and
- The impact that globalisation has on sport and tourism.

Sport tourism is a multi-billion dollar global industry and the fastest growing sector of the global travel and tourism industry (Hritz & Ross, 2010:119; Giampiccoli, Lee & Nauright, 2015:230). Sport tourism has not only been a widely held subject matter but has also made a worldwide economic contribution. In the latest World Travel and Tourism Council [WTTC] (2016:8) annual research report in conjunction with Oxford Economics, the travel and tourism industry's contribution to the world GDP has shown growth for the sixth consecutive year in 2015, with an increase to a total of 9.8% of the world GDP (US$ 7.2 trillion). This sector now supports 284 million people in employment, which is one out of eleven jobs worldwide created by the tourism industry (WTTC, 2016:8). The travel and tourism forecasts over the next ten years look particularly favourable with predicted growth rates of 4% annually (WTTC, 2016:8).

In recent years, this has resulted in several major sports events being held in developing countries; the 2008 Olympic Games in Beijing, the 2010 FIFA World Cup in South Africa, the 2014 FIFA World Cup and the 2016 Olympic Games held in Brazil are all contemporary examples. Governments eager to host these events justify their actions on the basis that GDP will increase and consequently, their populations will eventually be better off (Li, Blake & Thomas, 2013:235). According to the former Minister of Tourism, Marthinus van Schalkwyk, tourism is a key sector in South Africa as it has excellent potential for growth (South African Tourism [SAT], 2012:1). The latest available statistics showed that the total contribution of the Travel and Tourism industries to the South African GDP was R375.5 billion (9.4% of GDP) in 2015 and was forecasted to rise with 3.0% in 2016, and to increase with 3.7% to R555.1 Billion (10.6% of GDP) in 2026 (WTTC, 2016:3). In 2015, Travel and Tourism directly supported 703,000 jobs (4.5% of total employment). Job creation or support is expected to rise by 3.8% in 2016 and with 3.2% to 1,001,000 jobs (5.3% of total employment) in 2026.

Gillian Saunders, Head of Advisory Services for Grant Thornton (the company provides assurance, tax and specialist business advice to organisations), further highlights the economic contribution of sport tourism. She states that the sport tourism industry is worth between $182 billion (R1, 973 trillion) and $600 billion (R6, 506 trillion) and regrettably many industry players do not realise what large sector it is (Department of Tourism, 2014:1). Saunders is also of the opinion

that spectators are not the only sport tourists, but that sport tourism encompasses any travel to participate, to spectate, to work in sports as well as to visit sport attractions (Department of Tourism, 2014:1). It has also been found that sports participation as motivation to travel to South Africa is rapidly increasing. Sport events, such as the Comrades Marathon, 94.7 Cycle Challenge, The Cape Epic, The Durban July and Billabong Pro Surfing Championship are important tourism activities and are catalysts for increasing visitation to the South African destinations (Carlson, Rosenberger & Rahman, 2015:1065). Sport tourism events, such as the events mentioned, attract a broad range of national and international attendees (Kim, Jun, Walker & Drane, 2015:21). These type of sport events can also lead to increased spending by participants and spectators on accommodation, food and other recreational activities (Carlson *et al.,* 2015:1065). In agreement, Kim *et al.* (2015:21) deliberated that sport events can lead to increased income, job opportunities and enhance the status of under-represented cities and countries.

To capitalise on the said benefits, it becomes necessary for tourism operators, event managers and destination marketing organisations to understand on what their consumers put value, in order to stay competitive (Prebensen, Woo, Chen & Uysal, 2013:254). When commercial providers package sport activities, it will lead to a homogenised experience, and this will result in loss of the individual experience sport participants seek (Weed & Bull, 2009:35). Higham and Hinch (2009:8) emphasise that sport and sport events, therefore, need to adapt constantly to reflect the changing face of societies in which they are set. Delpy (1998) as cited by Hinch and Higham (2004:33) states: “a travel market focused entirely on participating or watching sport is a distinct and exciting concept.” To understand this niche market better, the following section considers the different definitions of the sport tourism concept; classifies sport tourism and sport events and discusses the important role sport events plays within sport tourism.

2.1.1 Defining sport tourism

Sport and tourism are among the most sought-after leisure experiences and have become critical contributors to economic growth (Ritchie & Adair, 2004:2; Getz & Page, 2016a:135). Over the past decade, there has been a substantial inquiry into sports tourism, and it has increased exponentially (Shipway & Jones, 2007:373; Dixon, Backman, Backman & Norman, 2012:5). Researchers, government, and non-governmental organisations have conducted research based on sport tourism at international and national levels, thus revealing the growing importance of sport tourism as a leading industry sector (Ritchie & Adair, 2004:2). Gammon and Robinson (2003:22) expressed that there is difficulty when defining sports tourism as one is dealing with two already distinctive disciplines, though to be combined into one. According to Deery, Jago and Fredline (2004:238) sport tourism, like the concept tourism, lacks a common definition because of many tourism bodies and organisations like the UNWTO and the WTTC endeavouring to find a common supply and demand side definition.

Since sport tourism is such a multifaceted theme that consequently, authors such as Hall (1992:194), Gibson (1998:49), Standeven and De Knop (1999:12) as well as Hinch and Higham (2001:49) have provided some definitions. Firstly, sport tourism is seen as predetermined or incidental participation or attendance by individuals or groups, away from their home environment, for non-commercial reasons in sporting activities (Hall, 1992:194). Pitts (1999:31) analysed sport tourism from a marketing and management perspective and suggests that sport tourism falls into two product categories: *sport participation travel* which he explains as travel for participating in sports, recreation, leisure or some physical activity. The other category is *sports spectator travel* that refers to travelling to watch sport, recreation, leisure or fitness activities and events. Gibson (1998:49) correspondingly defines sports tourism as "leisure-based travel that takes individuals temporarily outside their home communities to play or watch physical activities"; but adds "sport tourists can also venerate attractions associated with sport activities". Standeven and De Knop (1999:12) similarly define sport tourism as "all forms of active and passive involvement in the sporting activity, participated in casually or in an organised way for non-commercial or business/commercial reasons that necessitate travel away from home and work locality".

According to Hinch and Higham (2001:49) sport tourism is "travel away from the home environment for a limited time, where the sport is characterised by a unique set of rules, competition related to physical prowess and a playful nature". Weed and Bull (2009:61) on the other hand view sport tourism as the mixture of specific sporting activities, which people undertake in various forms of competitive interplay or other interactions that occur in places (of high or low familiarity) and is influential to the sport tourist experience. Sport tourism, according to Ritchie and Adair (2004:8), includes travelling to participate in a *passive* (e.g. participating in a sporting event or visiting a sport museum) or otherwise going on an *active* sport holiday (e.g. scuba diving or playing golf). Still, either sport or tourism must always be the dominant activity or reason for travel. Sport tourism could also be seen as a social, economic, and cultural phenomenon resulting from the distinct integration of activity, people, and place (Weed, 2009:618). It is furthermore important to note that sport tourism holidays can involve taking part in sporting activities either as a spectator, as a participant or visiting attractions associated with a sporting activity (Weed & Bull, 1997:130; Gibson, 1998:49).

Deery *et al.* (2004:236) add that sport tourism therefore entails the following key elements:

- Sport tourism is event related;
- The focus for sport tourism is competitive sport;
- The "participants" in sport tourism may be spectators, officials or competitors, the motivation to participate in a sporting event is intentional; and
- Sport tourism can have an effect on individuals, communities and a nation.

When evaluating the previously mentioned definitions of sport tourism, the following is evident:

- Sport tourism needs to take place away from an individual's home environment;
- Within sport tourism, active participation is a tourist participating or watching sport, recreation or leisure activities. On the other hand, passive participation is for example a tourist, visiting a sport attraction;
- Sport tourism can influence individuals, communities, and countries;
- The involvement in the sport should always be for non-commercial reasons; and
- Therefore, sport can contribute to a tourist's experience.

The next section will classify sport events within sport tourism.

2.1.2 Defining and classifying sports tourism and sport events

According to Kurtzman and Zauhar (2005:23) as well as Saayman (2012:12-16) there are five basic sport tourism activity categories. These categories include cruises, tours, attractions, resorts, and events. Cruises in this instance promote boat trips for sport or sport activities with marketing as the principal strategy. Tours as a category comprises the travelling to one or more entertainment attractions over a specified number of days and/or visiting sport events and/or participation in conferences, workshops or sport related clinics and/or tours related to natural characteristics for physical reasons. Attractions as a category for sport tourism activity mainly focus on sports-related physical activities. The fourth category refers to resorts that incorporate well-planned integrated resorts, complexes, or villas with sport as the focus and emphasis on the marketing strategy. The last category, events, comprises tourists attending or participating in sport activities that is formally planned or informally organised. Apart from these activity categories, Gibson (2003:207) suggests three general categories of research based on sport tourism, which include active sport tourism (climbing, hiking, skiing, bicycle tours and adventure tourism), nostalgia sport tourism (sport halls of fame, sport tourism tours, sport museums) and event sport tourism (small-scale events, Hallmark, mega and major sporting events). Sports tourism research has mostly focused on the latter type of events (Kotze, 2006:283) with particularly small-scale sporting events being the focus of this study.

Events are one of the fastest growing segments of sport tourism in the world (Neirotti, 2003:1; Getz, 2008:403). 'Event tourism is recognised as being inclusive of all planned events in an integrated approach to development and marketing' (Saayman, 2012:150). The typology of planned events falls into four main categories within an event-tourism context. The first category is business events or better known as the MICE (Meetings, Incentives, Conferencing, and Exhibitions) sector. These types of events mostly require convention and exhibition centres and are usually held at hotels and resorts (Getz & Page, 2016a:46). The second type of planned

events is festivals and cultural celebrations, which are less dependent on facilities, and normally make use of streets, theatres, concert halls and other public and private venues. Entertainment events such as concerts mostly use private sector venues. The last type of planned events is sport events, which require special-purpose facilities including athletic parks, arenas, and stadia; although many sports events these days make use of existing infrastructure such as roads and public parks (Getz & Page, 2016a:46).

From a sport tourism perspective, sports event tourism is the development and marketing of sport events to obtain economic and community benefits (Neirotti, 2003:9). From a consumer perspective, it is travelling with the main purpose of participating in, or viewing a sport event (Turco, Riley & Swart*,* 2002:3; Dixon *et al.,* 2012:6). Sport event stakeholders such as the organisers, marketers and event sponsors view the sport event as a tangible tourism product (Lamont & Dowell, 2008:253). In order for an event to become a product for sale, the event has to be attractive to the specified target market; the event has to be the right price for the specified target market. Furthermore, the marketer of the sport tourism event has to package the sport event carefully in order to meet the needs of these specific travellers and has to integrate the event with other tourism sectors (Candrea & Ispas, 2010:61). Gibson, Kaplanidou and Kang (2012:160) state that sport events appeal to a very broad audience seeing that events have the ability to spread tourism geographically and seasonally. Event sports tourism mostly involves sports competitions between amateur or professional participants as well as spectators attending the event (Getz, 2013:16). Planned sport events are therefore a spatial-temporal phenomenon that offers a unique blend of interactions among the setting, people, and management systems that include the design and programme (Getz, 2008:404). Gratton, Dobson and Shibli (2000:17) as well as Saayman and Saayman (2014:152, 153) typify sport events in four categories according to their size, regularity, media interest and economic significance (Table 2.1). Type A, are major international and once-off events that have an enormous economic importance and significant media coverage. An example of a Type A event is the Olympic Games. Type B is also major international events, but these events take place annually and have a substantial economic contribution and significant media coverage, for example the Tennis Grand Slam series. Type C is likewise major international events that are mostly once-off events, but have limited media coverage and limited economic significance. An example of the Type C event includes the Grand Prix World Championships. Type D is major national events that take place annually and have limited economic importance and limited media coverage, for example, national championships. Gratton and colleagues based their categorisation mainly on “major" events, which caused a shortcoming in the classifying of events. This led to Wilson (2006:68) identifying and adding a Type E event to this framework. Type E events are “minor competitor/spectator events, generating very limited economic activity, no media interest, and part of an annual domestic cycle of sport events” (Wilson, 2006:68).

Table 2-1: Classification of events

Category	Size	Frequency	Media Coverage	Economic significance	Examples
Type A	Major-international	Irregular, once-off	Significant	Large	Olympics, FIFA World Cup
Type B	Major-international	Annual	Significant	Large	FA Cup, Grand Slam Tennis, Golf Open
Type C	Major-international	Irregular, once-off	Limited	Limited	Grand Prix World Championships
Type D	Major-national	Annual	Limited	Limited	National Championships
Type E	Minor-competitor events	Annual	Limited	Limited	Mass Participation events

Source: Adapted from Wilson (2006:68) as well as Saayman and Saayman (2014:152)

Apart from categorising sports events according to the type and size, events also vary in size and impact, and terms such as mega-events, hallmark events, and major events are used for this categorisation (Getz, 2008:405; Lorde, Greenidge & Devonish, 2011:350). Mega-events are regarded as the events of international importance that involve political decision-making and a strategy designed by the government. It includes events such as the Cricket and Rugby World Cups, Olympic and Paralympic Games, and Commonwealth Games (Getz, 2008:405). Major events are of national (and possibly international) importance and include FINA Swimming World Cup, Triathlon World Cup Series and UCI Cycling World Championships to name but a few. These events could have some television coverage and are sometimes awarded through the bidding process or on a rotational basis, but this is done on a smaller scale in comparison with a Mega Event (Saayman, 2012:150; SRSA, 2012:3). Saayman (2012:154) describes hallmark events as "major one-time or recurring events of limited duration developed primarily to enhance the awareness, appeal, and profitability of a tourism destination in the short and long-term". In contrast to mega-events, 'hallmark events' cannot exist independently from their host community (Getz, 2008:408). Examples of hallmark events include the New York Marathon and in South Africa, the Comrades Marathon. Other international events include Federation events such as the Judo Junior World Championships, World Angling Championships, and private/commercial events such as the Two Oceans Marathon, Cape Town Cycle Tour and the Billabong Pro Surfing event (SRSA, 2012:4). Continental Events include events such as the All Africa Games, AFCON, Zone VI Games as well as private/commercial events such as the Roof of Africa (SRSA, 2012:4).

Domestic Events or local and regional events include events such as National Senior Swimming Championships, and private/commercial events such as the 94.7 Cycle Challenge and Spar Ladies Challenge (Getz, 2008:407; SRSA, 2012:5).

The section above indicates that there are arrays of sport events that can be classified in the different event categories. Hinch and Higham (2011:21), identified certain characteristics, which make sport event tourism unique, these characteristics include:

- Many sport events are “biddable” seeing that they are attached to a certain destination;
- Corporate sponsors are big supporters of sport events;
- Sport events can be the catalyst for new facilities and improved infrastructure;
- When sport facilities are built it can become permanent sport venues;
- Sport events can be the catalyst for other events such as exhibitions and meetings;
- There is the potential for sport events all year-round;
- There are a variety of sport events that can appeal to everyone, regardless age, gender or physical ability;
- Community pride and entertainment are associated with successful sport events;
- Sport events can help display the unique culture and traditions of a destination, thus enhancing the attractiveness of a place;
- Media coverage of sport events can have a tremendous impact on the development of a sport destinations image and brand; and
- Sport events can help spread benefits to rural areas and small towns that might have limited attractiveness otherwise.

With the resource characteristics in mind, different key stakeholders play a major role when organising a successful sport event. These stakeholders are discussed in the next section.

2.2 Key stakeholders in sport tourism

Stakeholders are people or organisations that usually have a genuine interest in the outcome of an event. Governmental as well as corporate interest and support for sport events are increasing. Therefore, it becomes necessary to identify the key stakeholder’s needs at an event (Goldblatt, 2000:6). A stakeholder can be defined as, “groups of individuals who are affected or could be affected by an event’s existence”. Each of these stakeholders also plays an imperative role in organising small-scale events, which the study is based on. Small-scale sport events can be defined as events that have minor national impact, typically have numbers of participants greater than the audience, are usually held annually and receive limited media interest (Gibson *et al.,*

2012:162). Figure 2.1 shows the various stakeholders in sport tourism, followed with a brief description of each key stakeholder.

Figure 2-1: Key stakeholders in sport tourism

Source: Adapted from Saayman (2012:18)

2.2.1 Participants

The participants are the most valuable role player in sport tourism, seeing that they act as the attraction which spectators come to see. Participants can either be members of a team, individuals or even sport personalities that draw large crowds to an event (Saayman, 2012:18). It becomes very important to understand the characteristics of different sport participants as they are the primary expenditure stakeholders and they have an intimate and extensive experience with the event. They can also be significant agents for image formation (Brown, Busser & Baloglu, 2012:60; Papadimitriou, Apostolopoulou & Kaplanidou, 2016:2). When looking at the context of this study, most events included in the study are small-scale endurance events where the competitors outnumber the number of spectators. The small-scale events that take place in South Africa can only attract a certain number of participants due to infrastructure restrictions. It is,

however, important to remember that without participants these events would not exist (Gibson *et al.,* 2012:162).

The endurance competitors who take part in these events have a significant commitment to their sport and the particular event(s), which entails months of fitness training and frequent practice sessions. Therefore, the level of exercise goes well beyond what is required for basic health benefits (Kruger & Saayman, 2013a:72). It becomes necessary to encourage more people to participate in these endurance events at a recreational level, as they will tend to purchase more sport equipment the more they participate. These participants are also more likely to continue to participate at a competitive level, and their propensity to watch sport may increase (Neirotti, 2003:1). Ultimately, an increase in participation, competing and watching sport will all have a positive effect on the tourism industry (Kruger & Saayman, 2013a:72). Most participants markets are not homogenous groups, and therefore no single marketing effort will satisfy all the individuals' needs (Fill, 2005:329; Myburgh, 2014:57). It, therefore, is important not only to deliver a high quality small-scale event but also to promote the event to important segments to stimulate future consumption for both the event and the destination (Papadimitriou *et al.,* 2016:2).

2.2.2 Spectators

Spectators are also a critical role player, as many sport events would not take place in the absence of spectators or fans. These spectators can have an economic contribution to the event just by travelling to a sport event, buying souvenirs and sport memorabilia and paying an entrance fee (Saayman, 2012:18). It, therefore, becomes necessary to ensure that the event is well organised seeing that this will lead to a positive experience, which will help to ensure that spectators return to future events but also spread positive word-of-mouth messages about the event (Nyikana, 2013:114). In the case of this study, most spectators to the included endurance sport events are primarily motivated to support a participant who is usually an individual athlete and in most cases a spouse or a family member (Kruger & Saayman, 2012:64). Therefore, the level of spectator involvement is different compared to other major sport events where spectators support a team or group of athletes. Most spectators at endurance events will have a higher attachment to the participant than to the sport (Kruger & Saayman, 2012:64). Spectators at endurance events, therefore, cannot be classified as "fans", which is defined as an enthusiastic consumer of organised sport and who is attached to the sport (Kruger & Saayman, 2012:64). In the context of this study, spectators have a significant role in the commitment of participants seeing that most participants need the motivation and support from spectators to start and continue their participation. The role of significant others (spectators) can, however, be referred to as either social support or social constraints, which will be discussed in more detail in Chapter 4 (c.f. 4.6.2.4 & 4.6.2.6).

2.2.3 Government

National, provincial and local government play a major role in the hosting of a sport event. They are responsible for making sure that the event is marketed in their region or destination, to sponsors and teams and individuals (Saayman, 2012:18). Government mostly acts as guarantor of major events and needs to maintain the infrastructure required for the event, bids or with the event programme (Slabbert, 2004:188; Yeoman, Robertson, Ali-Knight, Drummond & McMahon-Beattie, 2004:5; Hughes, 2013:88). Most small-scale events also rely on sponsorships and local and regional government support (Saayman & Saayman, 2012a:124). Local authorities / councils support services are responsible for aspects such as waste removal, traffic control, providing parking, provision of electricity and ensuring the health and safety in an area where the event takes place (South African Sports Commission, 2003:85). There are arrays of positive impacts associated with sport events that may encourage governments to support events. Governments in especially developing countries are keen advocates for promoting the positive impact that events have on not only a countries economy but also the developmental legacy that these events leave behind (Schulz, 2010:1). Most sport events make use of existing infrastructure and contribute to the well-being of the surrounding communities (Nyikana, 2013:2). Gillet and Kelly (2006:240) note that governments have more recently started to support more small-scale sport events and amateur competitions seeing that these events have a great potential for social and economic benefits. Kotze (2006:292) argues that developing countries such as South Africa do not have the capital to chase mega events and should concentrate on smaller-scale events. Giampiccoli *et al.* (2015:231-233) support the previous notion and state that a developing country like South Africa has not done enough to leverage smaller-scale events for international tourist promotion purposes.

2.2.4 Sponsors

Most sport events are dependent on sponsorships seeing that these events require significant capital investments. These investments are mostly used for sport development, hosting of events or just to enter participants into a league competition (Saayman, 2012:18). The corporate side of sport events is becoming more evident as organisations start to realise the opportunities a sport event can create regarding the positive image, to increase sales, branding and to promote new products and services (Damster & Tassiopoulos, 2005:37; Bowdin, O'Toole, Allen, Harris & McDonnell, 2006:99). Most organisations will see their sponsor as a form of investment and expect something in return for their support. Therefore, sponsorship should be regarded as a mutual marketing exercise (Van der Merwe, 2009:32). When looking at small-scale endurance sport events, revenue to meet costs are often drawn from sources such as participation fees, merchandising, fundraising and corporate sponsorships (Lamont & Dowell, 2008:254). Corporate sponsorship for these events mostly entails that an organisation provides resources directly to an event in exchange for a direct association to the event for example money, equipment and people

(Lamont & Dowell, 2008:254). On the other hand, many of the athletes that participate in endurance events will get their corporate sponsors; this athlete will then be used to achieve either their corporate, marketing or media objectives (Lamont & Dowell, 2008:254).

2.2.5 Volunteers

Volunteers play a vital role in especially large-scale events, seeing that these events would be unaffordable without the presence of volunteers (Saayman, 2012:19). International volunteer opportunities have expanded rapidly over the last decade, making volunteer tourism one of the fastest growing niche travel markets in the world (Smith, Cohen & Pickett, 2014:301). The use of volunteers is economically beneficial for event organisers and without the personal investment of the volunteers; many mega-events could simply not have been arranged (Baum & Lockstone, 2007:30). Alternatively, the recruiting and managing of volunteers at small-scale sport events remains a challenge for many sport organisations (Kerwin, Warner, Walker & Stevens, 2015:78). In contrast to large-scale sport events where sport managers use volunteers who reside beyond the boundary of the host city, most small-scale sport events will rely on the local community to comprise its workforce (Kerwin *et al.*, 2015:78). Small-scale events can often bring about a sense of civic pride allowing residents and volunteers to claim a sense of ownership and responsibility for the event (Stotlar & Cooper, 2014:387). The volunteers in a small-scale endurance event will assume therefore, several roles within one event (Kerwin *et al*., 2015:78). Some roles a volunteer may fill at a sport event include: catering and hospitality, media roles, team management and liaison, volunteer supervision and management, venue management, crowd control, finance and budgeting, first aid provision, event operations, risk management and registration (Ringuet-Riot, Cuskelly, Auld & Zakus, 2014:117). There are usually two groups of sport volunteers, those who have management, governance or administrative roles; and those who have operational roles such as coaches, team managers and event organisers (Ringuet-Riot *et al*., 2014:117). In the case of small-scale events, residents are more likely to volunteer seeing as these events normally aim to bring the community together (Stotlar & Cooper, 2014:385).

2.2.6 Officials

According to Kurtzman and Zauhar (2003:44) and Ntloko and Swart (2008:79) sport events refer to those sport activities that attract tourists of which a large percentage is usually spectators and has the potential to attract non-residents, media, technical personnel, athletes, coaches and other sporting officials. Qualified officials are required to manage competition. It is either the controlling sport federation that allocates these officials or the rules and regulations that determine who will fulfil the roles of officials (South African Sports Commission, 2003:85). Before the event, the sport federation and/or regulations should prescribe and finalise a number of the technical officials. It is also imperative that the sport federations and technical officials arrange to meet (South African Sports Commission, 2003:85). These role players ensure that the competition is played according

to the rules and regulations. Officials include security personnel, coaches, referees, managers, judges, sport psychologists, registration and support staff (Saayman, 2012:19).

2.2.7 Organisers

The organisers of an event can be divided into local, national and international committees, bodies, organisations or federations depending on the type and scope of the sport event (Saayman, 2012:18). They are responsible for ensuring that the event takes place successfully. Therefore, the organiser is mostly responsible for the organisation, technical aspects, legal issues, marketing and the execution of the different event plans/strategies (Van der Merwe, 2009:20). According to Chalip and McGuirty (2004:268), small-scale sport events can in most cases be seen as one of the arrays of attractions that the host destination offers to draw and retain visitors. The authors continue to state that an added challenge for many small-scale sport organisers is to persuade participants to bring visitors to the event and thenceforth encourage event visitors to stay beyond the period of the event. Chalip and McGuirty (2004:268) warn that this is only achievable when destination marketers and event organisers work together in a manner that enables an event to be cross-leveraged with other attractions in the host destination. According to the South African Sports Commission (2003:14) an event organising committee comprises of the following members, namely chairperson; project manager; secretariat; administrative and general office duty personnel; finance and treasurer personnel; as well as marketing and public relations (PR) staff. Furthermore, legal and protocol personnel, technical and information system workers, transport, catering and accommodation providers also make part of the committee. Such a committee also include medical and doping control, safety and security staff, interpretation services, local authorities or council support services, clothing providers and volunteers.

2.2.8 Media

The media is present to promote the sport event and provide the necessary publicity, which can be either positive or negative. Regardless, the size and scope of the sport event, media has a major role to fulfil (Saayman, 2012:19). The media's role is either to be a sponsor, partner, producer of the event or a combination of all three these roles (Nyikana, 2013:1). Technological growth has contributed to the media's influence and importance for events. It has also given media the ability to attract sponsors and to enhance the event's reputation (Bowdin *et al.,* 2006:105). Large-scale sporting events such as the Olympic Games have worldwide appeal and media coverage, but when it comes to small-scale sport events, the coverage is usually on a much smaller scale (Murphy & Bauman, 2007:193). Many small-scale events rely on posters, banners, websites and other forms of media. It also mostly relies on unpaid media e.g. social media and word-of-mouth. Seeing that endurance sport events can lead to increased physical activity and

health, many of these events receive more media attention to improve its awareness in the community (Murphy & Bauman, 2007:193).

2.2.9 Support services

Support services are additional role players that make a massive contribution to the success of sport tourism. The latter entails the hospitality, accommodation, transport, tour operators, banking and foreign exchange services, and food and beverages services. Small-scale sporting events have demonstrated an ability to generate a range of benefits for the host community such as injecting income into the local economy through visitor spending, levelling of seasonal peaks, increasing the demand for tourist facilities (such as restaurants, accommodation and attractions), and facilitating repeat visitation (Lamont & Dowell, 2008:254). If the support services are not in place, it can lead to an unsuccessful even or create a negative image of the event/destination. Under support services, external regulatory bodies are also included. These bodies oversee the events to ensure its compliance with government rules such as noise, food regulations, street barricades and waste management (Allen, O'Toole, Harris & McDonnell, 2012:6; Nyikana, 2013:49). In addition, sectors like the police, fire brigade, first aid, transport and residents support the previous mentioned services (Bowdin *et al.,* 2006:130).

2.2.10 Medical staff

Seeing that participation in sport events is competitive, it cannot take place without doctors, physiotherapists and first aid workers on standby. The range of medical staff required depends on the type of sport event as the different sport codes have advanced to a level, which necessitate specific medical skills and knowledge (Saayman, 2012:19). Increasing participation in particular endurance sport events is cause for the greater need to ensure the presence of appropriate medical care at these events (Hoffman, Pasternak, Rogers, Khodaee, Hill, Townes, Scheer, Krabak, Basset & Lipman 2014:1055). Unique medical challenges result from the extreme physical demands these events place on participants. In addition, the often remote settings that span broad geographical areas has the potential for extreme weather conditions and various environmental threats that can also result in participants facing various medical ordeals (Hoffman *et al.,* 2014:1055).

2.2.11 Communities

Over the past years, many communities have started to realise the tourism potential characteristic of smaller scale sport events (Kaplanidou & Gibson, 2010:163; Getz & Page, 2016a:57). Previous research has shown that when a destination hosts a small-scale sport event, it will have a significant economic value to the community. This economic benefit will outweigh the cost of hosting the event since the event makes use of existing facilities and bring people to the community who would not have otherwise visited the town or city. Developing an event portfolio

for the destination with smaller-scale events taking place on a regular basis, will thereby ensure a consistent flow of tourists and income for the community (Gibson *et al.,* 2012:162).

2.2.12 Coaches and sport clubs

Sport clubs play a major role in the safety of their club members as most athletes travel long distances to compete in sport events. Many clubs compile a handbook or host annual workshops to discuss travel issues, share accommodation options, review emergency procedures of the event, review guidelines for dealing with accidents, advise with sleeping patterns and share information regarding safe travel to the event (Arrive Alive, 2017:1). In many sport destinations, athletes can also find sport tourism centres (clubs), which are vital tourism products. Possible services provided by sport tourism centres include enabling the use of sport facilities, giving the opportunity for sport recreation, offering special services for top athletes and disabled athletes, and organising sport events for club members. Another valuable service for athletes is physical activity and therapy for immediate rehabilitation after injuries and surgeries (Polanec, 2014:98). The abovementioned services may be delivered to numerous types of tourists such as recreational sportsmen (children, youth, and adults) or professional athletes (Polanec, 2014:98). It becomes necessary to fund these sport clubs at a local level in order to develop the club because these clubs help in attracting young people and in encouraging event participation. Higham (2005:18) found that athletes normally choose a club based on the available gym and sport halls, the infrastructure of pools, springboards, athletic tracks, marathon tracks, training fields and medical services that the personnel offer. Some of these clubs also have professional sport coaches. Sport coaches, specifically endurance coaches, are there to ensure that the athlete reaches their optimum level of performance. Therefore, one of their main tasks is to evaluate and monitor an athletes' training schedule effectively (Ghosh. 2004:24). Coaches also have to pay attention to issues that may result in superior performance and decrease the risk of overtraining (Baker, Côte & Deakin, 2005:76). Professional coaches typically run structured training programmes offered several times per week to help prepare endurance athletes for competing in endurance events. Coaches also customise training programs seeing that many athletes may still be endurance sports novices. Moreover, endurance coaches can help members to plan their entry to specific events during the season by advising which races/distances to enter and when entries are due (Woolf, Heere & Walker, 2013:98).

The previous section indicated that each pivotal role player within sport tourism has an important but different role in the development and hosting of sport events. Therefore, it becomes necessary for the event organisers to comply with the various needs of each role player as far as possible (Van der Merwe, 2009:19). Sport event tourism is thus a multifaceted sector with various key role players and has unique characteristics that differentiate sport events from other events, making

these events imperative for the sport tourism industry, which will be discussed further in the next section.

2.3 The importance of sports events within sport tourism

The number of sports events organised for the public, in general, is growing at a rapid pace (Taks, 2013:121) and is a sector with considerable economic and job creation benefits (Getz, 1997:5; Dixon *et al.,* 2012:6). Florek, Breitbarth and Conejo (2008:201), as well as Hallmann and Breuer (2010:216), add that there is a trend for more events in the sports tourism context seeing that events can attract a high number of sports tourists. At the same time, it is observed that the tourism industry, in general, is still growing (Hallmann & Breuer, 2010:216). This growth requires attention to understand the essential processes and dynamics that affect the relationship between the two fields of sport and tourism (Hallmann & Breuer, 2010:216). Therefore, it is necessary to take both the demand and supply point of views into account. From a consumer perspective, it is important to determine who travels to these sports events and why they travel to these events (Getz, 2008:405). It is also vital to determine what sports tourists do while they are at the event and how much money they spend during the event. Additionally, looking at the supply-side approach, an assessment must be made of the value of the sport event, namely if this event is promoting a positive destination image, and if it is co-branding the destination (Saayman, 2012:150). On the supply-side destinations must develop, facilitate and promote sport events to meet different goals like attracting sport tourists (especially in off-peak seasons) and also act as a promoter for rural renewal as well as increasing infrastructure and tourism capacity of the host destination. Events are therefore an important motivator of tourism and features in the development and marketing plans of most destinations (Getz, 2008:403).

It is thus clear that the number of sport events is still growing and that destinations tend to host progressively more sport events. This can be due to benefits such as job creation, rural renewal, increasing infrastructure and other economic inputs. Sport events, however, need to be managed from both the demand and supply side to reap these benefits. Although most research related to sport events has focused on large-scale sport events, small-scale sporting events also serve an important role in destinations' tourism and sport strategy. Alongside the rise in mega sport events, the number of small-scale sport events, which are locally organised to stimulate local and regional economic development, have also shown a significant increase (Gibson *et al.,* 2012:160). There has been a growth in sport tourism research, but research has tended to focus on sport event tourism or large-scale spectators events such as "hallmark" or "mega" events at the expense of these small-scale sport events (Taks, Chalip & Green, 2015:1).

Smaller scale sport events are those events, which local and regional entities within a country organise and manage (Giampiccoli *et al.,* 2015:230). Unfortunately, smaller-scale events have

received less attention than mega-events, because of the perceived little economic significance (Ritchie, 2004:135). Although it is believed that these events take place on a recurring basis, it will collectively create a significant impact (Giampiccoli *et al.,* 2015:232). Limited studies have to date been conducted that take a longitudinal approach which involves repeated observations of the small-scale sport events over extended periods of time (Turco *et al.,* 2002:3; Ritchie, 2004:135-137). Therefore, authors such as Daniels and Norman (2003:215) argue the importance of small-scale events, especially to businesses, politicians and tourism planners.

According to Ritchie (2004:136) as well as Yusof, Omar-Fauzee, Shah and Geok (2009:48) small-scale sporting events include a large variety of categories, for instance, regular, team or individual sporting competitions in a local, regional or national leagues or tournaments. These include circuit, outdoor/adventure, marathon running, cycling, paddling/canoeing and automobile races. Smaller scale events are closely related to the tourism sector and should therefore be promoted as such (Kotze, 2006:292; Yusof *et al.,* 2009:55). Hinch and Higham (2011:55) in affirmation found that participants in non-competitive sports events are more likely to engage in other tourist activities at a destination. These events also closely relate to local contexts and opportunities for they are not once-off events. Based on local infrastructure, these events require smaller investment, have the potential to minimise tourism seasonality and are easier to manage. Therefore, they can evolve in relation to local opportunities and needs (Ritchie, 2004:135-137; Gibson *et al.,* 2012:160; Giampiccoli *et al.,* 2015:233). Saayman and Saayman (2012a:124) in confirmation reveal that these events cannot take place without sponsorship and local as well as regional government support. Gibson *et al.* (2012:161) note that these events could create substantial amounts of revenue for the surrounding communities in which the event is located. This is ideal, as some destinations are unable to host large-scale sporting events because of constraints such as capacity. However, such destinations aim to organise smaller non-elite sport tourism events (Gibson *et al.,* 2012:160). It is argued that a sustained number of smaller events that is usually based on the amateur sport will provide wider exposure and an improved image of the host city, which will help increase tourist revenue (Horne, 2000:34). Research also found that residents feel that these recurring small events have a long-term sustainable potential (Daniels & Norman, 2003:221). In a study done by Daniels and Norman (2003:221), the author found that the seven regular sport tourism events that were investigated had positive outcomes, such as zero to low bidding expenses, the use of existing infrastructure, little or no burden of public funds or problems with residents.

Unfortunately, limited research has focused on the travel preferences of participants to smaller sport events. This niche market is characterised by travel motivations that are different from those of elite and competitive event participants (Hinch & Higham, 2011:55). Getz (1997:8) thus points out that research that is more comprehensive is needed to understand key questions such as:

Who is the sport event tourist? There are also instances where elite and non-elite competitors are accommodated in a single event, which leads to a broad range of elite and non-elite athletes as well as spectators (e.g. Cape Town Cycle Tour, Ironman triathlons and the Comrades Marathon in South Africa). These types of events need academic attention as the markets, promotional possibilities, infrastructure requirements, tourist behaviour, travel patterns and associated tourist experience of each may stand in significant contrast (Hinch & Higham, 2011:53).

2.4 Conclusion

The goal of this chapter was to give a broad summary of sport tourism. Sport is one of the most important attractions within the boarder tourism strategy of a country and sport events specifically are an increasing motivation to travel to different destinations. Several stakeholders ensure the success of a sport event, and each stakeholder has a specific role. Yet, most events cannot take place without sponsorship and government support. Government is therefore one of the most important sport event stakeholders, especially in developing countries. Unfortunately, in a developing country such as South Africa, less focus is put on smaller recurring events and most government support is focused on hosting mega events. Chapter 5 touches on this matter by looking at South Africa's current sport tourism strategy. Sport clubs and coaches are also important stakeholders of sport events and can help in encouraging a healthier lifestyle adaption. Chapter 4 reviews these stakeholders as one of the most important components of commitment. Smaller scale events, such as endurance events, can increase tourism both geographically and seasonally. Smaller-scale events are also beneficial to host destination because they have zero bidding expenses; it uses existing infrastructure; and there is less resistance from surrounding communities.

Endurance events also appeal to a large target market since these events are accessible to everyone regardless of age, gender and level of physical activity. The participants that take part in these events do not want a homogenised experience. Therefore, studies that focus on the participants can assist in creating sustainable events. Also identifying important segments of participants can stimulate future consumption for both the event and destination. From the perspective of sport tourism research, most studies show a focus on sport spectators or solely on mega and hallmark events. Sport participants have therefore, in most cases been overlooked. This highlights the importance of Chapter 3 that focuses specifically on endurance events and participants.

3 A LITERATURE ANALYSIS OF ENDURANCE SPORT

Age is no barrier. It's a limitation you put on your mind – Jackie Joyner-Kersee -

3.1 Introduction

Physical inactivity is an established risk factor for cardiovascular disease, cancer and diabetes. More than 80% of chronic disease deaths occur in low and middle-income countries, such as South Africa (Bauman, Bull, Chey, Craig, Ainsworth, Sallis, Bowles, Hagstromer, Sjostrom, Pratt & the IPS Group, 2009:2). When looking at recent estimates, insufficient physical activity is the fourth leading risk factor for mortality. Approximately 3.2 million deaths each year are attributable to insufficient physical activity (Bauman *et al.*, 2009:2; World Health Organisation [WHO], 2014:18; Torbeyns, Bailey, de Geus & Meeusen, 2015:1440). Physical activity is seen as the best solution to improve public health. Therefore, practitioners are becoming advocates by endorsing and recommending local exercise programmes and sport events. Mega localised and mass events can be used to promote physical activity in the community. These events usually attract large numbers of participants and foster lower intensity participation in a non-competitive and fun environment.

Since the end of apartheid and the emergence of a democratic government in 1994, South Africa has hosted many international sporting events (e.g. 1995 Rugby World Cup, 2003 ICC Cricket World Cup and the 2010 FIFA World Cup). This is mainly due to external revenues through increased tourism and heightened awareness of the country. Despite the large-scale focus on mega and international events, the country also hosts many successful recurring sports events where control is retained locally (Saayman, Rossouw & Saayman, 2008:102). These events make use of existing facilities and infrastructure and have seen increased participation, spectating and media coverage. Additionally, sports events can re-create the image of a destination, spread tourism geographically and seasonally, increase demand for local tourism, stimulate business and infrastructure development, attract investment, generate direct economic income, bring in tax revenue, create employment and offer benefits to the community (Saayman *et al.,* 2008:102; Giampiccoli, Lee & Nauright, 2015:229; Kruger & Saayman, 2015:64). With these benefits in mind, it is unsurprising that many destinations host a large number of sport events. South Africa is no exception and the country especially hosts a considerable number of endurance events throughout the year.

The present study focuses specifically on endurance sport participants, while this chapter focuses on endurance sport as well as endurance sport athletes. In this chapter, the evolution of endurance sport is firstly analysed. Then, the distinct characteristics of endurance sports, athletes and events are outlined. Furthermore, endurance events as part of sport tourism are examined. The final section of this chapter considers the benefits of endurance events in different settings

as well as the factors that influence sport participation and specifically endurance sport participation.

3.2 The evolution of endurance sport

According to Ryan and Deci (2007:1), “sport and exercise epitomise motivation—people are moved to act - these activities require exertion, energy, focus and a great deal of discipline”. Seeing that sport is a socially constructed activity that has varied across historical eras, societies and cultures, there has been considerable controversy concerning the definition of “sport”. McPherson, Curtis and Loy (1989:15), as well as Kotze (2006:283), consider sport as “a structured, goal-oriented, competitive, contest-based, physical activity”. Sport is consequently organised by rules that may be displayed in the form of specific playing areas, duration of play and rules of engagement (Higham & Hinch, 2009:7).

Coakley (2001:137) classifies sport based on four major factors:

- *Physical conditions*: The use of physical ability, physical skill or physical effort.
- *Complex physical skills*: Coordination, balance, quickness, accuracy, speed, strength and endurance; which excludes non-physical activities such as chess and cards and include the human use of equipment and machines, for example, motor car racing.
- *Institutional and competitive*: Rules are standardised; official regulatory agencies oversee rule enforcement; organisation and technical aspects of the activity are significant, and learning of participation skills becomes formalised.
- *Individual participation is motivated by a combination of intrinsic factors and extrinsic factors*: Intrinsic rewards are received through involvement (dynamics of the activity, play, fun, etc.) and extrinsic rewards (salary, prize money, trophies, fame).

Individuals whose participation is motivated by a combination of intrinsic and extrinsic factors therefore institutionalise sport as a competitive activity that involves vigorous physical exertion or the use of relatively complex skills (Coakley, 2001:137). Since the ancient times of Greece, individuals aspire to improve their mental and physical aptitudes by pushing themselves to go “faster, further and higher” (O’Neil & Steyn, 2007:99). This led to individuals seeking a more competitive form of sport that will not only challenge them but also give them the opportunity to compete against others. Competitive sport can be defined therefore, as “physical activities, which involves the coordination of large muscle groups, which have a set of universally recognised rules that leads to a winner and a loser” (Saayman, 2012:8). Fortunately, people are created and programmed with the capacity to adapt and overcome obstacles and challenges. This led to the basic question “*how do athletes persevere in the face of adversity?”* (Eliot, 2005:3). According to Gastelu (2006:1), endurance is the answer to this question and can be defined as “the ability to continue the physical activity without undue discomfort”.

An activity that exemplifies perseverance is endurance sport, which is also globally one of the most popular pastimes for many individuals (O'Neil & Steyn, 2007:99). Participating in an endurance event decreases tension, vigour and leads to greater fatigue. This is not surprising given the physiological demands required to finish an endurance event (Lane & Wilson, 2011:358). The popularity of endurance sport is attributed to the fact that endurance sport events are authentic and present a unique experience, seeing that every event is a unique blend of duration, setting, management and participants (Getz, 1997:4; Hallmann & Breuer, 2010:216). In research done by Bauman, Murphy and Lane (2009:46), it was recommended that the Government should support endurance sport events as it can act as an entry point for new athletes seeing that there are many health-related benefits associated with endurance sport. "Endurance exercise can be defined as cardiovascular exercise like running, cross-country skiing, cycling, aerobic exercise or swimming that is performed for an extended period" (Kravitz & Dalleck, 2002:22). Endurance exercise is a multifaceted concept as it involves the complex integration of multiple physiological functions. Despite this, it can be characterised by one simple requirement, namely the ability to sustain repeated muscle contraction (Kravitz & Dalleck, 2002:22). Endurance sports include (but are not limited to) marathon running, cross country running, road cycling, mountain biking, endurance swimming, endurance horse riding, canoeing and kayaking (O'Neil & Steyn, 2007:100). Endurance events that accommodate these sports can be defined as "events where participants have the ability to withstand longer exertion, caused by the distance; time and the level of anaerobic fitness/intensity requirements for successful completion are considerably higher than when compared to other sport events" (O'Neil & Steyn, 2007:99).

An ultra-endurance sport (e.g. ultra-marathons) consists of competitive races over any distance longer than 26.2 miles (42.2 kilometres) (Nicolas, Banizette & Millet, 2011:368). The distance of an ultra-endurance race can vary from 31 to over 100 miles (50 to 161 kilometres) and are mostly distinct due to the challenging environments in which it takes place such as mountains, deserts and forests (Simpson, Post, Young & Jensen, 2014:176). Ultra-endurance races are growing in popularity and are becoming highly competitive global sports with hundreds of events offering prize money and sponsorship for the top athletes (Hoffman & Wegelin, 2009:2196; Lepers, Sultana, Bernard, Hausswirth & Brisswalter, 2010:251; Simpson *et al.*, 2014:176). The distinctness of an endurance event is settled in the physical and mental challenges it presents, the great deal of preparation it requires and the necessity that the participant needs to overcome extreme challenges to the body and mind to finish (O'Neil & Steyn, 2007:99, 100). Endurance sports competition involves "beauty, grace, passion and participatory satisfaction" (Kurtzman & Zuahar, 2005:22) that gives endurance sport enthusiasts the opportunity to test their physical and mental abilities to reveal their capability to withstand extreme environmental conditions associated and satisfy their craving for a variety of new experiences (Hallmann & Breuer,

2010:216). Endurance sport, therefore, offers a distinct sport experience for athletes, whom all share distinct characteristics. These characteristics are highlighted in the next section.

3.3 Distinct characteristics of endurance sport athletes

Endurance participation involves degrees of speed, strength and power that are all evident through competitive involvement, pressure, commitment and the will to excel (Ferreira, 2015:64). Since there is a lack of research based on female endurance athletes as noted by Fullager and Pavlidis (2012:150), the profile of the typical endurance athlete mostly refers to male athletes. In accordance to the previously mentioned, typical endurance sport participants are mostly well-educated, predominantly middle-aged, married men who rarely miss work due to illness or injury, generally use vitamins and/or supplements, and maintain appropriate body mass with ageing (Hoffman & Fogard, 2012:59). A lifestyle in which sport is the main focus mostly includes motives such as satisfaction and enjoyment, developing abilities, establishing friendships and overcoming the challenges inherent in a sport activity (Rauter, 2014:8). The intertwining of all of these motives results in feelings of enjoyment, which can drive people to become committed to a sport, invest much energy in sport and ultimately become a way of life (Rauter, 2014:8). Shipway and Jones (2007:374) report that such sport enthusiasts also demonstrate a particular type of consumption, they share a similar style of dressing and usually only wear those brands that are renowned and popular in a particular sport. Committed endurance athletes often consider such sport equipment a status symbol (Rauter, 2014:8). The leading sport equipment not only creates an 'image' but also helps the athletes' self-confidence and feeling of competence while engaging in a selected endurance sport. From this point of view, having the most up-to-date and trendy sports equipment is imperative for them (Bridel, 2010:140). The next section focuses on the distinct characteristics of endurance sport participants, the theories related to participation in sport and the characteristics of sport events.

3.3.1 Characteristics of endurance sport athletes

Endurance sport athletes share certain characteristics that set them apart from other athletes. These characteristics include:

- Participating in endurance events, such as marathons, cycling, and triathlons, requires **considerable dedication** and reflects a level of enduring involvement with the recreational activity (Funk, Toohey & Bruun, 2007:230);
- Through the dedication and physical effort, endurance athletes may develop a **strong identification** with this type of activity. Such identification may help them to shape the way they define themselves as individuals (McCarville, 2007:170; Shipway & Jones, 2007:375; Robinson, Patterson & Axelsen, 2014:376). Some individuals participate in endurance events in order to find happiness, satisfaction and self-assurance that are in some cases subdued by other parts of their lifestyle (Rauter, 2014:6);

- Sport is so significant to the endurance participant that it has a direct effect on training, schedules, finances, and preparation beyond the basic health benefits of a normal exercise programme (Lovett, 2011:3). This is demonstrated in their **engagement in sport** given the fact that many 'amateur' endurance athletes train and live by the same principles of professional athletes (Rauter, 2014:7);
- Often endurance athletes will raise the engagement in sport to an equal level, compared to their work obligations (Stebbins, 2001:3). In other cases, participants find endurance sports so important and exciting that they sometimes launch themselves into a **"career"** that is centred on **acquiring and expressing special skills, knowledge, and experience** (Lamont & Kennelly, 2011:87);
- Endurance athletes therefore appreciate a **set of values**, such as perseverance, determination, and relentlessness, which leads to the adoption of a different lifestyle tailored to prioritise sports activities (Rauter, 2014:8);
- The basis of an endurance athletes' way of thinking and behaving is **the ability to endure the mental, physical 'pain'** caused by their effort as well as gaining experience, and knowledge associated with the sport activity (Bridel, 2010:23). It has been found that the more strenuous and challenging the activity, the stronger the athletes' pride and satisfaction after completing the event (Rauter, 2014:8);
- Research has indicated that endurance participants who have gained a few years of experience tend to **search for lengthier events, new distances and tougher challenges** (Sehovic, Knechtle, Rüst & Rosemann, 2013:933);
- Endurance athletes are the prime example of having **healthy lifestyles** seeing that they rarely exhibit classic health-related risk behaviour such as smoking and they normally have a healthy diet and try to have unchanging sleeping patterns (Schnell, Mayer, Diehl, Zipfel & Thiel, 2014:165);
- Endurance athletes can also **risk their health** during training and partaking in competitions to reach maximal performance; literature has indicated that many endurance athletes have reported that while competing, there were times that they were in pain (Thiel, Diehl, Giel, Schnell, Schubring, Mayer & Schneider, 2011:410);
- Endurance athletes are often more **acutely aware of the impact of declining physical capacities** than in team sports and more technical and tactical individual sports (Ronkainen, Ryba & Nesti, 2013:387);
- Research has shown that certain **emotions** occur before, during and after participating in an endurance event. Completion of an endurance event involves not only overcoming intense fatigue but also many unpleasant emotions such as feeling depressed (Lane & Wilson, 2011:358); and

- Evidence suggests that endurance athletes can encounter **psychological and physiological challenges**, which include insufficient energy intake, hydration, sleep deprivation and alterations in emotional states (Lane & Wilson, 2011:358).

3.3.2 Theories related to participation in sport

Although not the focus of the current study, different authors have developed an array of theories to illustrate the reason for athletes to adapt their lifestyle in order to compete in endurance events.

Sport motivation is a concept that has been examined reasonably well and is one of the key defining elements that forms the foundation for sport commitment (Deci, 1975:115; Deci & Ryan, 1985:109; Deery, Jago & Fedline, 2004:235-245). Motivation can be defined as the processes that arouse, energise, and direct, purposeful behaviour. These processes cause and regulate behaviour directed to achieving certain goals (Kurtzman & Zauhar, 2005:23). Entrepreneurs, operators, and managers in the sports tourism industry, therefore, need to know what motivates their consumers to participate (Kurtzman & Zauhar, 2005:23). A better understanding of what motivates participants to compete in different sporting events will lead to more efficient marketing communication, enhance the event experience and identify the key components, which participants base their decisions on (Kruger, Saayman & Ellis, 2011:61; Kruger & Saayman, 2013a:73; Kruger & Saayman, 2014:139). Therefore, for the purpose of the current study, the motivation to participate was incorporated within the different factors in order to measure an endurance athlete's sport commitment. The second theory is a noticeable concept in understanding participation in physically demanding activities such as endurance sports. The *Flow Theory* envisaged by Csikszentmihalyi in 1975, is experienced when a person perceives an opportunity for action as being matched evenly by their capabilities (Csikszentmihalyi, 1990:51).

The third theory is *Recreation Specialisation*, which was developed by Bryan (1977:174). This theory assumes that athletes, like endurance athletes, have the desire to develop further skills and expertise in their chosen activity. The theory continues that athletes would also increase their frequency and intensity of involvement and thus progress along the specialisation continuum over time (Lamont & Jenkins, 2013:392). *The Self-determination Theory* (SDT), which was developed in 1985 by Deci and Ryan (1985:109-134), proclaims that people are pushed to achieve certain goals through intrinsic demands. This will ultimately lead to an improved experience (Vallerand & Losier, 1999:144). This is applicable to endurance athletes because most research has found that endurance athletes are intrinsically motivated. This indicates that they would rather participate for *fun, challenge, achievement, and competence* than external rewards and benefits (Pelletier, Fortier, Vallerand, Tuson, Briere & Blais, 1995:36; Ryan & Deci, 2000:69). The next theory is *Leisure Involvement,* which can be described as ‘‘an unobservable state of motivation, arousal or interest toward a recreational activity or associated product’’ (Havitz & Dimanche, 1999:122; Funk

et al., 2007:230). This theory is applicable to endurance athletes seeing that many of these athletes' level of involvement with products and pursuits such as endurance events mostly affect their preferences, behaviour, and satisfaction (Getz & McConnell, 2014:75).

Stebbins (1992:3) developed *Serious Leisure* and can be defined as "the systematic pursuit of an amateur, a hobbyist, or a volunteer activity sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience". Most endurance athletes can be seen as *serious sport tourists* by the level of ability needed to compete in endurance sport; the length of stays necessitated by participation, distance travelled and relatively high spending on preparation for endurance events (Shipway & Jones, 2007:373). The last theory referred to, is *Event Travel Careers (ETCs)* that was developed by Getz (2007:181), Getz (2008:412) and Getz and Page (2016a:294-295) and is characterised by the progression of motivations from lower order needs to higher order needs as the experience of travelling to events accrues. Lamont and Kennelly (2011:85-90) suggest that endurance athletes such as triathletes pursue an ETC as they are willing to accept significant opportunity costs (e.g. high amounts of spending and increased time on training) to continue their ambitious leisure goals. The next section will focus on the unique characteristics of endurance sport events.

3.3.3 Characteristics of endurance sport events

The preceding sections show that for endurance sport participants, the feeling of belonging to a particular circle of like-minded and physically active people who are extremely important. Willig (2008:692) further explains two factors that distinguish 'endurance athletes' from 'non-endurance athletes'.' The first factor is the desire to become familiar with everything relating to a selected sport. The second factor is the participant's enjoyment of the fact that the endurance sport is demanding and creates a challenge each time they participate (Rauter, 2014:8). Endurance sport events must cater therefore to these particular needs of endurance participants.

Endurance sport events exhibit the following unique characteristics:

- Endurance athletes may be directed towards some form of inter-personal competition which can take different forms such as personal standards (e.g. events must ensure the times of each participant is captured), degrees of difficulty (e.g. changing the course design) or forces of nature (e.g. focusing on challenges of terrain, climate or hosting events in scenic natural environments) (Higham & Hinch, 2009:7);
- The contest based nature (the competition side) of an event is an important part of an endurance event. The event should focus on ensuring that athletes are aware of the uncertain outcomes in a combination of physical prowess, strategy, skill, and composure needed to participate (Higham & Hinch, 2009:7);

- Endurance athletes are very selective when it comes to choosing an event; they consider race attributes such as, the type of sport, the distance, pre- and post-event activities, event size, event location or destination, event reputation and the challenge of the course (Rundió, Heere & Newland, 2014:25);
- Participants are attracted by the high level of difficulty of the trails and routes associated with different endurance events (Rundio, Heere & Newland, 2014:25); and
- The event management's effort is directly linked to the performance of the endurance athletes. This is because most athletes feel that injury, fatigue, and changes in the environment (e.g., temperature, time of day, terrain) is dependent on how well the event is coordinated (Simpson *et al.,* 2014:181).

Endurance events that host these unique endurance athletes lead to the intersection between the health, wellbeing, leisure, business and tourism domains, which all come together in the management context of an organised event (Fullagar & Pavlidis, 2012:155). Endurance events are therefore seen as one of the most important sub-segments of sport tourism, which will be assessed in the next section.

3.4 Endurance sport events as part of sport tourism

Organisations and many stakeholders that have specific goals in mind organise endurance events (Getz & Page, 2016a:12). The business domain of an event focuses on mobilising resources, transforming processes, management systems and professionalism (Getz & Page, 2016a:12). On the other hand, events have a multi-stakeholder approach that involves aspects such as profit, branding and destination marketing (Skinner, 2008:916). An event forms part of tourism and can be classified as event tourism when it meets certain goals such as attracting tourists, fostering a positive destination image by acting as a promoter of not only the sport but also the areas hosting these events (Hinch & Higham, 2011:49). Funk *et al.* (2007:228) similarly state that for sport tourism to be successful, a sport host destination must demonstrate social and economic benefits through the staging of sport events. It should also provide a positive experience for the tourists who travel to participate in the sport events. Many events receive assistance from authorities and sponsors with clearly expressed intended outcomes by these support systems (Hinch & Higham, 2011:160). Tourism organisations, therefore, decide what events to bid on or sponsor to attract a new market or a more lucrative market. Sponsors, on the other hand, determine their target segments, build relationships or sell to these segments and then by these goals design the event strategy (Shank & Lyberger, 2015:448).

Participatory endurance sport events are seen as one of the most important sub-segments of sport tourism and are often a catalyst for tourism (Getz, 2008:405), with local participants mostly representing a small proportion of the overall participation base. This was found in a previous

study by Lamont and Jenkins (2013:395) at a cycling event where most respondents considered themselves as “tourists” as these participants stayed away from home for one or more nights to participate in the event. The study also revealed that the event had a tremendous economic benefit to the host community (Lamont & Jenkins, 2013:395). Therefore, one of the challenges sports managers and researchers face is to understand the complexity of participation commitment that active competitors face (Funk *et al.,* 2007:228). When sport organisers and marketers create profiles of different types of participants, which include expenditure information, characteristics and trip behaviour, it will provide event organisers and destinations with important information (Dixon, Backman, Backman & Norman, 2012:6). This information can help to identify tourism products and services, which complement these participants’ desires in advance to the benefit of the event or area (Dixon *et al.,* 2012:6). Gibson (2005:210) on the other hand suggests that future research in sport tourism should focus on answering the question: “Why do they [sport participants] do what they [sport participants] do?”; It, therefore, become essential to understand the motivations and behaviours of sport tourists as this will allow destinations and tourism-related businesses to offer improved facilities and services. It will also assist in the developing of effective marketing strategies and campaigns (Gibson, 2005:210). Organised endurance events may also act as an experience that provides a different ‘entry point’ for less experienced athletes (Shank & Lyberger, 2015:448).

Sports events and tourism are strongly linked, and these events have become a central part of a destination's culture and society (Hallmann & Breuer, 2010:216). More cities and regions are bidding to become the host of major sport events. This leads to destinations trying to differentiate using its unique selling propositions to become more attractive for tourists (Hallmann & Breuer, 2010:216). Sports events are consequently an adequate instrument to emphasise the familiarity and image of a destination (Hallmann & Breuer, 2010:216). Streicher and Saayman (2010:122) agree by stating that sport events such as the Cape Town Cycle Tour (previously known as the Pick and Pay Cape Argus Cycle Challenge) in South Africa gets significant television and other media coverage. Therefore, it is useful for promoting a destination, region or city, and can then lead to attracting future tourists. Apart from the media coverage and the promotion of a destination there are several benefits related to endurance events, these benefits are discussed in the next section.

3.5 Benefits associated with endurance events

The next section considers the different benefits related to hosting a sport event. The benefits are revised from both a supply and demand perspective. Firstly the main benefits identified by an array of authors are examined followed by benefits specifically focusing on the host destination. This is then further divided into benefits concerning marketing, destination image, repeat visitation

(participation), social and economic benefits. Lastly, the physiological and social benefits associated with sport participation are assessed.

3.5.1 Main advantages linked with hosting sport events

Based on research done by Saayman and Van Niekerk (1996:64), Getz (1997:9), Kotze (2006:285), Hinch and Higham (2004:88), Turco (1998:8), Scott and Turco (2009:41), Gratton, Dobson and Shibli (2000:18), Saayman, Saayman and Du Plessis (2005:212), Preuss, Seguin and O'Reilly (2007:6) and Saayman (2012:9), the following are primary benefits of hosting a sport event:

- Attracting larger number of visitors, especially repeaters;
- Ensuring long-term economic benefits by stimulating spending in the host community;
- Using the sports media to extend the normal communications reach;
- Increasing the rate of tourism growth or a higher level of demand; spreading tourism geographically and seasonally;
- Securing a financial legacy for management of new sports facilities;
- Increasing community support for sports and sports events;
- Developing and enhancing of accommodation infrastructure;
- Improving transport infrastructure;
- Publicity for the host community through broadcasting the event on live television;
- Resulting in new facilities brought by the hosting of a sports event, more international events could also be hosted, thus leading to growth in sport tourism;
- Creating jobs;
- Improving other facilities such as parks, banks and even the improvement of basic supplies such as water, electricity and medical care;
- Improving wealth in urban and rural regions as well as community upliftment;
- Creating a multiplier effect;
- Generating investments;
- Promoting a countries image and portfolio regarding hosting sport events;
- Earning valuable foreign exchange;
- Creating entrepreneurial opportunities;
- Furthering the knowledge regarding sports medicine, coaching, and tourism;
- Serving as an attraction and entertainment activity;
- Contributing to nation pride building;
- Helping in the growth and development of sport;
- Introducing a destination to markets that are otherwise not accessible; and
- Increasing the attractiveness of a destination.

With these benefits in mind, it is important to consider the different environments in which sports tourism can be beneficial, the first being the host destination.

3.5.2 Benefits for the host destination

Many destinations choose to host sport events, since there are many direct benefits associated with the hosting process. These advantages include enhancing the image of the destination, adapting marketing strategies, repeat visitation and lastly economic and social benefits. These said benefits are reviewed in the following section.

3.5.2.1 Enhancing the image of the destination

Sport events have an important role in the creation of a positive destination image (Xing & Chalip, 2006:50; Hallmann & Breuer, 2010:216; Funk *et al.,* 2007:231). According to King, Chen and Funk (2015:3) a destination and local tourism marketers, often use sport events as an effective image building, enhancing, or rectifying tool. Xing and Chalip (2006:50) add that many destination marketers can strategically incorporate event elements into their promotional campaigns to strengthen or modify the destination image. This can take place after the event took place. The image furthermore acts as an important factor in evaluating a potential destination that is hosting a sporting event (Funk *et al.,* 2007:231). The common image associations that exist for both the sports event and the hosting destination can be used in marketing communication (Hallmann & Breuer, 2010:216). Smith (2006:77) supports this view by stating that sport events may have many positive connotations that can lead to positive implication for the sport destinations hosting cities. Destination image improvement leads to increasing exposure of the destination, as well as providing a supplementary attraction for potential visitors (Dixon *et al.,* 2012:6).

3.5.2.2 Destinations use of sport events in marketing strategies

Destinations throughout the world compete against each other for the opportunity to host professional and amateur sport events (Dixon *et al*., 2012:6). Destinations can also use sport events as instruments in their marketing campaigns to differentiate themselves in the tourism market (Hallmann & Breuer, 2010:216). On the other hand, a sport event can also use the destination as a means within their marketing for the promotion of the event (Hallmann & Breuer, 2010:216). Therefore knowing the needs of endurance athletes is not only useful from an events perspective but also for destination marketers and local businesses to design and promote salient opportunities (Taks, Chalip, Green, Kesenne & Martyn, 2009:124; Snelgrove & Wood, 2010:270).

3.5.2.3 Repeat visitation and increased number of visitors

Sport tourism is widely viewed as a niche sector of the tourism industry and can be used to increase the number of visitors that visit a destination (Hinch & Higham, 2011:35). Sport events are also commonly used as a vehicle for destination marketing and are being used to simulate

repeat visitation among participants (Kaplanidou & Vogt, 2007:202). Destinations must utilise these participants travelling to a destination to participate (Filo, Funk & Hornby, 2009a:34) as this represents an opportunity for a destination to leverage the existing event and promote flow-on tourism, this will help to market as participants will most likely recommend the destination to others (Filo *et al.,* 2009a:35; Snelgrove & Wood, 2010:270; Streicher & Saayman, 2010:130).

3.5.2.4 Social and economic benefits

Given the global economic crisis and drastic decline in tourism spending that began in 2007 (Sheldon & Dwyer, 2010:3), sport events have served as an economic development vehicle for host communities by attracting tourists to the destination (Sato, Jordan, Kaplanidou & Funk, 2014:763). Research suggests that a host destination of a sport event may receive a number of benefits, including increased revenue from participants and spectators, as well as media attention that builds a positive image among community residents and visitors (Chalip, Green & Hill, 2003:215; Funk *et al.,* 2007:231). Sports events thus, have an important role to play especially concerning community-building to urban renewal, cultural development and fostering national identities (Getz, 2008:403). Events can also lead to certain social impacts for the residents of the hosting community. This can include the increase of local pride, enthusiasm for the community and a sense of community (Crompton, 2004:44). In previous research done on the Sydney Olympics, it was found that this event had an influence on the residents regarding their sense of community spirit, sense of pride in the community and a sense of excitement (Waitt, 2003:210). Additional motivation for these destinations is the anticipated economic impacts that sport tourists' (participants and spectators) expenditures produce while attending/participating in sporting events (Gratton, Shibli & Coleman, 2005:986; Dixon *et al.,* 2012:6). According to Chalip and McGuirty (2004:268), O'Brien and Chalip (2008:318), as well as Snelgrove and Wood (2010:269) sport events, can also be leveraged to the economic and social benefit of a host destination. Coleman and Ramchandani (2010:25) as well as Lamont and Jenkins (2013:395) also note that participatory events such as the Comrades Marathon make use of existing infrastructures and can, therefore, deliver a sustainable economic benefit to the host communities.

As destinations continue to include sports tourism as a component of the destinations tourism strategy, research on sports tourists' travel behaviours and preferences provides essential information for event organisers, tourism-related businesses, and local government. The next section reviews the benefits that endurance sports events may have for the participants that take part in these events.

3.5.3 Benefits for the participant

Apart from sport events being beneficial for a destination, participating in a sport event leads to certain benefits for the participant. These benefits include health, wellbeing as well as social and psychological benefits, which are discussed in the next section.

3.5.3.1 Benefits associated with physical activity, health, and wellbeing

There is overwhelming evidence for the need to increase physical activity levels to improve health and wellbeing. Physical inactivity is recognised as a global key health risk, with 60% of the world's population failing to complete the recommended amount of physical activity required to induce health benefits (WHO, 2010:1). It is recommended that adults engage in at least 30 minutes of moderate physical activity during five or more days per week. This will help reduce the risk of mortality and illnesses such as obesity, type 2 diabetes, coronary heart disease, hypertension, stroke, and some cancers. However, participation rates in physical activity are low around the world (e.g. only 40% of men and 28% of women in the UK achieve the recommended level). It has been argued that engaging people in physical activity is the most important public health issue of the 21st century (WHO, 2010:88). Population-based interventions designed to increase physical activity continue to draw attention from governments, academics, and practitioners, but evidence of the effectiveness of these interventions is needed (Harrison, McElduff & Edwards, 2006:207). The sport and recreation industry, as a result, has joined healthcare professionals in the battle against physical inactivity (Funk, Jordan, Ridinger & Kaplanidou, 2011:251). More frequently, the delivery of services that provide potential increases in physically active leisure is becoming central components of promoting healthy lifestyles within communities (Bauman *et al.,* 2009:44). While the emphasis appears to be on producing the higher levels of fitness required for health benefits, an equally beneficial approach should focus on encouraging the least active members of society to be slightly more active (Dishman, 2003:44).

Mass participant endurance sports events represent one potential population-based intervention that may have the capacity to increase physical activity across a range of fitness levels (Murphy & Bauman, 2007:193). Less is known about the role of participation in mass community events that are more targeted at amateur athletes (Bowles, Rissel & Bauman, 2006:2). These large-scale events include fun runs, marathons, walking and cycling events that are held in many cities, often with sponsorship and fundraising objectives. It is therefore deemed that these large-scale community-based endurance events such as running or cycling could be promoted to increase regular physical activity (Bauman *et al.,* 2009:45). The travel distances of these events are usually more accessible, and these events are promoted to all segments of the general community. Large numbers of participants can take part in endurance events because existing infrastructure within destinations are used to accommodate these events. These events have the capacity to motivate individuals to begin exercising, which theoretically should translate into an increase in the

frequency, intensity, and duration of exercise to prepare for and participate in the event. However, empirical evidence supporting such claims and whether events increase or sustain population-level physical activity post the event, is lacking (Bowles *et al.*, 2006:2; Murphy & Bauman, 2007:193; Bauman *et al.,* 2009:45). In addition, such events may also allow currently active people to become more active (Bowles *et al.,* 2006:1). Community-based physical activity intervention, in the form of an event, could as a result motivate participation among inactive and active individuals by promoting a readiness for exercise (Funk *et al.,* 2011:252).

3.5.3.2 Physiological and social benefits

When examining the mood states of endurance sport participants, they showed fewer signs of tension, depression, fatigue, confusion and more dynamism compared to non-endurance athletes (Tharion, Strowman & Rauch, 1988:229). Evaluations of endurance athletes' cognitive orientation that includes their race thoughts and mental strategies indicated that these athletes are more confident, committed to the sport, and have higher goal orientation compared to other athletes. Endurance athletes mostly make use of dissociate thoughts (e.g. thinking of work, friends or music) and use several mental skills (i.e. imagery, goal setting, self-talk) (Acevedo, Dzewaltowski, Gill & Noble, 1992:248). Shipway and Holloway (2010:270) also noted that endurance sport is a spiritual activity that benefits the athlete's mind, body and soul. Seeing that endurance sports are such demanding sports, many participants emphasise the need to prepare psychologically for races, and many of these athletes view mental preparation as a higher priority than some physical aspects (Simpson *et al.,* 2014:180). Athletes, however, gain confidence as they gain experience in the sport by reflecting on this previous participation and researching the upcoming event regarding course layout and weather (Simpson *et al.,* 2014:180). Endurance athletes also gain confidence when their physical training matched their expectations about the challenges of an upcoming event.

Endurance events for many participants are about more than just competing; it is an opportunity to stretch personal boundaries and explore uncharted areas of their lives (Simpson *et al.,* 2014:180). As mentioned previously, endurance training and participating expose participants for extended periods, under demanding physical and mental conditions. This self-imposed test provides the basis for endurance athletes to overcome personal obstacles, fulfil challenging goals, and foster an aesthetic appreciation for their event environment (Hochstetler & Hopsicker, 2012:123). One of the most important aspects that attract athletes to endurance events is personal development. Endurance sport events offer participants an opportunity to grow as a person and to challenge them as events will vary in distance, risk, and terrain (Shipway, 2010:58). When taking part in endurance sport a person becomes part of an endurance community. This community helps endurance athletes effectively prepare for events (e.g. providing information in how to train), manage in race demands (e.g. support from crew members), discover new

environments (e.g. competing in new events), and improves the sense of personal achievement (e.g. the exclusivity of the number of people participating in endurance events) (Shipway, 2010:64).

Endurance events can also lead to support, shared personal bonds, and camaraderie that are all integral aspects of the event experience (Simpson *et al.,* 2014:180). Participants view fellow endurance athletes as like-minded with similar backgrounds (Shipway, 2010:70). In addition, interpersonal connections are also a critical part of the success in endurance training, as well as taking part in competitions. Unfortunately, there are not always resources available for endurance athletes to train. This leads to the creating of an endurance athlete community that helps each other prepare for events (Shipway, 2010:64). Sports events do not only offer an athlete with the opportunity to participate but also provides leisure activities, social opportunities and entertainment. An event must be designed with unique elements that match the expectations of diverse participant market and wide-ranges of socio-economic status (Bennett, Mousley, Kitchin & Ali-Choudhury, 2007:158), physical skills, fitness levels, and other characteristics (Bennett *et al.,* 2007:160; Taylor & Shanka, 2008:954, 955). Observing and interacting with large numbers of other participants with diverse profiles help participants increase awareness of the charity, create a sense of community with other participants, and develop cause-related motivation and attachment to the events (Filo, Funk & O'Brien, 2009b:361).

Individuals may have a variety of reasons for training and participating in endurance events and can encounter various constraints that influence the frequency, type of event and training before and after the event (Ingledew, Markland & Ferguson, 2009:338). The aspects that influence an endurance athlete's sport participation are evaluated in the next section.

3.6 Aspects/factors affecting endurance sport participation

Lamont and Kennelly (2012:236) note that there is the only a small proportion of elite competitors that may harbour realistic visions of being victorious at the finish line. However, this does not stop thousands of amateur athletes challenging themselves by taking part in endurance sport. External forces such as friends, family, social peers, word-of-mouth communication and media advertising can intentionally engineer a decision after is has been made to partake in a sports event (Kurtzman & Zauhar, 2005:21). Therefore, others can directly influence the sports participation travelling and is not necessarily proceeding from oneself (Kurtzman & Zauhar, 2005:21). Hemmati Nezhad, Malek Akhlagh, Mottaghi Talab, Afshar Nezhad and Mirkazemi (2009:145) further state that the characteristics of a sports event, safety and financial restrictions all have an influence on the willingness or unwillingness of potential participants and their choice to participate. Furthermore, Dixon *et al.* (2012:6) note that it becomes necessary to focus on the socio-demographic characteristics, travel behaviours and the impact of each on a group of sport tourists.

This information will help create profiles that event organisers and destinations can use to identify appropriate tourism products and services, which will ultimately produce the biggest benefit for the event or area (Dixon *et al.,* 2012:6).

With a particular focus on sport marketing, Mullin, Hardy and Sutton (2007:80) identified a range of factors, which influence consumer behaviour, either positively or negatively. These factors include *environmental factors* (e.g. significant others, such as parents, teachers, and peer group leaders), *cultural norms and values* (e.g. media, class, race and gender relations) and lastly *individual factors* (e.g. self-concept, a person's stage in the life of family cycle, perception and motivation). In short, sport and leisure marketers have a significant task in understanding why consumers behave the way they do. However, this understanding is an essential foundation for the rest of marketing activity. Factors like place of origin, cultural characteristics and demographic characteristics can further influence event participation. Results have shown that demographic characteristics is an important variable when predicting the probability of participation and commitment. Other factors such as age, income, motivation, personality, spending, ethnicity, culture and the distance travelled all have an influence on a tourists' choice to visit a destination for sport purposes. It is important to note that motivation is not just a psychology domain, but helps researchers understand why people behave in certain ways (Brown, 2005:481). Thus, it becomes necessary to consider the factors that influence endurance sports participation as it can and often does lead to sports commitment. The most noteworthy factors relevant to endurance athletes in particular, are discussed in the following sections and considered in this study.

3.6.1 Gender

Studies dealing with engagement in sport, socio-demographic characteristics of sport or sport-recreational event participants establish that the share of men who are physically active or actively participate in various sports events is greater than that of women (Nogawa, Yamaguchi & Hagi, 1996:46; Getz & McConnell, 2011:330; Stamm & Lamprecht, 2011:22). In a study done by Van Vlerah (2013:8) on female participation in lifestyle sports such as motorcycling and skiing, the author found that gender and femininity of female athletes are constantly being questioned. Furthermore, Van Vlerah (2013:8) adds that there is still a divergence between traditionally feminine sports and activities (e.g. gymnastics) and females' access to larger arenas where financial rewards and other benefits of participation accrue (e.g. baseball, basketball, and cricket). Fullagar and Pavlidis (2012:157) further state that it is surprising that there has been little research on gender about both participant experiences and management issues. It also becomes necessary to examine how gender is significant when reflecting on the 'design, production and management' of planned sport events (Getz, 2008:404).

Gender differences are furthermore seen as a critical aspect to examine in conjunction with sports participation motivation (Funk *et al.*, 2007:233). The role of gender in sport continues to emerge within the literature (Funk *et al.,* 2007:233). Socialisation, enjoyment and body-related concerns tend to motivate female participation in sport and exercise more. In contrast, competition and ego-related concerns steer male participation more (Recours, Souville & Griffet*,* 2004:5; Funk *et al.,* 2007:233). Ritchie, Tkaczynski and Faulks (2010:413) similarly identified gender differences in endurance sport and highlighted the need to promote better social aspects (fun, socialising) and intellectual benefits (discovery) of physically challenging event experiences to increase women's participation. Correspondingly, Egli, Bland, Melton and Czech (2011:404) affirm that males and females exercise for entirely different reasons. Results showed that intrinsic factors tend to motivate males more, whereas female athletes placed more focus on extrinsic motives. Focusing on these various motives for each gender in the management and marketing on an event can be linked positively to exercise adherence for both males and females (Egli *et al.,* 2011:404). Unfortunately, Ritchie *et al.* (2010:414) state that there has been little qualitative or quantitative research that explicitly explored the gender issues and relations focusing on women's participation in endurance sports events. Need then emerges from knowledge in event studies that critically engage with participants' event experiences to develop management strategies that address inequities in participation (Fullagar & Pavlidis, 2012:157). Endurance events offer a distinctive experience that can engage and promote women's involvement in sport and physical activity more generally. This then leads to an opportunity for event managers to develop more gender inclusive approaches to event planning, promotion, and operations as a strategy to increase women's participation, and participation overall (Fullagar & Pavlidis, 2012:157). Collectively, the literature indicates gender is an important consideration in understanding sports motives and destination image and sports commitment (Funk *et al.,* 2007:233). Age is another demographic variable that can have a direct influence on an athlete's event participation; this is further outlined in the following section.

3.6.2 Age

Ageing presents a particular challenge to athletes, even at a relatively young age, because declining physical performance threatens a career as a professional and elite athlete (Messner, 1992:112). Studies done by Kruger and Saayman (2014:145) as well as Myburgh, Kruger and Saayman (2014c:2) reflect a significant finding which implies that an endurance athlete could easily extend their competitive age, if they wished to, by competing in endurance events. This supports the notion of Myburgh *et al.* (2014c:3) that endurance sport can become a lifespan sport – depending on the type of endurance activity and event. The concept of lifespan sport is furthermore promoted by, for example The World Masters Games (WMG) event (Walker, Hinch & Higham, 2010:287). The World Master Games is based on traditional Olympic sport, but caters to a diverse range of sporting interests. The wide-ranging appeal of this event is mostly because

athletes can participate regardless of their experience and skill (Gillet & Kelly, 2006:240). The event however, has an age-based eligibility criterion, which for most sport disciplines begins at 30 years of age (Gillet & Kelly, 2006:240). The guiding principles of the WMG are (World Masters Games, 2005:4; Walker *et al.,* 2010:287):

- Fostering the philosophy of 'sport for life' throughout life;
- Offering broad-based participation in a variety of sports featuring some disciplines in a multinational environment;
- Encouraging mature individuals from all over the world to participate in sport regardless of age, gender, race, religion, or sports status;
- Leading the charge to increase recognition that competitive sport may continue throughout life;
- Bringing together mature athletes every four years from different cities around the world to take part in their sport and to share cultural and tourist experiences; and
- Motivating a goal-oriented and long-term attitude towards sport, physical fitness, and health.

Age can also be seen as an important factor that influences people's motivations to exercise, when looking at research of what motivates people of different ages to exercise and participate in physical activity, researchers have found that children are mostly motivated by "fun", experimentation, unusual activities, and support from family and friends (Mulvihill, Rivers & Aggleton, 2000:168; Allender, Cowburn & Foster, 2006:831; Snethen & Broome, 2007:144). Adolescents are often more motivated by factors such as body shape, weight management, social networks and support from friends and family (Allender *et al.,* 2006:829; Daley, Copeland, Wright & Wales, 2008:815; Goodsell, Harris & Bailey, 2013:339). Adult's motivations include sense of achievement, mood management, skills development, medical requirements, support network and enjoyment (Segar, Spruijt-Metz & Nolen-Hoeksema, 2006:183; Allender *et al.,* 2006:829; Graham, Kremer & Wheeler, 2008:449; Jancey, Clarke, Howat, Maycock & Lee, 2009:197; Shipway & Holloway, 2010:275; Goodsell *et al.,* 2013:339). Older adults have been found to be motivated by social support, health benefits, improved role performances, past experiences, health and fitness and enjoyment (Allender *et al.,* 2006:829; Kontos, Miller, Brooks, Jassal, Spanjevic, Devins, De Souza, Heck, Laprade & Naglie, 2007:1307; Hardy & Grogan, 2009:1043; Jancey *et al.,* 2009:196; Goodsell *et al.,* 2013:339). Ogles and Masters (2003:81) furthermore suggest that winning is less important as age increases. In a sporting context, age can additionally be used as a demographic segmentation variable, by categorising participants in the same age groups who tend to have similar interests and experiences. This will ultimately influence their behaviour and participation patterns (Howell, 2012:22). Lepers *et al.* (2010:251) state that it is also important to look at the characteristics of older athletes in combination with the changes in training volume and physiological characteristics in order to better understand age-associated

changes in performance. This will provide vital information on the way to maintain physical capacity and performance with advancing age. Therefore, more research could focus on categorising participants according to different age groups. Commitment can be a major factor that either increases or decreases with age and is further discussed in Chapter 4. Participant behaviour is another variable that has an influence on endurance participation and is reviewed in the next section.

3.6.3 Behaviour related to physical activity involvement

Physical activity is conceptualised as an individual's pursuit of physically active leisure (Beaton & Funk, 2008:55). The development of physically active leisure progresses from an individual's initial adoption to subsequent commitment and continuance (Iwasaki & Havitz, 2004:49; Funk *et al.,* 2011:252). An endurance event can therefore have a differential influence on the level of prior physical activity involvement (Iwaski & Havitz, 2004:49; Beaton & Funk, 2008:66). There are notable aspects of an individual's physical condition at the time of the event, before the event, and physical activity level before the event preparation phase (Funk *et al.,* 2011:254). Research has also revealed that the race distance category that was selected can also influence an individual's physical condition (Funk *et al.,* 2011:252). Individuals participating in longer distance races would have invested in different and acuter levels of physical conditioning (i.e. frequency and duration) whereas shorter distance events are more likely to attract less active endurance participants (Bowles *et al.,* 2006:2). One way to measure prior event experience is the number of endurance events an individual has completed before a particular race. The hypothesis is that individuals, who complete in more events per year, are more likely to be already active and experienced endurance athletes (Funk *et al.,* 2011:256). Furthermore, it was found that individuals who participated in obtaining benefits for enjoyment, competition, positive health, and were more experienced and physically fit before the event were more likely to be committed to the sport after the event (Funk *et al.,* 2011:263).

Baker, Côte and Deakin's (2005:65) investigations revealed that athletes pass through three stages of sports participation before the attainment of expert level performance (i.e. sampling years, specialising years, and investment years). During these stages, significant changes occur in several areas. There appears to be a shift from activities that are play-like in nature to more structured and effortful training activities. In addition, the number of sport-specific training hours dramatically increases from initial involvement in the sampling years to committed involvement in the investment years (Baker *et al.,* 2005:65). Researchers also report differences of sport-specific training between experts and non-experts during later stages of development (e.g., Hodges & Starkes, 1996:400; Starkes & Hodges, 1998:21).

Physical activity level can also be examined through the intensity of the exercise activity ahead of an event (i.e. intense vs. moderate) over various periods of time (i.e. six months to two months) prior to training for the event (Bowles *et al.,* 2006:5; Funk *et al.,* 2011:256). In summary, less active athletes are likely to select shorter distance endurance categories, have completed fewer prior endurance events, and will be less likely to be active before the event. These are significant involvement facets seeing that the following questions related to commitment could be asked. Will race distance category predict increased activity commitment and future exercise intentions? Will a prior number of events completed predict increased commitment and future exercise intentions? Will physical activity level before the event predict increased activity commitment and future exercise intentions? Consequently, this information can help determine whether the event increases sports commitment (Funk *et al.,* 2011:263).

It has been a long-standing goal of marketers to understand the spending behaviour of participants in sports events (Stewart, Smith & Nicholson, 2003:206). According to Craggs and Schofield (2009:255), a wide range of socio-demographic and behavioural determinants influence visitor expenditure. Thus, the latter can be used to identify if the relevant determinants are affecting visitor spending. With this in mind, Spotts and Mahoney (1991:24), as well as Legohérel and Wong (2006:16), indicate that visitor expenditure is a major factor to indicate sport commitment and can be used to determine the high spenders in addition to the determinants that positively influence higher spending. This is because travel (sports) marketers seek visitors who will be committed to the event and thus spend money, and not just time, on their tourism products (in this case, sports events). Tourist/participant spending is furthermore one of the most critical variables in the analysis for tourist destinations (sports events), since it directly determines the tourism (sports event) sector's profitability (Frechtling, 2006:26).

Within tourist expenditure research, three behavioural factors are prevalent, behavioural involvement, the purpose of event participation and past event participation (Sato *et al.,* 2014:764). Behavioural involvement refers to athletes who have more prior experience, more past event participation and it is seen as an important aspect in predicting spending behaviour of individuals (Kim, Scott & Crompton, 1997:322). Sato *et al.* (2014:764) state that if participants' purpose of traveling was a dual-purpose (i.e. sport and tourism), they are more likely to spend more money compared to participants who come to the destination solely for the sport event. Past event participation can also have an influence on expenditure. It can have a negative influence where participants spend less money because they make more efficient choices or a positive impact where they spend more money as they seek higher quality factors (Sato *et al.,* 2014:764). Within the involvement construct, enduring involvement occurs, which has frequently been utilised in the leisure and recreation literature (Havitz & Howard, 1995:255-276; Park, Yang, Lee, Jang & Stokowski, 2002:55-65; Havitz & Mannell, 2005:152-177) but has had limited application in

tourism. (Ritchie *et al.,* 2010:412). Enduring involvement mostly encompasses people that adjust their daily schedules and even their lifestyle to accommodate leisure and sport activities. Further, this concept is thus very relevant to niche tourist markets such as endurance participants seeing that these athletes tend to exhibit high levels of enduring involvement (Ritchie *et al.,* 2010:412). Research concerning enduring involvement could assist in understanding the motivation, commitment and behaviour of sport and especially endurance participants. It is, therefore, important to determine if committed visitors have the highest spending at a sports event and which variables are most influential in determining their expenditure levels (Kastenholz, 2005:557). Although limited studies have researched the direct effect of commitment on participants spending, research have shown that participants with a high income, high level of education, high level of participation and great time investment or seniority in sport (years of participation) tend to have a higher level of sports-related expenditure (Davies, 2002:99; Wicker, Breuer & Pawlowski, 2010:214). According to Beaton, Funk, Ridinger and Jordan (2011:129), empirical research on attitudinal involvement and behavioural involvement are correlated positively to endurance events. Therefore, the event itself can have an influence on involvement, participation and ultimately the commitment of a participant. This is further explored in the following section.

3.6.4 The event

Since endurance events typically offer various distances and categories, these events attract individuals from beginners to the more experienced participant, all having levels of prior attitudinal and behavioural involvement (Funk *et al.,* 2011:256). An event can influence both the initiation and continuation of participation through its impact on attitude formation changes that occur during the event (Funk *et al.,* 2011:256). This perspective suggests an event has the motivational ability to influence a broad spectrum of endurance athletes. Consequently, endurance events can serve as a catalyst to increase attitudes toward physically active leisure that would correlate with increased behavioural activity and participation (White, 2008:344; Wilhelm Stanis, Schneider & Russell, 2009:300).

Theoretically, if an endurance event can promote positive and stronger attitude toward physical activity, it could play an influential role in developing two important consequences: increasing psychological commitment to a specific sport; and increasing intentions to engage in general exercise activity as well as event participation (Coalter, 2012:3). Pritchard, Havitz and Howard (1999:335) describe psychological commitment as the strength of attitude formation regarding preference stability toward an object and resistance to persuasive attempts promoting choices. Hence, an endurance event that increases an individual's level of commitment would correlate with an increase in sport-related behaviour and can lead to greater participation in the future. Individuals with higher levels of sports involvement have an increased frequency of participation (Beaton *et al.,* 2011:136). However, it has been found that only a medium level of commitment to

endurance exercise would be necessary to produce energy expenditure that promotes health-related benefits (Dishman, 2003:48). Funk *et al*. (2011:263) found that although an event would likely increase the frequency, duration and intensity of training, endurance athletes were probably already exceeding the threshold of physical activity that would result in health benefits. If the event, however, could encourage sport commitment, then individuals are more likely to initiate, continue, or increase the level of event participation, and this change would be more consistent across time and context (Beaton *et al.,* 2011:129). Beyond fostering higher sports commitment, the endurance event can also influence attitudes toward engaging in regular exercise behaviour. Park (1996:234) states, individuals with high levels of involvement in sports events have increased intensity and frequency of participation in fitness activities. From an attitudinal perspective, the event could foster the development of more positive attitudes toward fitness as individuals experience mental and physical benefits of exercise through the event preparation and participation phases (Wilson & Rodgers, 2004:231). Hence, the event has the potential to increase the frequency of future exercise intent and could help the least active members of a community to be more active. On the other hand, in the sport and tourism literature, Kaplanidou and Vogt (2007:185) state that an event or the image of an event can have a direct influence on the behavioural intentions to visit for the first time or revisit a destination. This is closely related to event satisfaction, which is studied in the ensuing section.

3.6.5 Event experience and satisfaction

According to Kaplanidou and Vogt (2007:185), previous research indicates that event satisfaction was a key predictor of both future intentions to exercise and commitment to the sport. In post-trip contexts, satisfaction has been found to be a significant predictor of future visitation intentions (Petrick, Morais & Norman, 2001:41), and loyalty (Bigné, Andreu & Gnoth, 2005:842). It is important for an individual to have a positive event experience, as it will contribute to the development of optimistic attitudes towards physically active leisure. Endurance events represent a form of experiential consumption within the leisure context through which emotional responses are derived (Holbrook & Hirschman, 1982:132). Event participation can be intrinsically enjoyable, and the perceived quality of services encountered can produce higher levels of emotional intensity (Arnould & Price, 1993:25). A positive sports event experience can, therefore, lead to an individual attaching more functional, emotional, and symbolic meaning to an event (Filo *et al.,* 2009b:363). Experience proved to have played a major role in attitude-behaviour theories (Terry, Hogg & White, 1999:231). Past experiences such as previous event participation can be a strong predictor of attitudes towards future physical activity intentions (Kaplanidou & Vogt, 2007:187). Past experiences can also be related to previous destination experience or event experience, and it is believed to reduce the risk of future unsatisfactory experience. Furthermore, Baloglu (2001:132) found familiarity (as a function of past visitation experience and informational familiarity) as positively influenced destination image. Funk *et al.* (2011:263) also found that runners that

participated in a greater number of prior events, and who had higher levels of physical activity before the event, were more committed to running. Experience or prior event participation can thus have a positive influence on sport commitment and ultimately future event participation.

Satisfaction with the sports event experience has the potential to foster the development of positive attitudes toward sports commitment and future participation intentions. The perception of the sports event experience would form the basis of satisfaction (Oliver, 2014:111). In summary, satisfaction represents a cognitive appraisal of the degree to which a leisure activity performs in agreement with an individual's subjective expectations (Petrick *et al.,* 2001:41). From a service quality perspective, the perceived quality of the sports event experience can lead to a positive attitude toward engaging in the future activity (Funk *et al.,* 2011:252). An endurance event should be designed to cater to every need of the participants and provide the following services and facilities; namely first aid, mechanics, gear shops, masseurs, a general store and tourist information to name but a few. The event design that includes route planning and support will enable participants to feel safe while participating. Events also have certain risk management protocols such as ambulances, police escorts, and signage as well as gear maintenance that all contribute to a culture of a safe event (Fullagar & Pavlidis, 2012:165). Most events also host preparatory workshops before the event that include training, fitness, safety procedures, gear, and basic mechanics. Many events also facilitate networking (social media, website and workshops) that encourage participants to communicate with other participants and offering help to first-time participants. Events also should link more with local clubs to provide pre-event and post-event support (Fullagar & Pavlidis, 2012:165).

Specifically, if event satisfaction is predictive of sports commitment and future exercise intent, it especially highlights the importance of service quality and management of the sports events (Lee, Kim, Ko & Sagas, 2011:56). Accordingly, it is imperative for a sport organisation and managers to be able to determine which components of an event or services at the event will significantly contribute to participant satisfaction (Lee *et al.*, 2011:56). This information combined with an understanding of motives, lifestyle and participation frequency could help determine the developmental capacity of events for promoting positive attitude change and sports commitment (Funk *et al.,* 2007:229). Research is therefore needed to examine whether the increase is observed among the least active members of a population or merely among those already active in endurance events. This can be done by looking at the involvement in physical activity as well as lifestyle adoption to participate in endurance events. Consequently, findings on event satisfaction indicate that a positive event experience has the potential to encourage the least active members of a population to be more active and therefore would be beneficial to society as a population-based physical activity intervention (Dishman, 2003:47). In addition, the results

support the important role that the event management and service quality play in developing positive attitudes toward physically activity leisure (Funk *et al.,* 2011:263).

3.6.6 Social environment and social constraints

The social environment comprises out of social, cultural, political and economic contexts (Rauter, 2014:9). Consequently, friends, acquaintances, family members as well as school, societies, clubs and different organisations can shape one's views on sports activities (Jarvis, 2006:41). A person's personality traits can also define one's attitude toward pursuing sport. The term socialisation describes the process whereby people acquire the rules of behaviour and the systems of beliefs and attitudes that form part of life in their society (Jarvis, 2006:16). Beyond the social environment to help understand engagement, research on constraints (Godbey, Caldwell, Floyd, & Payne, 2005:152) should be used to examine disengagement and, more importantly, negotiation of barriers to participation (White, 2008:344). Mass participant sports events, such as marathons, can be both time-consuming and expensive. Lower socio-economic groups are more likely to be less physically active and have less time for social participation (Lindström, Hanson & Östergren, 2001:441). The cost of registration for these events can exceed $100 (R1400), which does not include the additional training-related costs (e.g. shoes, clothing and travel). Future research should examine the rate of inclusion of participants from different socio-economic backgrounds to determine whether cost and time appear to be constraints on physical activity.

3.6.7 Sport participation and travel behaviour

Previous research has shown that when studying sport tourism behaviours and the destination for the trip, tourists mostly search for opportunities to participate and the destination itself becomes a less important factor (Weed & Bull, 2009:79). Many tourists base their holiday decision on the availability of sport tourism opportunities for example, water sports on beach holidays and sport activities for children on holiday camps. Thus, sport can be an important factor in destination choice (Weed & Bull, 2009:83). Consequently, it becomes necessary to understand the significance of sport tourism behaviours and the role it plays in the trip and destination choice (Weed & Bull, 2009:83). Research done by Havitz and Dimanche (1999:122) found that involvement was the mediator of purchases and participation. However, there were little findings of the link between involvement and travel. Subsequently, there remains a gap in tourism studies concerning participation and its influence on travel behaviour (Iwasaki & Havitz, 2004:49). Previous studies have shown that sport can be used as a tool to promote travelling as long as the destination gives the tourist the opportunity to train. Destination marketers should keep this in mind when marketing a destination as this will sway a participant to arrive a few days earlier than the event date (Iwasaki & Havitz, 2004:49).

In a study done by Kruger and Saayman (2013a:88) on Comrades Marathon participants, two segments of runners were identified, *serious runners* and *recreational runners.* Both groups presented different holiday choice behaviour. The serious runner segment's holiday choice behaviour was regularly influenced by their sport participation while this was only sometimes the case for recreational runners. It is, however, important to note that sport participation sometimes had a lesser influence on serious runners travel behaviour, which shows that these participants are inclined to travel to destinations other than those where the sport events take place regardless of their sport participation. Furthermore, it was found that the serious runners visited more tourist attractions in the event area. This highlighted that this group is an important market to target from a tourism perspective as well. This was further supported with research findings of McGehee, Yoon and Cárdenas (2003:320) and Funk *et al.* (2007:229) who suggested that participants with high levels of involvement in sport travel more to events and destinations where these events are held. Sport events can thus have a direct impact on travel and tourism behaviour since these events expose a participant to travel and it can eventually become a habit or even a lifestyle (Shipway & Jones, 2007:378).

Ryan and Trauer (2005:179) examined the involvement in the context of sport event tourism at the Masters Games, which is a multi-sport event. It was hypothesised that a participant who is highly involved is willing to travel around the world to participate in sport events. Getz and McConnell (2014:75) however found that the event location (i.e. the destination) is a secondary consideration for sport participants. Research also suggests that highly involved participants will spend more time and money on their interests (sport). Therefore, the spending on travel will evolve, and participants will be looking for more unique and self-fulfilling experiences (Getz & McConnell, 2014:76). In a study by McGehee *et al.* (2003:320), it was found that the highly involved recreational runners travelled more to participate in events compared to medium-involved runners. Consequently, the well-established proposition that greater involvement will lead to higher levels of participation and participation in more competitive events was confirmed.

The sport event can further also influence the exposure a destination receives; this was evident from the increased positive international exposure South Africa received from the FIFA Soccer World Cup held in 2010. It was found that tourists had less negative perceptions of South Africa, especially regarding a safety and security perspective. A greater focus was put on the fact that South Africa is a value-for-money destination (The Fédération Internationale de Football Association [FIFA], 2010:1). The event also ensured an increase in tourist arrivals after the World Cup (Giampiccoli *et al.,* 2015:237). According to a study conducted by the South African Tourism Organisation on the impact of the FIFA Soccer World Cup on the South African tourism, the total awareness of South Africa as leisure destination increased by 9% globally after the event. Most of the tourists that visited the country for the event was also extremely satisfied with their

experience and would recommend the destination to their family and friends. Furthermore, tourists' intentions to visit South Africa in the short term also increased with 35% after the World Cup (South African Tourism [SAT], 2010:13). Most importantly approximately 90% of tourists that attended the World Cup indicated that they would consider visiting South Africa again in the future. This was evident in the growth of tourist arrivals by 3% in 2011 to 8.34 million (Giampiccoli *et al*., 2015:237). The problem however with the Soccer World Cup was the fact that it did not benefit South Africa more widely. Most of the tourism associated benefits had intensified only in Johannesburg, Cape Town and Durban (Giampiccoli & Nauright, 2010:58).

This section clearly indicates that sport participation/involvement and sport events can have a direct influence on travel behaviour. Unfortunately, to the author's knowledge, no empirical research had been done to measure the influence of commitment on travel behaviour. Thus it becomes a sensible factor to take into account the influence of commitment on travel behaviour for this study. Apart from the factors mentioned, other factors have a direct influence on sport participation. These factors are discussed in the next section.

3.6.8 Other influences

The next section also highlights aspects such as cultural background, social class and race, tourist's expenditure, family life stages and loyalty. These all influence sport commitment and are reviewed below:

- Previous studies have indicated that **cultural background** influences tourist behaviour (Funk *et al.,* 2007:234). Funk *et al.* (2007:233) predicted that participants' sports motives, destination image, commitment and travel motives would differ based upon their cultural background;
- It is suggested that future sport tourism research also focuses on the effects of **social class and race** as it will increase understanding of the influence of social structure on participation and sport commitment (Egli *et al.,* 2011:405);
- According to Standeven and DeKnop (1999:15), sport tourists can be characterised as individuals more likely to travel long haul, stay more days, stay in pricier accommodations, and spend more per day. Research on **tourists' expenditure patterns** can thus be seen as important, especially regarding marketing, segmentation, policy formulation and management (Wilton & Nickerson, 2006:18; Brown, Busser & Baloglu, 2012:60). However, tourists' expenditure patterns are seldom used in marketing segmentation or in combination with sport psychology such as commitment (Wilton & Nickerson, 2006:17; Dixon *et al.,* 2012:7). Events, destinations as well as tourism-related businesses are mostly interested in attracting 'quality' tourists. 'Quality' is usually related to upscale and

higher spending tourists (Mak, 2004:58). Research is needed to identify if there is a relation between these 'quality' sport participants and sport commitment;

- **Family life stages**, which is defined by transitions or turning points between different stages (e.g. getting married, having a child or retiring) has wide-ranging impacts (Goodsell *et al*., 2013:340). Allender *et al.* (2006:834) argue that significant shifts in a person's life course can have implications for participation in physical activity. Endurance sport participation is one activity that affects and is affected by family life course. It can take on different characteristics and functions, depending on life circumstances (Leedy, 2009:88). In summary, increasing attention should be given to various stages in people's lives, as this can be helpful in understanding similarities and differences between members of different groups, while also looking at their motivation and commitment towards sport; and
- **Loyalty to a sport object or sport event** can be seen as the degree of attitude formation towards a sport object (for example a specific event or sport team) and is characterised by *persistence*. Persistence refers to the frequency of which an individual thinks about their team. *Resistance to change* is the increased resistance towards counter-persuasion characteristics, by blocking negative communication about the sport object (Funk & James, 2006:197). *A bias in cognitive processing about the positive sport information is* accepted, whereas negative information is resisted or interpreted in support of the object. It also leads to increased likelihood that decisions are rendered when certain information about the sport object comes to mind. Lastly, it *guides behaviour* where an individual will engage in some form of behaviour (attend, participate, buy, watch, listen, etc.) (Funk & James, 2006:197).

3.7 Conclusion

Physical activity is seen as the best solution to improve public health. It has been realised that localised events (mega and small-scale events) can attract a large number of participants and act as an ideal opportunity to get the population more active. Endurance sport gives the participant the opportunity not only to improve their physical health but also to challenge them mentally. Endurance participants all share similar characteristics such as the will to excel, competitive nature, high levels of involvement, strong identification with the sport, willingness to adapt their lifestyle, perseverance, determination. This like-minded group becomes the ideal group to research regarding commitment as amateur and professional endurance athletes adapt their lifestyle to prioritise endurance training and events. The distinctiveness of endurance athletes is further revealed by different theories that highlight an endurance athletes involvement and lifestyle adaption for the sport. Some of the theories include *Recreation Specialisation*, *Leisure involvement, Serious leisure, Self-determination theory* and *Sport Commitment.* Endurance sport events, which hosts these participants, form an important part of the sport tourism industry. Since these events act as a catalyst for tourism, it ensures economic benefits for the host destination.

Research regarding endurance athletes lead to an array of benefits. Benefits include enhancing the destination image, improving marketing strategies, repeat visitation, an increase in the number of visitors as well as social and economic benefits for the destination. The participants that take part in these events will also be benefitting in terms of improved health, wellbeing and physiological and social benefits. It is, however, important to note that endurance participation at events is either encouraged or discouraged. Sport participation and involvement, on the other hand, can also have a direct influence on these factors. These factors include demographics such as age and gender, behavioural related to the sport, extrinsic factors such as the event itself. A factor also included is the level of satisfaction as a result of event participation, the social environment and social constraints, travel behaviour (which is a less researched factor) and lastly other factors that had an influence. These factors not only have a direct effect on sport participation and vice versa but can also lead to commitment towards endurance sport. These factors are all used to compile a research framework and the questionnaire, which are discussed in detail in Chapter 6 (c.f. 6.2). A detailed evaluation of the commitment of endurance athletes, the factors that influence this commitment as well as the relevant commitment theories follows in Chapter 4.

4 ASSESSING COMMITMENT IN THE CONTEXT OF ENDURANCE SPORT

There is but one degree of commitment; *total*. – Arnie Sherr -

4.1 Introduction

As evident from Chapter 3, endurance sports such as marathon running, cycling and triathlons can consume vast amounts of leisure time in preparation and training (Lamont & Kennelly, 2012:236). Endurance events have a range of formats, vary in duration and with regard to course difficulty, and have various levels of prestige that allows for progression in the sport. Endurance athletes that participate in these events are found to be more confident, committed and have higher goal-orientations compared to other athletes. They also make use of several mental skills while taking part in endurance events (Simpson, Post, Young & Jensen, 2014:177). This involvement in endurance sports may extend well beyond participation in events. Participation in the activity may become integrated into daily life and form a central part of the individual's social identity. Endurance athletes have been reported to make significant lifestyle adjustments to accommodate their sporting efforts (Hill & Robinson, 1991:85). It is, therefore, necessary to analyse endurance sport participants and the aspects/factors that facilitate or constrain commitment to their sport, and particularly sport events.

It is clear that commitment is closely related to different factors, making the commitment a complex physiological concept. This observation forms the premise of this chapter. In order to understand commitment in the context of the study, this chapter firstly examines commitment within the context of sport, with particular emphasis on the Sport Commitment Model (furthermore referred to as SCM). Background will be given on the models that form the foundation of the SCM model; these models/theories include the Investment Model, Social Exchange Theory and the Interdependence Theory. Furthermore, the chapter looks at the implementation of the model as well as discusses the SCM hypotheses. The different variables associated with the SCM are then discussed individually. The complexity of sport commitment is analysed as well as the various factors pertinent to sport commitment. The last part of the chapter investigates the application of the SCM, the importance of sport commitment research and the additional benefits that come from researching commitment in a sport context.

4.2 Commitment in a sport context

Commitment can be seen as an individual's decision to sustain involvement in a focused behaviour (for example job, relationship or sport) (Young & Medic, 2011:168). Commitment is therefore based on a person's equivalent appraisal of three forces: those that attract them to the activity, those attracting them to alternative activities and lastly those forces restraining them from being involved in the activity (Young & Medic, 2011:168). A degree of commitment occurs when

the pros of membership overweigh the cons of membership (Hall, 2013:10). Early psychologists were all in general agreement that commitment referred to either the stability or perseverance of a relationship (Kelley, 1983:293) or is an explanation for persistent behaviours (Becker, 1960:40). The definition of commitment has varied according to the aims and area of interest by different researchers. Many researchers have explained commitment as an attitude (Sheldon, 1971:143; Leik & Leik, 1977:299; Steers, 1977:52); an intention (Michaels, Acock & Edwards, 1986:161; Rosenblatt, 1977:73); behaviour (Kiesler & Sakumura, 1966:349); a process (Kanter, 1968:500) and a psychological state (Rusbult, 1988:147; Scanlan, Carpenter, Lobel & Simons, 1993:283). Kelley (1983:293) states "commitment exists when the total set of relevant causal conditions firmly generates a consequent that is supportive of continued membership in the relationship". According to Meyer and Herscovitch (2001:301) as well as Bergman, Benzer, Kabins, Bhupatkar and Panina (2013:149), commitment can be defined as "a force that binds an individual to a course of action of relevance to one or more targets". Meyer and Herscovitch (2001:303) further explain that commitment is experienced as a mind-set, a frame of mind or a psychological state that compels an individual towards a course of action. From a marketing literature perspective, commitment is seen as an attitude that guides or mediates consumers' behaviour intentions towards an object (Kim, James & Kim, 2013:173). Previous studies have shown that commitment leads to a relationship between consumer behaviours (for example purchase behaviour) and experiences such as service performance and satisfaction (Kim *et al.,* 2013:173). Participating in a particular sport can also be seen as a relationship, and hence researchers investigated this phenomenon more intensively.

Scanlan, Carpenter, Schmidt, Simons and Keeler (1993:7) define sport commitment as "the desire and resolve to continue sport participation over time firstly". Therefore, sport commitment can be seen as "the desire and determination to keep playing" and in addition was defined as "a psychological state representing the desire and resolve to continue participation in a particular athletic programme, specific sport or sport in general" (Scanlan, Carpenter, Schmidt *et al.,* 1993:6). This definition works at various levels of specificity including general, specific sport or specific team (Scanlan, Russell, Scanlan, Klunchoo, & Chow, 2013:529). Scanlan, Carpenter, Simons, Schmidt and Keeler (1993:16-38) designed the framework of commitment in a sport setting based on psychological processes related to sport participation. The framework of commitment describes sport commitment as a psychological state in that participants have the longing to continue in a particular sport programme or sport in general (Fernandes, Correia, Abreu & Biscaia, 2013:3). Sport commitment is, therefore, the motivation to persist in one's involvement in organised athletic or other physical activities (Weiss & Weiss, 2006:310). Correspondingly, it represents one's resolve, determination and desire to continue in a given activity or programme (Scanlan, Russell, Beals & Scanlan, 2003:377). It can further be described as the demonstration of mental structure for continuing sport activities. In a way, sport commitment can be associated

with sport enjoyment, challenges and the restrictive forces that people face after participation (for example personal investments, social pressures and challenge opportunities) (Scanlan, Carpenter, Lobel *et al.,* 1993:276; Nazari, Mohammadi & Yektayar, 2013:69). Psychological commitment is seen as a person having greater knowledge of something, certainty in one's opinion, the degree of consistency between feelings and beliefs and personal relevance of information related to evaluating decisions to participate in a leisure activity (Iwasaki & Havitz, 2004:45). The psychological commitment will also reflect preference (e.g. volition) stability towards an object, brand or issue as well as resistance to other alternative persuasive choices (Crosby & Taylor, 1983:414; Dick & Basu, 1994:101). Funk and Pastore (2000:175) also observed that commitment is highly related to behaviour and behavioural intent. Therefore, commitment to a sport reflects a specific attitude that persists over time, resists counter-attitudinal information, lead to prejudices cognitive processing and guides behaviour.

Commitment also refers to the frequency or intensity of involvement in sport. It can also refer to the willingness to spend money, time and energy in a pattern of sport involvement (Mullin, Hardy & Sutton, 2007:69). When a sport participant is committed to a sport, the commitment will lead the participant to a higher level of involvement (Mullin *et al.,* 2007:69). The ties between involvement and commitment can be strong for example in tennis and golf when compared to other sports (Mullin *et al.,* 2007:69). According to the following authors, Crosby and Taylor (1983:414); Haugtvedt and Petty (1992:308); Dick and Basu (1994:100) as well as Eagly and Chaiken (1995:413), the resistance to change one's attitude is the underlying factor that contributes to consumer commitment. For the context of this study, it is important to understand that the concepts involvement and participation are interchangeable. Participation refers to an individual taking part or watching a particular sport event. Involvement in the context of this study refers to continued participation in a sport activity, but also indirectly refers to one's added preference to this activity. This can include more frequent media consumption, higher spending, positive word-of-mouth related to the sport activity, higher training hours and frequent participation to name but a few. Commitment is conceptualised as a psychological construct within the leisure literature.

Sport commitment thus becomes pivotal in consumer behaviour seeing that it can represent resistance to change (Fernandes *et al.,* 2013:3). It is suggested that the commitment participants have towards a sport organisation is a factor that induces consumption behaviour (Weiss & Weiss, 2006:312; Fernandes *et al.,* 2013:3). The relationship between sport commitment and sport consumer behaviour help sport managers to design effective retention strategies and promote different forms of sport consumption (Fernandes *et al.,* 2013:3). Sport commitment has been studied as a one-dimensional construct reflecting the various antecedents, but it has also frequently exhibited multidimensional characteristics that are conceptually associated with

different outcomes relating to sport experiences (Wigglesworth, Young, Medic & Grove, 2012:237). Within the field of sport psychology and sport tourism, the study of commitment becomes vital seeing that it helps to explain the factors that influence an individual's decision to begin or remain active in sport (Wigglesworth *et al.,* 2012:236). Sport commitment can be seen as a dynamic, psychological state that can vary over time, through seasons and over the course of an athlete's career (Williams, 2013:36). The level of commitment will influence the individuals' behaviour regarding choice, persistence as well as effort (Williams, 2013:36). The importance of sport commitment concurs with previous research that found that half of the individuals that start taking part in sport, drop out shortly after they have started (Dishman, 2001:280; Chu & Wang, 2012:756). To form strategies to improve the retention rate of participants in the sport, sport events and practitioners, including event organisers and marketers need to understand the reason for individuals to drop out (Chu & Wang, 2012:756). Hence, research has focused on understanding the psychological processes that enable the sport populations to commit. This knowledge then assist in informing strategies to increase and maintain physical activity and sport participation within adult populations (Wigglesworth *et al*., 2012:236; Fernandes *et al.,* 2013:10). Asztalos, Wijndaele, De Bourdeaudhuij, Philippaerts, Matton, Duvigneaud, Thomis, Duquet, Lefevre and Cardon, (2009:469) as well as Baker, Meisner, Logan, Kungl and Weir (2009:224) have highlighted that there are many positive outcomes associated with participation in regular physical activity especially among middle-aged and older adults. Even against other persuasive attempts (e.g. an alternative sport event), the participants will still be loyal to the sport and sport event they are committed to (Casper & Stellino, 2008:95; Fernandes *et al.,* 2013:3). Therefore, it is necessary to examine the relationship between commitment, loyalty and involvement. Iwasaki and Havitz (1998:256-280) developed a conceptual model that shows the relationship between involvement, psychological commitment and behavioural loyalty. The conceptual model is displayed in Figure 4.1 and will be examined in the next sub-section.

4.2.1 The relationships among involvement, psychological commitment and behavioural loyalty

Previous research show that the constructs; namely involvement, psychological commitment and loyalty have contributed to conceptual and methodological advancements (Iwasaki & Havitz, 1998:256). It was found that research regarding the relationship between these constructs will help the development of loyalty towards leisure activities such as running and cycling, or towards brands. Featuring in leisure brand loyalty research, sport participants may be loyal towards an agency (e.g. cycling club), a site (e.g. a particular cycling route), or even to a particular event (e.g. the Comrades Marathon) (Iwasaki & Havits, 1998:257). This type of research can be beneficial as it firstly will provide a better understanding of psychological commitment and give insight into the developmental processes which drive the levels of involvement and commitment that will explain a participant's behavioural loyalty. With this in mind, Iwasaki and Havitz (1998:256-280),

developed a conceptual model of the relationships among involvement, psychological commitment and loyalty (Figure 4.1). The following section will be based on Iwasaki and Havitz's (1998, 2004) research and the authors' conceptual model.

The model by Iwasaki and Havitz (1998), proposes that an individual goes through sequential processes comprising: (a) The establishment of high levels of involvement in a leisure activity; (b) The development of psychological commitment; and (c) The maintenance of strong attitudes towards resistance to change preferences for the activity or brand. The model furthermore suggests that as individuals do not all exhibit the same loyalty development processes it becomes necessary to take both personal characteristics and social situational factors into account that moderate developmental processes. In Figure 4.1, the dotted lines represent the integration effects (moderating effects) between different constructs (e.g. social support, social constructs, sign value and side bets) for illustrative purposes (Iwasaki & Havitz, 1998:260). Each of the various constructs in the model is briefly explained in the next section.

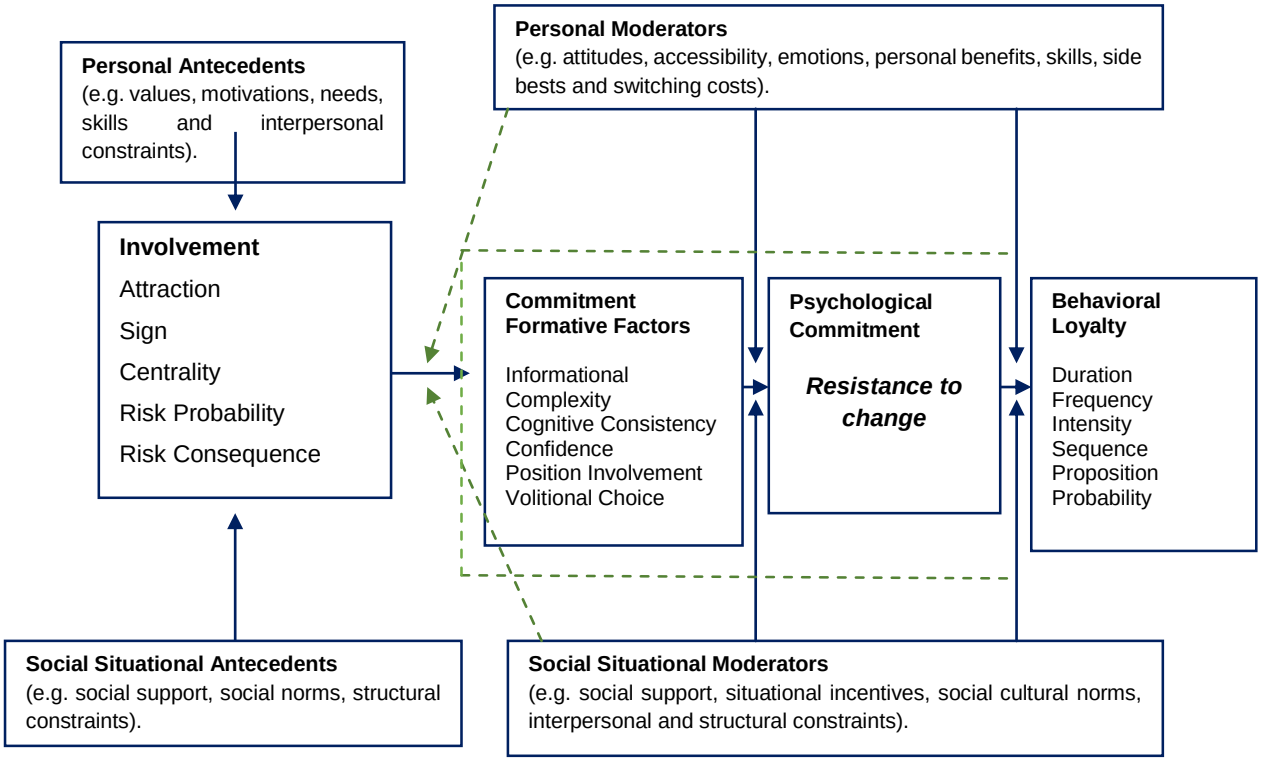


Figure 4-1: A conceptual model of the relationships among Involvement, psychological commitment and behavioural loyalty

Source: Adapted from Iwasaki and Havitz (1998:259)

Involvement, as depicted in Figure 4.1, is the unobservable state of motivation, arousal or interest towards a recreational activity or an associated product. Involvement levels tend to stay stable but may fluctuate over time due to different circumstances (Havitz & Howard, 1995:255). Antecedents of involvement consist out of two general factors: individual characteristics and

social situational influences. Individual characteristics that have been suggested and found to be antecedents of involvement include values or beliefs, attitudes, motivation, needs and goals, the initial formation of preference, initial behavioural experiences and lastly competence/skills (Iwasaki & Havitz, 1998:261). Personal antecedents of involvement, include interpersonal constraints, the anticipation of personal benefits and initial gain of personal benefits. High levels of interpersonal constraints are mostly associated with low levels of involvement, whereas anticipated personal benefits and or initial gain of personal benefits tend to result in high involvement. The social-situational antecedents are seen as social-cultural influences or specific situational circumstances such as: (a) Social support from significant others; (b) Situational incentives; (c) Social and cultural norms; (d) Interpersonal and structural constraints; and (e) Anticipation of social benefits or initial gain from social benefits. These antecedent factors have an influence on the formation of individuals' involvement in leisure activities or products. The model, therefore, accounts not only for the moderating effects of psychological commitment and its various facets but also for the individual characteristics and social-situational factors (Iwasaki & Havitz, 2004:49-51).

Previous research has found that involvement plays a formative role in developing a psychological commitment to a brand or activity (Havitz & Dimanche, 1999:122; Funk *et al.,* 2011:263).. The model, therefore, proposes that an individual's involvement in a recreational activity is an antecedent of his/her psychological commitment. Psychological commitment to a preference can be defined as a system where in essence the constructs tend to resist change and maximise the extent to which individuals are firstly motivated and seek information, secondly initiate choices freely, and lastly show willingness to identify critical values of self-images that are associated with their preference. Within psychological commitment, there are several facets, including informational consistency, which means that participants with high informational consistency will have positive attitudes and beliefs towards the activity or brand. The second facet of psychological commitment is informational complexity or a person's cognitive structure. The higher a person's informational complexity, the harder it becomes to change an individual's mind with conflicting information. The third facet is confidence that is the degree of certainty associated with attitudes and behaviours. One's level of confidence largely determines the difficulty with which an attitude can be changed. The fourth facet is position involvement where self-image is linked with activity or brand preference, and individuals evaluate the brand to see if they are truly consistent with their internal views and personal self. The fifth aspect is volitional choice, where the extent to which a decision is measured based on a person's free choice to pursue a goal or to perform a task. For example, repeat participation is relatively meaningless when a participant does not have a variety from which to choose. Resistance to change is the last facet that plays a mediating role in the commitment-loyalty linkage (Iwasaki & Havitz, 1998:261, 262; Iwasaki & Havitz, 2004:49, 50).

The model proposes that in order to become loyal participants, individuals go through sequential psychological processes that include high levels of involvement; the development of a psychological commitment to a brand; and then experience strong attitudes toward resistance to change preferences in brand. Researchers have also taken into account the moderating functions to understand further the above mediating relations. If only the mediating functions of psychological processes explain the involvement-loyalty relationship, then all individuals must develop behavioural loyalty in an identical manner. Therefore, at each level, researchers need to consider moderating roles of personal and social-situational characteristics. In conclusion, the model illustrates that individuals initially evolve from involvement with an activity (e.g. running, cycling, paddling), then gradually develops a psychological commitment to brands (e.g. running shoes or specific race routes) and consequently develop behavioural loyalty towards this brand.

On the other hand, the Sport Commitment Model (hereafter referred to as SCM) was developed to give a more theoretical explanation for an athlete's commitment to the sport and was defined as "the desire and resolve to continue participation over time." The model was first introduced as a means of expanding motivation research in the physical domain (Weiss, Weiss & Amorose, 2010:423). This model was chosen as the focus of this study seeing that it identifies the factors that contribute to an athlete's sport commitment. These factors are important to research seeing that it can help sport events motivate their participants to become committed to the sport event. Ultimately, as seen from the Iwasaki and Havitz model, if an athlete is physiologically committed, the athlete has a higher involvement and it will consequently lead to behavioural loyalty. The next section will give a detailed overview of the Sport Commitment Model developed by Scanlan, Carpenter, Simons *et al.* (1993:16-38) as well as provide insight on the theoretical foundation the model is based on.

4.3 Sport commitment model (SCM)

A complete understanding of the SCM is gained through the next section that provides, firstly an outline of the development of the SCM followed by the theoretical background and theories that helped shape the model. Finally follows a brief overview of the reason that this model is suitable for application in different sport contexts and to conclude the hypotheses of the various constructs of the model are examined.

4.3.1 Development of the model

The SCM helps to consider the reasoning for individuals to continue their participation in certain sports (Scanlan, Carpenter, Simons *et al.,* 1993:16). The developers of this model made a thorough review of sport motivation as they believed that it was the starting point of the model (Scanlan *et al.,* 2013:526), based on overwhelming evidence that enjoyment or fun was the

primary motive in diverse athletic samples that ranges from different ages, ethnicities, gender and sport types (Scanlan & Lewthwaite, 1986:26; Scanlan, Ravizza & Stein, 1989:68; Stein & Scanlan, 1992:150). Using enjoyment as the main construct, Scanlan and Simons (1992:199-215) introduced an extended conceptual model of motivation which was later termed as the SCM. Scanlan and her colleagues (Scanlan, Carpenter, Schmidt *et al.,* 1993:2; Scanlan, Carpenter, Simons *et al.,* 1993:18) proposed that an athlete's enjoyment, personal investments, involvement opportunities, attractive alternatives, social constraints and social support (Scanlan, Russell, Beals *et al.,* 2003:379; Hall, 2013:12) would most likely predict an athlete's level of sport commitment and thus their resolve to continue their participation (Scanlan, Carpenter, Simons *et al.,* 1993:18).

Iwasaki and Havitz (2004:45) also found that commitment is the key to increased behavioural involvement and loyalty. Literature found that commitment will provide a more comprehensive and sport-relevant view on participant behaviour and their underlying psychological state (Casper & Stellino, 2008:96). The model, therefore, has a strong foundation of research regarding commitment as it is based on general commitment, relationship commitment, and work commitment as well as in the less explored areas of sport commitment (Scanlan, Carpenter, Schmidt *et al.,* 1993:1). Kelley (1983:265) as well as Scanlan, Carpenter, Schmidt *et al.* (1993:2) stated that commitment could be separated into three major periodic conditions. The first can be described as the attractiveness of the relationship. In the SCM, this periodic condition of commitment is seen as "Sport enjoyment". The second periodic condition is the degree to which alternative options to the current situation are seen as more or less attractive. This condition is represented in the SCM as "Involvement alternatives". The final causal condition represents those forces that act as restraints or barriers to extinction (cited in Kelley, 1983:266). In the SCM, this periodic condition refers to "Personal Investments", Social Constraints" and "Involvement opportunities". To understand the context on which the SCM model is based in its whole, it becomes necessary to firstly understand the different commitment theories on which the SCM was based.

4.4 Origins and theoretical foundation of the SCM

According to Casper and Andrew (2008:203), Casper and Stellino (2008:96) as well as Chu and Wang (2012:756) the SCM was derived from the social exchange theory (Thibaut & Kelley, 1959:313; Kelley & Thibaut, 1978:13), Kelley's (1983:265-314) model of romantic relationships (interpersonal relationships) and Rusbult's (1980:172-186; 1983:101-117) investment model. It was clear that commitment as a construct was absent in sport psychology literature and, therefore, a close review was made of industrial psychology literature (Brickman, Dunkel-Schetter & Abbey, 1987:145; Kelley & Thibaut, 1978:13; Rusbult, 1980:172; Rusbult & Farrell, 1983:429). Thus, the model was developed that is grounded in theoretical and empirical research in the social

psychology as well as industrial psychology (Kelley, 1983:265) and sociology (Becker, 1960:32). Each of these models is consequently briefly discussed.

4.4.1 Investment Model

The investment model which is the main model on which the Sport Commitment Model is based was produced by Rusbult (1980:172) to predict the degree of commitment and satisfaction with a variety of forms of on-going associations, with wide ranges of duration and involvement, including romantic relationships, friendship and business (Williams, 2013:39). In this model Rusbult suggests that the greater the investments, the fewer the perceived costs of the relationship. Together these were predictive factors of committed behaviours, thus staying in a relationship (Weiss *et al.,* 2010:429). It is clear that the Investment Model has been applied to different associations including romantic relationships as well as work organisations, which is reviewed in the following section.

4.4.1.1 Investment model in romantic relationships

Commitment within in a relationship refers to the desire or intention to maintain a given relationship and is crucial to functioning in romantic relationships (Campbell & Foster, 2002:486). According to the investment model, attraction and satisfaction with a relationship is a function of a comparison of the relationship outcome value (both rewards and costs), to the individual's expectations or comparison level. Therefore, an increase in investment size decreases in alternative value and increase in relationship value should increase the commitment in an on-going relationship (McCallum, Rusbult, Hong, Walden & Schopler, 1979:1311). The investment model of commitment in romantic relationships focuses on three essential elements of social relationships (Rusbult, 1980:172; 1983:101). The three elements include satisfaction, investments and perceived alternatives. These elements are used to measure commitment to a relationship (Campbell & Forster, 2002:484). Satisfaction refers to awards minus the costs that can be either implicitly or explicitly in comparison to what an individual expected of the relationship. Consequently, greater satisfaction leads to increased commitment. The investment element refers to the amount an individual has risked in the relationship (Campbell & Foster, 2002:487). Examples of investments would be shared friendship networks, shared resources (for example a bank account), children and even memories or time. Greater investment leads to greater commitment. Perceived alternatives can be seen as the option that the individual has outside the relationship; alternatives may include maintaining a relationship with another individual or not having a romantic relationship. Therefore, a perceived alternative leads to lesser commitment (Rusbult, 1980:172; 1983:101).

4.4.1.2 Investment model within work organisations

The investment model has also been implemented in an organisation context and asserts that job satisfaction is the degree to which the individual positively evaluates his or her job. In other words, to the extent that the job offers high rewards and low costs (Rusbult & Farrell, 1983:429). Commitment to an organisation refers to the likelihood that an individual will stay with a job and feel psychologically attached to it, whether it is satisfying or not (Rusbult, 1983:103). Consequently, according to the investment model, job commitment will increase with an increase in job rewards, a decrease in job costs, and growth in investment size (resources inextricably connected to the job), and a decline in alternative quality (an alternative job or not working). As the worker continues to invest resources in the job it should become increasingly costly to abandon that job and lose the invested resources, so the investment and commitment relationship becomes stronger (Rusbult & Farrell, 1983:431).

The similarities between the Investment Model and the Sport Commitment Model are evident in the determinants and nature of commitment proposed by both models (Williams, 2013:39). In the Investment model, Rusbult (1983:101) identified five determinants of commitment, including satisfaction/attraction to an association, attractive alternatives, investments, the rewards or benefits of association and the costs of an association. It is clear that Rusbult's five determinants of commitment are conceptually consistent with sport enjoyment, involvement alternatives, personal investments and involvement opportunities (Williams, 2013:39).

The concept of sport commitment also originates from the Social Exchange Theory proposed by Thibaut and Kelley (1959:313) as well as Kelley and Thibaut (1978:341). According to these authors, "people participate in the activities as long as the result of their participation is sufficiently favourable". The next section discusses this theory in more detail.

4.4.2 The Social Exchange Theory

The theory emerged within family sciences in the latter part of the 20th century, first being considered in a meaningful way in the early 1960's (Chibucos, 2005:137). At its most basic, the social exchange theory is an economic metaphor for social relationships (Chibucos, 2005:137). The social exchange theory operates on the assumption that individuals are rational and engage in calculations of costs and benefits in social interaction (Chibucos, 2005:137). The theory also builds on the assumption that those engaged in interactions are rationally seeking to maximise the profits or benefits to be gained by exchanging situations regarding meeting basic needs. Tied to this concept of power in a social exchange is the principle of least interest. Those with less to gain regarding meeting their basic needs through social exchange tend to hold more power in that exchange. From a social exchange perspective, human behaviour may be viewed as

motivated by a desire to seek rewards and avoid potential costs in social situations. The social exchange theory corresponds with the notion made by Homans (1961:404), which indicated that individuals are most comfortable when they perceive they are receiving benefits from a relationship approximately equal to what they are contributing to the relationship. The social exchange theory proposes that individuals are motivated to gain rewards in social interaction. The theory also carries three potential costs. Firstly, investment costs that represent the energy and personal cognitive or emotional investment put into an exchange by the persons involved. Direct costs can include time, financial resources, or other structural resources that are dedicated to the exchange. Finally, opportunity costs represent possible rewards that may be lost as a result of the relationship or social exchange. For example, a parent sacrifices significant potential rewards or benefits to raise their children responsibly.

The theory of social exchange that is underlying to sport commitment suggests that if a participant feels like they are improving in the sport, they will consider it as a benefit (intrinsic reward). Therefore, they will continue their participation for as long as they feel the outcome of their participation results in a positive experience, where the benefits outweigh the costs (Thibaut & Kelley, 1959:313). The investment model and social exchange theory also made way for the development of the Interdependence Theory, which is considered in the next section.

4.4.3 Interdependence Theory (Model for Romantic Relationships)

The Interdependence Theory (Model for Romantic Relationships), which is very similar to the Investment Model, assumes that individuals are motivated to maximise their rewards while minimising costs (McCallum *et al.,* 1979:1312). The model also states that satisfaction with and attraction to an association is a function of the discrepancy between the outcome value of the relationship and the individual's expectations concerning the quality of relationships in general (Thibaut & Kelley, 1959:313). Greater stability in commitment within a relationship will be found when the pros of the relationship outweigh the cons (Kelley, 1983:293). Commitment, therefore, exists when the total set of relevant conditions generates a result that is supportive of continued membership in the relationship. Commitment in a relationship is further clarified as the pro-con balance of causal conditions. There are two dimensions of causal conditions that provide a greater understanding of commitment within relationships (Kelley, 1983:266). The first condition is pro-membership conditions and has two categories that are attraction and barriers. Attractions are positive characteristics and traits that an individual experience with their involvement in a relationship (Hall, 2013:11). The second category of pro-membership conditions is barriers; this category increases commitment resulting from complications set in place that makes it difficult for one party to leave the relationship (Hall, 2013:11). Barriers might include financial, emotional, social and other psychological factors that individuals perceive as having negative consequences

on the relationship (Hall, 2013:11). The second condition is labelled co-membership conditions and includes the category of the attractiveness of alternatives that an individual in the relationship perceives (Hall, 2013:11). This category is relevant when a person perceives a secondary relationship (or activity) as more attractive than the relationship that they are currently in. Therefore, commitment to the primary relationship will diminish (Rusbult, 1980:173).

Within the nature of relationship commitment, an additional complication arises which is the two faces of commitment (Hall, 2013:11). Johnson (1982:51) explains the two major reasons for an individual to be committed to a relationship as feelings of either the desire to be committed or the obligation to be committed. Brickman (1987:2-8) explains that "wanting to" persist in an undertaking and is evident in individuals who have feelings of satisfaction for the relationship. However "having to" continue a relationship and is demonstrated by social pressures and obligations towards the relationship (Brickman, 1987:2).

When synthesising the work of Johnson (1982:51) and Kelley (1983:266), Scanlan, Carpenter, Schmidt *et al.* (1993:6) were able to define commitment in the area of sport, thus being a physiological construct representing the desire to resolve or continue sport participation. All the previous theories have a definite impact on the development of the SCM, which is examined in the following part.

4.5 The contribution of theories/models to the formation of the SCM

With the theories above and models in mind, the SCM is a modification of Rusbult's (1980:172-186) Investment Model with influences from Kelley's (1983:265-314) theoretical thoughts that include the Social Exchange Theory and the Theory of Romantic Relationships. Originally Scanlan, Carpenter, Simons *et al.* (1993:16-38) developed the SCM to account for unique characteristics of youth sport that she and her colleagues believed the Investment model could not fully describe sport commitment. The model was modified by substituting satisfaction with enjoyment, defining and operationalising each construct specifically to sport (Scanlan, Carpenter, Simons *et al.,* 1993:17). The SCM was also expanded in two ways by firstly, splitting the construct of investment found in Rusbult's (1980:172) model. The two separate constructs reflected the ideas of intrinsic and extrinsic investments separately (Hall, 2013:18). These constructs became "personal investments" and "involvement opportunities" respectively (Scanlan, Carpenter, Simons *et al.,* 1993:17). The model was also expanded with the notion of social pressures in commitment (for example Johnson, 1982:51; Kelley, 1983:266). In totality, the original SCM had five determinants of commitment that included sport enjoyment, involvement alternative, personal investments, social constraints and involvement opportunities.

Each of these five determinants was also based and developed from the theories and models mentioned earlier. Sport enjoyment is based on the satisfaction component of Rusbult's (1980:172) Investment model. The personal investments variable builds on the intrinsic investments, also from Rusbult's (1980:178) Investment model (Hall, 2013:20). Involvement opportunities developed from extrinsic investments of the Investment Model (Hall, 2013:20). Social constraints, on the other hand, was based on Becker's (1960:32) idea of "side-bets" in combination with Kelley's (1983:267) notion of the social expense (social exchange theory) of ending a relationship. The involvement alternatives are parallel to Rusbult's (1980:181) attractiveness of alternatives components in the Investment model. Social support was added to the model as a sixth determinant and was mainly based on psychology literature from Brown, Frankel and Fennell (1989:398) who believed that support from significant others might increase continued involvement in sport. In brief, it is clear that Scanlan, Carpenter, Schmidt and colleagues (1993:16) mostly adapted the determinants of relationship commitment (Investments, Satisfaction, and Alternatives) to fit the context of sport (Hall, 2013:25). More recently additional modifications and clarifications were made to the SCM (Scanlan, Russell, Beals *et al*., 2003:377). Specifically, social support was added as the sixth determinant of sport commitment (Hall, 2013:25). After the development of the model, it became necessary to examine the validity of the model in different sport contexts. The next section underlines why the model is useful for application and implementation.

4.6 The implementation of the SCM

The SCM is chosen in most studies based on three essential features (Scanlan & Simons, 1992:199): Firstly, sport commitment addresses the psychological attachment to an activity and therefore, does not involve estimations of the actual probability (for example intentions). Secondly, commitment involves both cognitive (for example knowledge, thinking) and affective (for example emotions) factors. Lastly, the SCM indicates the different distinguishing predictors of participants who may report overall equal levels of commitment (Casper & Stellino, 2008:96). Through this model, it is possible to determine the value of sport commitment and also to be able to measure the relationship between the determinants of *Sport Commitment* and *Sport Commitment* itself. Therefore, quantifying the relationship between these variables and the psychological state of *Sport commitment* (Scanlan, Carpenter, Schmidt *et al.,* 1993:16).

This model provides a theoretical framework for studying the motivational foundation of continued or persistent sport participation (Casper & Stellino, 2008:96). The SCM has been advocated to explain people's "desire and resolve to continue participation in sport over time" (Scanlan, Carpenter, Schmidt *et al.,* 1993:6; Casper & Stellino, 2008:96). The SCM is seen as a widely accepted conceptual framework for understanding the commitment of different sport participants (Chu & Wang, 2012:756). When trying to understand why someone participates in sport, one

must understand the sources of motivation and the potential outcomes of the action (Casper & Stellino, 2008:96). Therefore, the SCM is ideal to examine the motivational foundation of continued or persistent, organised sport participation (Wigglesworth *et al.,* 2012:236). With the development of the model by different physiological theories, the researchers, who developed the model (Scanlan, Carpenter, Schmidt *et al*., 1993:6), made certain hypotheses. These hypotheses are briefly outlined in the following section followed by a discussion of the model constructs.

4.6.1 The SCM hypotheses

The SCM hypothesises that enjoyment, personal investment, social constraints, involvement opportunities and social support act as attractors to keep individuals participating (strengthen commitment), whereas involvement alternatives decreases (weakens commitment) (Scanlan, Carpenter, Lobel *et al.,* 1993:275; Scanlan, Carpenter, Simons *et al.,* 1993:18; Scanlan, Russell, Beals *et al.,* 2003:377; Weiss, Kimmel & Smith, 2001:140; Casper & Stellino, 2008:97; Weiss *et al.,* 2010:423; Chu & Wang, 2012:757; Wigglesworth *et al.,* 2012:237; Hall, 2013:4). According to the SCM, higher levels of enjoyment, involvement opportunities, and social support directly influence greater commitment. These are thus seen as attracting participants towards the sport. Higher levels of social constraints and personal investments are perceived as restraining athletes from participation where levels of attractive involvement alternatives attract athletes away from participation (Young & Medic, 2011:168). A behavioural index of commitment was not included in the original SCM testing, but it is seen as theoretically intuitive to add behaviours such as continued participation, effort, intensity and perseverance as these are indicators of commitment in sport participants (Weiss *et al.,* 2010:425).

According to Scanlan, Russell, Magyar and Scanlan (2009:703) there might be two types of commitment. The first type refers to a constrained or a “have to” form of commitment. The second type is the enthusiastic or “want” form of commitment. The original sport commitment model was cited as having five direct antecedents that will either increase or decrease sport commitment, which included sport enjoyment, involvement opportunities, personal investments, social constraints and involvement opportunities (Casper & Stellino, 2008:96). Social support is an additional predictor of commitment that was revealed in more recent research and which the SCM also support (Carpenter, Scanlan, Simons & Lobel, 1993:119; Scanlan, Russell, Beals *et al.,* 2003:377; Scanlan, Russell, Wilson & Scanlan, 2003:362). The constructs of the SCM are consequently discussed.

4.6.2 The variables associated with the Sport Commitment Model

In Figure 4.2 it is illustrated that the current SCM consists of six constructs that have been developed and clarified by some studies. Each of these constructs is discussed in the next section as well as their relationship (either positive or negative) to commitment.

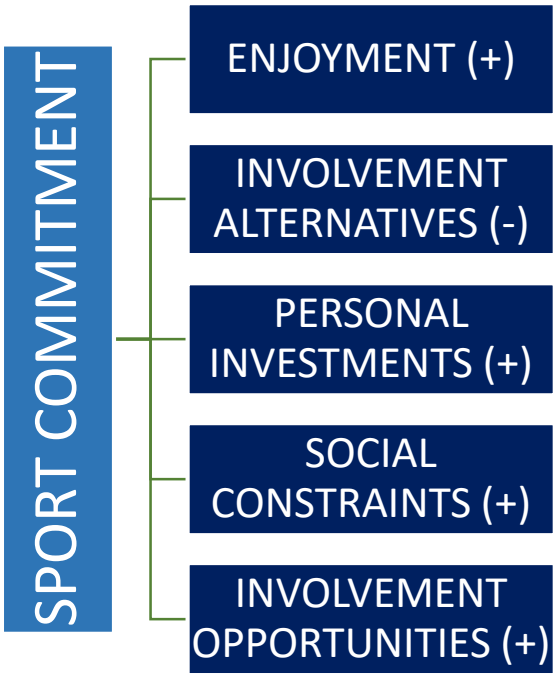


Figure 4-2: Sport Commitment Model

(The (+) and (-) signs indicate the hypothesised direction of influence for each construct)

Source: Adapted from Scanlan, Carpenter, Schmidt *et al.* (1993:5)

4.6.2.1 Sport Enjoyment

The *Sport Enjoyment* component of the model was designed to take into account the degree of enjoyment that the participant experiences as a result of the participation in the sport (Scanlan, Carpenter, Schmidt *et al.,* 1993:3). The positive affective response is a definition for the sport experience (participation) that mostly reflects on feelings of liking, love, fun and pleasure (Casper & Stellino, 2008:97; Weiss *et al.,* 2010:423; Wigglesworth *et al.,* 2012:237; Scanlan *et al.,* 2013:526; Williams, 2013:36). The positive and affective response refers to a sport experience that reflects generalised feelings such as pleasure, affection or entertainment (Young & Medic, 2011:168; Chu & Wang, 2012:756). Sport Enjoyment can be seen as the fun associated with sport participation as well as the feelings obtained from participation (Hall, 2013:3). *Sport Enjoyment* is thus a positive component related to sport commitment. Therefore, as the level of *Sport Enjoyment* increases, *Sport Commitment* will also increase (Scanlan, Carpenter, Schmidt *et al.,* 1993:3).

Studies have been done to determine the sources of sport enjoyment (Williams, 2013:40). Some of the studies revealed that social interaction with friends, coaches, teammates and family as well as demonstrating skill mastery and being effortful were all sources of fun (Duncan, 1993:315; Scanlan, Carpenter, Lobel *et al.,* 1993:277; Weiss & Smith, 2002:429; Keegan, 2010:53; Williams, 2013:40). The sources of a participant's enjoyment are noteworthy particularly about individuals'

motives for participation in sport (Williams, 2013:40). Therefore, if the sport experience can be designed to meet people's motives for participation, they will be more likely to enjoy themselves, commit to the sport voluntarily and lead to longer participation in a sport (Williams, 2013:40).

4.6.2.2 Involvement alternatives (Other priorities, Alternative opportunities)

This construct is defined as the attractive and demanding alternatives that are in conflict with continued sport participation (Wigglesworth *et al.,* 2012:237; Scanlan *et al.,* 2013:526). It can also be seen as the attractiveness of alternative activities that seem to be more meaningful and worthwhile than that of continued sport participation (Casper & Stellino, 2008:97; Young & Medic, 2011:169). Chu and Wang (2012:757) clarify it as the most preferred alternative(s) to continue participation in the current sport activity. *Involvement alternatives* are also referred to as interests or priorities that compete with on-going activities that detract from one's current pursuit (Hall, 2013:3). It can also represent how alluring other activities are about one's current sport participation such as a career that competes for one's time, attention and energy (Weiss *et al.,* 2010:423). Therefore, if attractive alternatives were available, it would potentially detract a participant's desire and resolve to continue (Weiss *et al.,* 2010:423). There is a negative sign associated with this component of the model as it indicates that as the number and attractiveness of *Involvement Alternatives* increase, *Sport Commitment* will decrease (Scanlan, Carpenter, Schmidt *et al*., 1993:3). It is important to take into account that some athletes may be able to participate in multiple activities without sacrificing commitment. Therefore, alternatives may have a lesser weighting on *Sport Commitment* (Scanlan, Carpenter, Schmidt *et al.,* 1993:3). Scanlan, Russell, Beals *et al.* (2003:378) relabelled the "Attractive alternatives" construct as "other priorities" to highlight other activities and/or responsibilities in an athlete's life that can contribute to difficulty in continuing participation.

4.6.2.3 Personal investments

Rusbult (1980:181) defined personal investment as the concept of lost investments, which primarily includes time, effort and energy of athletes. The resources are further explained as that which is invested in the sport that cannot be recovered if participation is withdrawn (Scanlan *et al.,* 2013:526). It includes resources such as time, effort and money that is associated with sport participation and is irretrievable if sport involvement is discontinued (Casper & Stellino, 2008:97; Young & Medic, 2011:169; Weiss *et al.,* 2010:423; Wigglesworth *et al.,* 2012:237; Chu & Wang, 2013:757; Williams, 2013:36). Therefore, it can be seen as individual resources that cannot be recovered in the event of termination of participation (Hall, 2013:3). Scanlan, Carpenter, Schmidt *et al.* (1993:3) clarify the concept by stating that the more a participant invests into a sport, the less likely they are to discontinue their participation. There is a positive sign associated with this component for if *Personal Investments* increases, *Sport commitment* will also increase (Scanlan, Carpenter, Schmidt *et al*., 1993:3). Ultimately, it is based on the assumption that if investments

are made it cannot be retrieved upon termination of involvement. Therefore if psychological attachment increases, resources allocated to the sport will increase (Scanlan, Carpenter, Schmidt *et al.,* 1993:3).

4.6.2.4 Social constraints

Social constructs are defined by the social expectations or customs that creates a feeling of obligation to continue participation (Weiss *et al.,* 2010:423; Young & Medic, 2011:169; Scanlan *et al.,* 2013:526; Chu & Wang, 2012:757; Wigglesworth *et al.,* 2012:237; Williams, 2013:36). Hall (2013:3) describes social constraints as the social norms and hopes of others that produce obligatory feelings in athletes to continue their participation. These obligatory feelings normally come from coaches, parents and significant others (Hall, 2013:3). There is a positive sign associated with this component of the model for as *Social Constraints* increase, *Sport Commitment* also increases (Scanlan, Carpenter, Schmidt *et al.,* 1993:3). To summarise, athletes will remain within a sport to avoid the negative sanctions that they believe important others may apply, should they discontinue their participation (Scanlan, Carpenter, Schmidt *et al.,* 1993:3).

It is therefore hypothesised that greater commitment exists if an individual feels that they should continue involvement to please or not to disappoint important individuals in their life (Weiss *et al.,* 2010:424). Findings in social constraints vary with regard to studies relating younger, less competitive athletes. In this instance, constraints had been interpreted as stressful. This has led to a decrease in commitment, whereas with older athletes social constraints were interpreted as a positive obligation and had increased commitment (Casper & Stellino, 2008; Jeon & Ridinger, 2009:325; Scanlan *et al.,* 2009:685; Hall, 2013:5). It was found that social constraints from an athlete's spouse, own children and training partners positively influences obligatory commitment, where support from health professionals had an adverse effect on obligatory commitment (Scanlan *et al.,* 2013:528).

In a study done on ski participants Hinch, Jackson, Hudson and Walker (2005:143, 144) constraints were defined as the factors that are assumed by researchers and perceived by individuals to inhibit or prohibit participation and enjoyment in leisure. Alexandris, Funk and Pritchard (2011:59) note that constraints could be divided into two types, internal and external. Internal constraints refer to an athlete's personal skills, abilities, knowledge and health problems. External constraints can include time, cost, facilities and accessibility (Hungenberg, Gould & Daly, 2013:315).

4.6.2.5 Involvement opportunities (Valuable opportunities)

This construct is defined as significant opportunities that arise only through continued sport involvement (Wigglesworth *et al.,* 2012:237; Scanlan *et al.,* 2013:526). It can also represent those

real or anticipated valued opportunities and benefits that will only be available through continued sport involvement. These opportunities may include being with friends, to travel, to become a more skilled athlete or to achieve personal goals (Weiss *et al.*, 2010:423; Young & Medic, 2011:169). Hall (2013:3) as well as Williams (2013:36) state that these opportunities stem from sport participation such as building relationships with friends, the anticipation of good times and other valuable opportunities that would not be present without continued participation. Opportunities may also include potential benefits such as travel opportunities, scholarships or meeting new people (Hall, 2013:3). There is a positive sign associated with this component of the model, namely it indicates that as the number and significance of *Involvement Opportunities* increases, *Sport Commitment* will increase (Scanlan, Carpenter, Schmidt *et al.,* 1993:3). *Involvement opportunities* can be quantitative in nature, for example the opportunities to master a task or be with friends while participating. On the other hand, it can also be psychological, for instance the belief that failure to continue participation in a particular sport would result in a decrease in physical fitness (Scanlan, Carpenter, Schmidt *et al.,* 1993:3). It is important to note that this construct is based on anticipation of events and not necessarily based on events that will occur (Scanlan, Carpenter, Schmidt *et al.,* 1993:3).

Results associated with personal investments are primarily the time, effort and energy athletes devoted to continuing their participation (Scanlan *et al.,* 2013:527). Players are thus forced to make a decision on how vast the loss of this resource will be. As most participants accepted the concept, it had a strengthening effect on commitment (Scanlan *et al.,* 2013:527). Participants who denied the notion of loss felt that personal investment does not influence commitment (Scanlan *et al.,* 2013:527). Another aspect, namely that of personal investments, involves how much an athlete invests versus the loss of this investment if participation ceases. Authors normally ask participants to identify a number of their personal resources invested into sport participation or sport event. Moreover, results mostly showed that the greater the quantity, the greater the commitment (Scanlan, Carpenter, Simons *et al.,* 1993:17; Carpenter & Scanlan, 1998:357; Weiss *et al.,* 2010:424). Personal investment**,** the quantity, and loss of it, therefore have an influence on commitment (Scanlan *et al.,* 2013:527).

4.6.2.6 Social Support (Added construct)

Social support is seen as the support and encouragement the athlete experiences with their involvement in sport from their significant others (Casper & Stellino, 2008:97; Young & Medic, 2011:169; Scanlan *et al.,* 2013:526; Williams, 2013:36). It can further be described as the unconditional positive regard and encouragement that will lead to sustained participation or continued involvement in the sport (Hall, 2013:4). This construct can also involve the emotional comfort, pride, information and financial support that participants receive from a group of significant others (Chu & Wang, 2012:757). The greater the social support from significant others

the greater the psychological commitment to sport participation (Weiss *et al.,* 2010:424). Scanlan, Russell, Beals *et al.* (2003a:379) and Scanlan, Russell, Wilson *et al.* (2003:362) add that in comparisons, it is evident that the determinant of social support might be more important to participants of older ages than to adolescents. Although the SCM has clearly defined constructs and hypothesis of each of the constructs, researchers found that commitment is a multi-dimensional concept and therefore, researchers such as Casper and Stellino (2008:99) mention the need to understand further commitment and the antecedents of commitment particularly with regard to different sport participants. Hence, as a complex term to understand, it is further as elaborated on in the next section.

4.7 The application of the Sport Commitment Model in different sport contexts

Previous research done by Schmidt and Stein (1991:256) as well as Chu and Wang (2012:762) found that athletes would participate longer in a sport for two particular reasons. Firstly, they mostly stayed for the enjoyment that went hand in hand with low cost that increased satisfaction, with few alternatives and increased investment. Secondly, most participants continued because of commitment although this group of athletes has been particularly vulnerable to burnout. It is possible that the importance of some of the antecedents (for example personal investment and involvement opportunities) will vary in a different context (for example different types of sports and different sport events) (Chu & Wang, 2012:762). It can also be of importance to validate the SCM against other behavioural measures of commitment (for example income, the frequency of participation and length of stay as included in this study) to make a complete indicative outline for future sport events (Chu & Wang, 2012:763).

The SCM has therefore been utilised in a variety of sports to test the validation of the determinants, including on adolescent swimmers (Raedeke, 1997:396-417); masters swimmers (Young & Medic, 2011:168-175; Wigglesworth *et al.,* 2012:236-250); youth and recreational tennis players (Weiss *et al.,* 2001:131-144; Casper, 2007:269-282; Casper & Stellino, 2008:93-115; Casper & Andrew, 2008:201-219); elite youth cricket players (Carpenter & Coleman, 1998:195-210), elite rugby players (Scanlan *et al.,* 2013:525-535); elite netball players (Scanlan *et al.,* 2009:685-705), gymnasts (Weiss & Weiss, 2003:229-247, 2006:309-323, 2007:90-102; Weiss *et al.,* 2010:423-434), skateboarders (Hall, 2013:1-92), triathletes (Augaitis, 2005:1-105), college dance competitors (Chu & Wang, 2012:755-766), soccer players (Sousa, Torregrosa, Viladrich, Villamarín & Cruz, 2007:256-262), windsurfers (Jeon & Ridinger, 2009:325-327), as well as sport participants taking part in both individual and team sports, fitness and outdoor activities (Fernandes *et al*., 2013:2-11). The original Sport Commitment Model and the expanded/modified version has been implemented in varied domains such as exercise and fitness commitment (Alexandris, Zahariadis, Tsorbatzoudis & Grouios, 2002:217-230), occupational intention to quit among referees (VanYperen, 1998:427-439), coaching commitment and turnover

(Raedeke, Warren & Granzyk, 2002:73-86), athlete burnout (Raedeke, 1997:396-417), competitive youth sport (Carpenter *et al.,* 1993:119-133; Scanlan, Carpenter, Schmidt *et al.,* 1993:275-285) and elite athlete commitment (Scanlan, Russell, Wilson *et al.,* 2003:360-376). The findings from these studies are summarised in Table 4.1.

Table 4-1: The use of the SCM in different studies

Study and Author	Variables Tested	Findings
Chu and Wang (2012:757) focused on how the SCM model influenced dance participants, participation experience, levels of participation and participation methods.	**Sport Experience**	Except for social constraints, the effects of dance sport experience were significant for all sport commitment determinants as well as for overall sport commitment. Participants with different levels of dance sport experience differed in terms of enjoyment, involvement opportunities, social support, personal investment, involvement alternatives and overall commitment.
	Level of experience	Three significant sport commitment determinants; overall commitment, social support and enjoyment. Dance sport participants also differed regarding personal investment, involvement alternatives and overall commitment.
	Participation method	There were two significant sport commitment determinants, personal investment and involvement alternatives. Dance competitors that had dance sport as part of their school curriculum tended to have higher levels of involvement alternatives. These participants also had to make a greater personal investment. Results also revealed that students that took part in a dance as part of a club and who were not working for a grade or a mark enjoyed dance more than those students that participated as part of an elective course.
	Retention Rate (Age)	It was found that the retention rate of dance sport competitors is very small when participants reach more senior years.
	General (Main) finding	Contradicting previous research, the major indicators for retention of dance sport participants were involvement opportunities and social support.
A study was done on master swimmers Wigglesworth *et al.* (2012:236) examined	**Gender**	Findings of this study provide evidence that sport commitment, as well as sport commitment determinants, can vary according to gender.
		Males and females reported equally high levels of functional commitment, although males reported significantly higher obligatory commitment.

the gender differences in levels of sport commitment and commitment determinants for predicting functional (FC) and obligatory commitment (OC).		Males also reported significantly higher involvement alternatives than females, meaning they perceived other attractive activities besides swimming in which they could visualise themselves to pursue.
		Males also reported higher levels of social constraints; meaning they feel more pressure to continue their sport from their spouse, own children, training partners and healthcare professionals, compared to female participants.
		For males, increasing levels of social support significantly predicted lower obligatory commitment levels.
		Males may also feel more socially constrained and possibly more obligated to participate because of the need to prove them in the sporting domain.
		Personal investment constructs appeared to explain uniquely functional and obligatory commitment for females. In addition, social influences, particularly social support, seemed more influential in explaining male's obligatory commitment to swimming.
Krinanthi, Konstantinos and Andreas (2010:41) completed a study to explore self-determination and sport commitment among different athletes.	**Self-determination**	Strong positive association of intrinsic motivation and commitment, therefore high self-determination supports commitment.
	Sport enjoyment, involvement opportunities, and personal investments	Sport enjoyment was the most important predictor of sport commitment, while 'sport commitment,' involvement opportunities and personal investment seem to be relevant to the prediction of commitment, whereas social constraints were not. These results support the notion that individuals who find sport programmes and events enjoyable, fun and exciting are less likely to drop out. In addition, participants who have high scores in personal investment are willing to invest money, time and effort and are less likely to discontinue their participation. These days' individuals also have the

		difficulty to fit sport participation into their busy schedules. Therefore, if a participant can manage time to participate, it is also less likely that they will drop out of the sport.
	Involvement opportunities	With the involvement opportunity constructs, it was found that to be one of the most powerful predictors of commitment; the more participants feel they have the opportunity to participate to gain psychological, sociological and physiological benefits the more likely they will be committed to the sport.
	Gender	Gender differences indicated that males are more committed than females, especially when looking at the social constraints as well as personal investment subscales.
Jeon and Ridinger (2009:325) conducted a study on windsurfers to establish what the underlying reasons are associated with continued participation in windsurfing.	**Intrinsic and extrinsic motivators**	A factor analysis found five unique predictor constructs of sport commitment. The first factor was labelled intrinsic motivators and included all the items comprising of windsurfers enjoyment, involvement opportunities, and personal investments. The second factor was labelled extrinsic motivators that included items from social constraints and social support. Intrinsic motivators explained most of the variance in sport commitment.
	Participation frequency and purchase behaviour	Regression analysis revealed that participation frequency could be predicted by sport commitment while there was no significant relationship between purchase behaviour and sport commitment.
	Demographic variables	The demographic variables showed no significant differences based on gender and age, although differences in sport commitment regarding both skill level and income level were found. Advanced windsurfers had a higher level of commitment than those who classified themselves as intermediate or beginner. Also, windsurfers in higher income categories were more committed than respondents with lower annual incomes.
	Gender	Results found that gender had an influence on enjoyment, personal investment and social support.

Casper and Stellino (2008:93) conducted a study to understand the relationship between demographic determinants of community tennis association members on commitment		Females reported higher enjoyment and personal investment while male tennis participants reported higher social support for tennis.
	Age	Participant's age had an influence on commitment, involvement alternatives and social constraints.
		It was found that enjoyment was the strongest predictor of commitment across different age, gender, income and skill level categories, but there were differences in the strength of predicting commitment based on the other antecedent variables.
		Findings have to provide evidence that personal, social and monetary based variables directly contribute to commitment and, therefore, it was clear that sport participants differed based on segmentation. The study found that sport events should place emphasis on promoting time and monetary investment in the sport as this can increase player commitment.
		The youngest tennis players (ages 34 and younger as well as ages 35 to 44 years) reported significantly lower commitment levels than the two older groups (ages 45-54 and 55 and up). An explanation for this can be that older participants have played tennis for a longer period (higher involvement). Therefore, they have developed a deep-rooted commitment. It is evident that if a participant is more involved, more enduring aspects of participation subsequently become stronger, like loyalty or commitment.
		The two youngest groups reported a much higher lure of alternative activities, seeing that they have a wider leisure repertoire than the two older age groups. This finding may indicate that tennis may be competing with other activities with younger market segments, more so than older market segments.
	Income	There were no significant differences between income categories and sport commitment.
	Skill Level	Considering the skill level of participants, it was found that lower skill level participants reported social support as a significant predictor of commitment, while higher skill level participants did not. Higher

		skill level participants also cited involvement opportunities as the only significant predictor in addition to the enjoyment of increased commitment. These findings correspond with the recreational specialisation in which participants who are less involved in a sport exhibit a variety of general motivations for participation. Those participants, on the other hand, who are highly involved, exhibit more specific motivations.
In a study done by Kuo (2013:1707) the author wanted to test the effect of recreational sport involvement on work stress and quality of life.	**Quality of life**	The quality of life was found to influence sport commitment positively. Therefore, it suggests that quality of life benefits obtained through sport participation will facilitate and increase commitment to the sport.
Weiss and Weiss (2006:316) did a study on commitment among competitive female gymnasts	**Type of commitment**	1. Attracted gymnasts: Higher (Enjoyment, Benefits), Lower (Costs, Attractive Alternatives). 2. Entrapped gymnasts: Higher (Costs, Attractive Alternatives). 3. Vulnerable Average (Enjoyment, Costs), Higher (Attractive alternatives), Lower (Benefits). 4. Uninterested gymnasts: Lower (Enjoyment, Benefits, Investment levels), Higher (Costs, Attractive alternatives) Research demonstrated that athletes may vary in the type of commitment, and that commitment types are associated with different outcomes in competitive sport athletes. Commitment type correlated with participation behaviour and changed over time. The type of commitment was receptive to coach support, but also parent and team mate constraints.

		Attracted gymnasts had higher scores in the level of sport commitment compared to entrapped and vulnerable gymnasts. It was found that attracted gymnasts reported more encouragement and positive affection from their parents and coaches than did entrapped gymnasts. Entrapped gymnasts had greater feelings of obligation towards parents and team mates to continue their involvement in the sport.
	Entrapped commitment	Gymnasts that reported lower enjoyment and benefits and greater costs associated with their involvement. Entrapped gymnasts also had lower coach support and higher team mate and parent constraints. These gymnasts will most likely be looking at other activities that are more appealing than gymnastics.
	Attraction-based commitment	Results revealed that gymnasts who are involved because of their attraction to the sport (attracted gymnasts) would have stronger intentions to continue their participation.
		Findings suggested that attraction-based participants demonstrated how attraction results in the higher effort, persistence and intrinsic motivation.
Funk, Jordan, Ridinger and Kaplanidou (2011:250-268) studied the capacity of mass participant sport events for the development of activity commitment	**Level of event satisfaction and sport event motives**	The development of commitment as a leisure pursuit and future intentions to exercise on a regular basis after an event is dependent on the level of event satisfaction and a specific configuration of sport event participation motives.
	Distance of event, previous participation in events and level of physical activity	Events have the capacity to both sustain and increase attitudes toward physical activity leisure. Individuals who completed the longer distance events, had participated in a greater number of prior events, and who had higher levels of physical activity before the event were more committed to the sport.

and future exercise intention	**The event**	The event had the capacity to promote more positive attitudes toward exercise among the least active, inexperienced with events, and novice participants.

-Only the most recent and relevant sources are included in the table

Based on the findings indicated in Table 4.1 the following conclusions can be drawn:

4.7.1 General findings concerning the SCM

Previous research indicates that enjoyment is the most influential positive predictor of commitment (Scanlan, Carpenter, Lobel *et al.,* 1993:276; Carpenter *et al.,* 1993:129; Carpenter & Coleman, 1998:195; Weiss *et al.,* 2001:132; Krinanthi *et al.,* 2010:44; Hall, 2013:4; Williams, 2013:39). Thus, athletes who reported having more fun and pleasure related to their participation would almost certainly have a greater desire to continue their participation (Weiss & Weiss, 2006:321). Other general findings include:

- Involvement opportunities, social support and the personal investment of time and effort constantly predicted commitment. On the other hand, most research found that the involvement alternatives is a negative predictor of commitment (Raedeke, 1997:412, 413; Weiss *et al*., 2001:141; Scanlan *et al.,* 2009:695).
- In exercise specific literature it is found that, enjoyment and personal investments are two keys to fostering "want to" commitment and exercise behaviour (Williams, 2013:39).
- Research also indicated that enjoyment and involvement opportunities have consistently emerged as the strongest predictors of increased commitment in sport-related research (Casper & Stellino, 2008:97). This finding corresponds with Krinanthi *et al.* (2010:44) who found that apart from sport enjoyment, other significant predictors of commitment were sport commitment and involvement opportunities.

4.7.2 SCM's influence on demographic variables

Sport commitment variables among various populations should not be generalised across demographic characteristics (Casper & Stellino, 2008:109). Findings in this regard include:

- Enjoyment was the strongest predictor of functional commitment for both genders, which is consistent with previous research (Casper, Gray & Stellino, 2007:253-278; Casper & Stellino, 2008:93; Weiss *et al.,* 2001:132). Females reported higher enjoyment/satisfaction and personal investments, which predicted higher functional commitment levels (Wigglesworth *et al.*, 2012:245).
- The SCM research found that commitment increases with age and older adults will be more committed to the physical activity they participate in (Moode, Wiggings & Broughton, 1988:13; Wheaton, 2000:269, 270; Casper & Stellino, 2008:106). However, research done on competitive runners found that commitment decreases with the age of the participant. Thus, results may vary according to the dependent sport (Horton & Mack, 2000:101; Casper & Stellino, 2008:106).

4.7.3 The influence of sport commitment on other variables

Sport commitment can have an effect on other variables, such as sport identity, life satisfaction, motivation, and service quality perceptions. These are supported by the following findings:

- The research found that there is a significant positive relationship between sport commitment and sport identity of gymnasts examined in a study done by Kuo (2013:1707). They also found that life satisfaction has a significant role in athletes sport identity and commitment. Furthermore, the more satisfaction increases, the more commitment will grow which is a vital finding for sport events (Reifsteck & Gill, 2011:180; Kuo, 2013:1707).
- Ryan, Frederick, Lepes, Rubio and Sheldon (1997:350) suggest that intrinsic motivation accompanied by positive behavioural outcomes is a better determinant of exercise adherence and commitment when compared to extrinsic motivation. Extrinsic motivation has been associated with increased state anxiety in young athletes and increased dropout numbers in the sport.
- A study focussing on adults that participate in aerobic sessions completed, suggested that higher intrinsic motivation was associated with increased intentions to continue participating in activities while extrinsic motivation was related to lower intention to participate in exercise activities. These findings concurred Zahariadis, Tsorbatzoudis and Alexandris (2006:406) who found strong correlations between intrinsic motivation and commitment while extrinsic motivation scores were not significantly correlated to sport commitment.
- Evidence has shown that service quality perceptions are related to positive behavioural intentions as high self-determinations and commitment (Krinanthi *et al.,* 2010:50).

4.7.4 Commitments' influence on behaviour

Commitment is positively related to different behaviour patterns, such as higher spending, longer training hours, loyalty, higher frequency of participation and media consumption. This is supported by the following findings:

- Highly committed sport participants are more likely to spend more money on sport equipment (Casper & Stellino, 2008:107; Fernandes *et al.,* 2013:3).
- Casper and Stellino (2008:94) who found that highly committed sport participants, participate more often than other sport consumers.
- Sport commitment positively influences participation frequency, sporting goods consumption, and media consumption (Fernandes *et al.,* 2013:2).

- The more committed participants are to an event, the higher the overall satisfaction with the event experience and the more likely they were to exhibit loyalty intentions towards the event (Lee & Kyle, 2014:656).
- The competitive level has an influence on commitment as it is found that athletes who compete at a higher competitive level and trains more hours per week are more likely to be more committed to their sport participation (Weiss *et al*., 2010:425).

Based on the different findings from the said studies, some of the authors recommended that sport events could consider improving the event. Recommendations are also made concerning future research based on sport commitment. This is assessed in the next part of the chapter.

4.7.5 Recommendations from previous studies to consider in sport commitment

Enjoyment and personal investment are the strongest most consistent determinants of commitment to the sport and physical activity (Williams, 2014:38). Based on this finding sport and physical activity specialists are advised to create events in which people find enjoyment and are willing to invest (Williams, 2013:39). Events must convey a message that although they cannot keep every child or older athletes in a particular sport forever, they will still ensure that the participants' sport experience is as enjoyable and rewarding as possible (Weiss & Weiss, 2006:322). Events, competitions, and retail outlets should organise and offer instructional clinics and enjoyable opportunities for participants to become more involved and personally invested in sport (Jeon & Ridinger, 2009:325).

Future research can focus on the area of service quality towards sport participation in addition to sport commitment and sport motivation. This will further inform managers of sport events and assist them in identifying participant needs and expectations in order to design effective relationship-marketing programmes (Krinanthi *et al.,* 2010:50). Studies are needed at sport events to test how strategies can be implemented that will increase enjoyment, benefits (achieving goals, encouraging friendships, receiving recognition and feeling successful) and social support. These studies should also focus on decreasing costs (stress, boredom, time, high expectation and pressure) as well as social constraints that are linked to participation. This will ensure that the participant has attraction and not entrapped commitment (Weiss & Weiss, 2006:321). Coaches and parents should be advised to engage in methods that will maximise commitment by advising participants to participate for the "love of the game" (Weiss & Weiss, 2006:322). Younger participants reported more social constraints than older age groups. Therefore, sport marketers can use the social pull towards sport by introducing players to other players through social events and opportunities for continued social relationships, and

this may be a key tactic in increasing commitment among younger segments (Casper & Stellino, 2008:107).

The problem is that little research has been conducted to understand what influences the commitment levels of sport participants (Casper & Stellino, 2008:93). This is especially evident in individual endurance events such as cycling, swimming, marathon running, triathlons and other endurance sports. It is also evident from the findings mentioned above that little research about the influence of commitment, and the SCM has been done in a South African sport event context. Therefore, studies in this regard are critical for South Africa as sport destination and for the continuation of endurance events in the country. Therefore based on the different findings regarding the implementation of the SCM, it becomes necessary that South African sport events, as well as sport destinations, implement these findings within the organisation as well as their marketing efforts.

4.8. Complexity of sport commitment

Sport participants experience sports in different ways. Therefore it is important to categorise sport consumption behaviour to better understand the sport consumers and the differences between them (Fernandes *et al.,* 2013:4). Commitment is a multi-dimensional perspective. Consequently, it yields more detailed and relevant information regarding specific commitment behaviours (Kim *et al.,* 2013:173). The multiple dimensions of commitment also construe that one's behaviour can be conveyed by different physiological states compared to those found to characterise different types of commitment (Kim *et al.,* 2013:173). The construct of commitment can be divided into various types of sport commitment (Weiss & Weiss, 2006:310). This can be associated with findings made by Rusbult (1980, 1983) who found that people may be committed to their jobs or relationship for positive reasons (attraction-based commitment) or negative reasons (entrapment-based commitment) (c.f. 4.4.1). Raedeke (1997:400) claimed that there are two faces of commitment; firstly, individuals that are committed because they want to be involved and because they feel they have to be involved. These are seen as attraction based (for example "I want to") and other was entrapment-based ("I have to"). The entrapment commitment participants are associated with a greater burn-out consequence (Wigglesworth *et al.,* 2012:237; Williams, 2013:37). The basis for one's commitment is related to an individual's discretionary behaviours because the individuals' commitment is based on the mind-set of self-interest (continuance commitment). An example of this, are individuals who are more disposed to engage in behaviours than others whose commitment is based more on desire (affective commitment) or social influence (normative commitment) (Kim *et al.,* 2013:174).

Schmidt and Stein (1991:262) also found these differences in commitment to sport. It was found that if an athlete were committed to their sport because of attraction reasons, they would report higher benefits associated with their participation (Weiss & Weiss, 2006:310; Williams, 2013:36). In contrast, athletes who participated because of feelings of entrapment would show decreasing levels of benefit and enjoyment associated with their involvement (Weiss & Weiss, 2006:310; Williams, 2013:36) Therefore it can be concluded that entrapped athletes will experience greater negatives than positives accompanying their sport involvement, but will remain involved in the sport since they have invested so much and feel there are no other satisfying options available (Weiss & Weiss, 2006:310). Looking at the profile of an entrapped athlete, it is clear that these types of athletes are prime candidates for dropping out of the sport (Weiss & Weiss, 2006:310).

Other authors supported Schmdt and Stein's (1991:263) predictions and found different types of commitment with adolescent athletes (Raedeke, 1997:400; Weiss & Weiss, 2003:229) as well as coaches (Raedeke, Granzyk & Warren, 2000:85; Raedeke *et al.,* 2002:73). In the study done based on competitive swimmers by Raedeke (1997:400), the authors found four commitment types that were similar to the findings of Schmidt and Stein (1991:263). These four commitment types was replicated and extended from Raedeke's (1997:406) study of elite female gymnasts, where they found attracted gymnasts who had higher enjoyment, benefits, lower costs and attractive alternatives while entrapped gymnasts were characterised by lower enjoyment, benefits and higher costs. Moreover, findings on attractive alternatives supported Schmidt and Stein's (1991:263) findings. Yet, unique to the study, a third profile emerged (Weiss & Weiss, 2003:244). The last group was labelled the vulnerable gymnasts as they had moderately lower enjoyment and benefits, and moderately higher attractive alternatives (Weiss & Weiss, 2003:244). Therefore, vulnerable gymnasts were inclined to become members of the attracted or entrapped group as they weighed up the pros and cons of continuing their involvement in gymnastics (Weiss & Weiss, 2003:244). Athletes who drop out of sport were most likely starting to concentrate on other activities and goals in life and thus decided to give up their participation in a particular sport to achieve their other, new set goals (Weiss & Weiss, 2006:320).

Apart from commitment, sport researchers have done studies to understand the psychological attraction a consumer has to sport and the differences in demographics (James & Ridinger, 2002:267), type of sport (Wann, Schrader & Wilson, 1999:124, 125; James & Ross, 2004:23), motivation (Trail & James, 2001:123; Zhang, Pease, Lam, Bellerive, Pham, Williamson & Wall, 2001:50; Funk, Mahony & Ridinger, 2002:42; Robinson, Trail & Kwon, 2004:187, 188), and the developmental process that occurs due to continued participation (Funk & James,

2001:135; 2006:190). The main gap in the sport tourism research is the fact that there is little research that focuses on sport participants that are direct and indirect consumers of sport (Casper & Stellino, 2008:95). Studies must be aimed at explaining the correlations between sport participants' commitment to the sport commitment model embedded in the sport psychology field (Casper & Stellino, 2008:96).

A further challenge to sport commitment is the fact that some sport events cannot necessarily grow regarding participant numbers, seeing that most endurance events in South Africa have restrictions regarding infrastructure. Most of the events take place on public roads, parks or other natural environments. The number of participants is therefore determined by taking the carrying capacity of the environment and the safety of the participants into account. Accordingly, the number of participants that take part in South African endurance events cannot necessarily grow in terms of more participants each year. Sport events can usually only allow a certain number of participants. These participants are different with regard to age, gender, nationality, different skill set levels (e.g. amateur and professional) (Kruger, Myburgh & Saayman, 2016:382). Consequently, it becomes a challenging task to ensure that all these different participants become committed to the event. The challenge is for organisers to understand their current market to sustain the event while at the same time helping to expand the sport, increasing tourism, and especially sport tourism, in the events' host destination (Kruger *et al.,* 2016:382). Research is therefore needed to understand the various factors that lead to commitment, but also the differences in factors within an event market to ensure return participation as well as the attracting of new participants each year. The complexity of commitment can further be highlighted by the fact that commitment is influenced but also influences other factors associated with sport participation.

4.9 Factors pertinent to sport commitment

In Chapter 3, a set of factors that influence endurance sport participation was discussed. These factors include age, behaviour, sport events and event satisfaction (c.f. 3.6). Many of these factors in Chapter 3 overlap with some of the factors that have a direct influence on sport commitment as found in literature. Consequently, this study will integrate different commitment factors, different involvement factors as well as sport participation factors (as discussed in Chapter 3). These factors all are related in some way. Therefore, the factors overlap. This however, will be the first time that these factors are used in combination to investigate their relationship with and influence on sport commitment. In sport psychology as well as sport tourism, certain factors arise that can have an influence on commitment. These factors include, but are not limited to involvement level, sport identity, motivation, skill level

and age, a variation of commitment as well as consumer loyalty. Each of the influences that are the most widely acknowledged in the literature is reviewed in the upcoming section.

4.9.1 Level of Involvement

Involvement level is a sport behaviour that is explained by Beasley, Shank and Ball (1998:33) as well as Fernandes *et al.* (2013:4) as the number of hours that people participate in sports. It is also suggested that involvement level can be a direct predictor of participant commitment for if a participant increases his/her time of practice it is directly reflected in their commitment (Iwasaki & Havitz, 2004:46; Weiss *et al.,* 2001:131; Casper, 2007:270; Fernandes *et al.,* 2013:4). Therefore, events must aim to increase participation frequency (involvement level) as this is an indication of a participant's personal investment in the sport that is reflected in personal resources such as time, effort and money. Findings also suggest that event marketers must find strategies to increase commitment to sport as this will have an influence by focusing on specific media audiences (Fernandes *et al.,* 2013:9). Therefore, sport event organisers must realise that increasing media consumption through making participants more committed to the event is essential to the success of the event (Fernandes *et al.,* 2013:9). Results also revealed that committed participants had a higher sporting goods consumption, sport events can use this knowledge by developing strategies that aid to commit participants as well as encouraging the purchase of more sporting goods (Fernandes *et al.,* 2013:9). Having knowledge of how sport commitment influences sport consumption is vital as this will give sport marketers knowledge about the consumers and help them plan retention strategies that can assist in establishing new relations between the consumers and sport products (Fernandes *et al.,* 2013:10). Closely related to the involvement level is the term of repeat consumption. The sport setting in such instance, can be explained as frequent participation in the absence of a strong self-interest stake in a relationship with a sport (team or event) and could be a function of habit or lack of knowledge regarding alternatives (Kim *et al.,* 2013:180). An individual who has a mind-set of continuance commitment will demonstrate repeat consumption based on the symbolic value of the activity, the relevant knowledge regarding the activity and the physiological arousal caused by the sport activity (Kim *et al.,* 2013:180). There is also a linkage between sport consumers continuance commitment and behavioural intentions (Kim *et al.,* 2013:181). The linkage is significant and positive because continuance commitment implies a psychological connection (for example self-interest) to sport by the status related to attachment which can lead to positive word-of-mouth, repeat participation or purchasing and attendance of sporting events (Kim *et al.,* 2013:181).

4.9.2 Sport Identity

A strong sport identity increases the commitment of the athletes to participate in sport activities. Therefore, self-confidence and sport commitment influence the sport identity of athletes (Nazari *et al.,* 2013:68). Sport identity can be defined as "the domain for the communication of a person with the role as athlete. Moreover, sport identity for an individual who identifies his/her identity with a sport role is like a level of power and exclusiveness that commits him/her to the sport activities" (Nazari *et al.,* 2013:68). Commitment is one of the influential factors in the sport identity of athletes, and according to Becker (1960:34) commitment are the term for people's tendencies in the direction of certain behaviours. It is suggested that participants who become more engaged in a sport will shift their motives to participate in skill acquisition, performance and winning, motivational traits that are synonymous with more competitive athletes (Hungenberg *et al.,* 2013:329). Heo, Lee, Kim and Stebbins (2012:459) made similar findings when investigating substantial effort in an activity where one will develop a valued sport identity. Once the identity is formed, the individual will make a greater effort to retain this identity by committing extra hours to strengthen skills for the sport (Hungenberg *et al.,* 2013:329).

4.9.3 Motivation and commitment

According to Scanlan *et al*. (2013:526), it is clear that commitment would provide a fresh and potentially fruitful understanding of motivation in sport. Motivation also plays an important role in sport participation in general, as was discussed in detail in Chapter 3 (c.f. 3.8). It was evident that commitment as a construct was completely different in the various literature and raised the question: 'What is sport motivation without commitment?" Commitment to physical activity impact refers to one's motivation for involvement (Williams, 2013:36). The motivation associated with participation is manifested in an individual's physical activity choices as well as the effort they put forth in physical activity endeavours and how long they persist particularly with regard to obstacles and failure (Williams, 2013:36). Physical activity programmes and sport are usually targeted to fit with participants' specific principal motives to sustain levels of participation. Therefore, sport and exercise accommodate very different motivational needs (Vallerand & Young, 2014:439). The question then arises what is the best theory (method) to aid physical activity in promoting commitment to lifelong physical activity (Williams, 2013:35). Sport marketing researchers have been interested in sport consumer motives (Trail & James, 2001:110; Kim *et al.,* 2013:174). There is, therefore, a need to integrate the two domains to demonstrate how motives and commitment may collectively influence sport consumer behaviour (Kim *et al.,* 2013:174). According to Vallerand and Rousseau's (2001:389) as well as Krinanthi *et al.* (2010:42) sport participation, adherence and true commitment towards participation are consequent to motivation. Research to explore participation motivation has

steadily revealed that enjoyment; affiliation, challenge, and rewards are commonly the most referred to reasons of participating in sport (Weiss *et al.,* 2010:423). According to Kim *et al.* (2013:181) incorporating motivation and commitment acknowledges that behavioural intentions can be accompanied by different psychological states or mind-sets, comparable to those found to characterise various forms of commitment.

4.9.4 Age and Skill level

Researchers have reported differences in the determinants of commitment due to age and skill level factors (Hall, 2013:27). A good example of this is research from Weiss and Weiss (2006:322) who found that commitment differed by competitive level among young gymnasts. For the less skilled athletes commitment was mostly predicted by personal investments, perceived costs and social support while for the more skilled athletes, commitment was depended on social support from team mates, social constraints and personal investments (Hall, 2013:27). Casper and Andrew (2008:201-219) also explored the influence of skill level on adult tennis players' commitment. Their research revealed that involvement opportunities and social constraints influenced higher sport commitment (as cited by Hall, 2013:28). On the other hand, lesser skilled athletes reported higher levels of enjoyment (Casper & Andrew, 2008:201). Jeon and Ridinger (2009:326) had similar findings with windsurfers, indicating those who were more highly skilled had the greater commitment. This was because they were able to engage in more advanced conditions than people of lower skill level. Therefore, whether it is perceived skill level or actual skill level, it is positively related to sport commitment (Lavigne, 2013:31).

Differences in commitment have not only been influenced by skill level but also by the age of the athlete (Hall, 2013:28). Weiss and Weiss (2006:312) found that perceived costs, social constraints, and social constraints from friends and parents were the strongest predictors of sport commitment with younger female gymnasts. The middle-aged gymnasts' (age 11-14 years) strongest predictors of commitment were personal investments, social constraints from parents and perceived costs. The oldest group's (15-18 years) commitment was mainly based on perceived costs and perceived competence (Hall, 2013:28).

4.9.5 Variation of commitment over time

Literature reporting on the SCM has found that the strength of the variables of the model alters over time (Hall, 2013:28). Therefore, SCM determinants can change over a season, and an athlete's commitment can fluctuate (Carpenter & Coleman, 1998:195; Weiss & Weiss, 2006:319-321). Carpenter and Coleman (1998:208) found that commitment would increase over time as sport enjoyment and social opportunities increased. Alternatively, commitment

will decrease when social opportunities and social support decreased. Carpenter and Scanlan (1998:356) concurred by stating that there are longitudinal changes in sport commitment. Findings mostly revealed that a decline in sport enjoyment and involvement opportunities correspond to decreases in sport commitment (Hall, 2013:28). In contrast, an athlete whose involvement opportunities increased reported an increase in their sport commitment (Hall, 2013:29). It is important to investigate the change in commitment type over time, seeing that if the commitment type is susceptible to change over time, interventions must take place to modify benefits, costs, enjoyment, investments and attractiveness of alternative activities, social constraints and social support to ensure more attraction-based and less entrapment-based commitment in a particular sport (Weiss & Weiss, 2006:312).

4.9.6 Sport consumer loyalty

Commitment has been examined with different labels in many disciplines, there has also been substantial support from Becker, Randall and Riegel (1995:617); Gruen, Summers and Acito (2000:37); Meyer and Herscovitch (2001:301) as well as Kim *et al*. (2013:177) establishing that commitment has three dimensions. In sport marketing literature commitment has mostly been studied about team loyalty (Kim *et al*., 2013:177). This led to the development of a Psychological Commitment to Team (PCT) scale to segment athletes who participate in the team (Mahony, Madrigal & Howard, 2000:15-25). In this proposed scale, commitment is believed to influence sport consumption behaviour (for example purchasing products, attending and participating in sport events). Therefore the fundamental basis of what drives sports consumers to purchase sports products or to take part in sporting events may be affective (sport consumers like to), continuance (sport consumers want to) or normative (sports consumers have to). These three dimensions of commitment are used as the foundation for the derivation of sport consumer commitment (Meyer & Allen, 1991:83; Gruen *et al*., 2000:37; Bansal, Irving & Taylor, 2004:245, 246). It is clear that commitment can influence different components making it a widespread construct used in sport literature as discussed in the next section.

4.10 Importance of sport commitment

Sport events should improve their efforts to maintain and enhance the commitment of the participants participating in athletic and other physical activities (Weiss & Weiss, 2006:312). Sport events must also minimise the attributes that result in entrapped commitment as these athletes come to a point where they feel they have to quit and leave the sport (Weiss & Weiss, 2006:319). It is vital that sport events realise that if a participant has a positive experience while participating, it will lead them to maintain their involvement and become more committed to the sport event (Casper & Stellino. 2008:94). Mullin *et al.* (2007:79) concur by stating that

to sustain sport tourism and the event industry the dependency of frequent and committed participants must be realised. Sport events can maintain and even increase their market share if it puts the focus on retention of current participants. This should be of great concern seeing as this is a future indication of direct and indirect consumption of goods and services (Casper & Stellino, 2008:94).

Sport environments must exist for both female and male participants. Participants must feel that the sport event is a special opportunity that they can find only in sport and nowhere else in their lives. Events must, therefore, emphasise opportunities that are enjoyable and personally fulfilling instead of being associated with risks or threats. Therefore, there must be involvement opportunities available for the athletes, for example, more events to participate in (Wigglesworth *et al.,* 2012:247). Enforcing commitment will consequently lead to different benefits for not only the expansion of sport but also for sport events. Hofmeyr and Rice (2000:4) identified the following six benefits:

- Firstly, when consumers (participants) are committed to a brand (event), price becomes less important in the purchase decision. Therefore the larger the number of committed participants that participate in an event, the more justified the event will be in demanding a price premium. Still, if an event has fewer committed participants, the price will be sensitive, dictating a very different pricing strategy.
- Secondly, committed participants will stay longer with the event. Findings across many product categories found that the higher the commitment, the less likely it is that the consumer will defect from the event. Thus, the higher the commitment, the longer a participant will remain with a sporting event.
- Thirdly, a committed consumer will give more of their business. Therefore, a committed participant will participate in a repertoire of events with the size of the repertoire varying by participants and by the event.
- Fourthly, committed consumers will soak up the advertising campaigns launched by the event. It is found that committed participants are more likely to see advertising and the advertising will be more effective. This is also a benefit as it is found that advertising works best at maintaining relationships, rather than attracting new users.
- Fifthly, a committed consumer will act as an advocate for a brand and exhort others to use it. Therefore, events can use this as a marketing extension of their sales force for the more committed the consumers, the more efficient marketing efforts will be.
- Lastly, if an event understands the commitment of consumers to their event, the event will be able to assess whether or not advertising is appropriate for the market. Therefore, the

suitability of all communication channels can be better assessed when the commitment of participants to the events they participate in is understood.

Sport commitment can, therefore, have a positive influence on a sport event, sport marketing and the retaining and expanding of loyal participants. The benefits associated with sport commitment are consequently categorised under these headings in the next section.

4.11 Additional benefits associated with sport commitment

Sport commitment is a physiological variable that has an influence on a large variety of variables as seen from previous findings and recommendations. This leads to a substantial number of benefits, including sport event enhancement, more effective sport marketing, loyalty and decreased sport withdrawal. Each of these benefits will be discussed under the following headings.

4.11.1 Sport event enhancement

If events take into consideration the participants commitment, it will lead to a theoretically sound and practical approach to maintaining and enhancing intrinsic motivation and positive participation behaviours in athletes of all ages, competitive levels and sport types (Weiss & Weiss, 2006:322). Applying the SCM will help different sport events understand that there is a unique set of predictors of commitment for different types of athletes (Hall, 2013:6). Research by the SCM can, therefore, expand research and provide practical guidelines for sport events and sport destinations (Chu & Wang, 2012:757).

4.11.2 More effective sports marketing

Assessing commitment of participants to the event as well as the availability of those who are not participating in the event, the event can formulate an appropriately tailored marketing strategy (Hofmeyr & Rice, 2000:15; Lee & Kyle, 2014:656). Commitment is an important factor to research, as it will contribute to developing strategies for retaining participants by providing valuable insight into individual participant commitment (Chu & Wang, 2012:757). Research has furthermore found that psychological variables, such as commitment, can play a significant role in the market segmentation process (Lee & Kyle, 2014:656). Commitment-specific segmentation can be identified where profiles of participants include attitudes, motivations and commitment towards a particular sport event (Casper & Stellino, 2008:97). Research based on commitment is also needed to understand why sport consumers engage in behaviours such as positive word-of-mouth, participating and attending sport events and their repeat purchasing of sport merchandise and attire (Kim *et al.*, 2013:174). On the other hand, when looking at non-participants or potential participants of an event the marketer will

be able to identify those most likely to be acquired and those participants on whom marketing efforts will be wasted, as they are unlikely to switch events in the near future (Hofmeyr & Rice, 2000:15).

4.11.3 Loyalty, resistance to change and continuous participation

Sport commitment is seen as an essential component of loyalty that highlights an attitudinal predisposition towards a durable, long-lasting relationship with an event (Evanschitzky, Iyer, Plassmann, Niessing & Meffert, 2006:1207; Lee & Kyle, 2014:656). Highly committed participants will be valuable consumers of their chosen activity through sustained participation, higher involvement and increased loyalty to an activity (Casper & Stellino, 2008:93). The more committed a participant, the more likely he/she will be loyal to the sport. This is vital as it will help achieve organisation goals, which include higher revenue generation (Iwasaki & Havitz, 2004:45; Casper & Stellino, 2008:96). It is found that highly committed participants spend greater amounts of money compared to non-committed participants. In studies by Casper *et al*. (2007:271) as well as Jeon and Ridinger (2009:325) a strong link was identified between participation frequency, purchase intention, and commitment. Commitment has been found to increase product-related consumption (Casper *et al.,* 2007:271; Jeon & Ridinger, 2009:325; Fernandes *et al.,* 2013:2; Hungenberg *et al.,* 2013:319). Fernandes *et al.*'s (2013:9) findings revealed that athletes who exhibited greater commitment characteristics were more likely to purchase sport-related products such as sport shoes, sportswear and training accessories. Therefore, literature insinuates that commitment may not just stimulate physical activity, but also spending behaviour of athletes (Hungenberg *et al.,* 2013:319).

The concept of commitment in sport participant behaviour is important seeing that it does not necessarily represent direct spending, but theorists have advocated that it represents resistance to change (Funk & James, 2006:190; Casper & Stellino, 2008:95). Resistance to change in the context of sport can be understood as a reflection of consistency or the withstanding of counter-persuasive attempts (for example an alternative activity) and it is a predictive form of behaviour (for example participation frequency and purchase behaviour (Casper & Stellino, 2008:95).

4.11.4 Decreasing sport withdrawal and increasing overall healthier lifestyle

Increasing participants' commitment is an imperative task for practitioners and sport events since research has found that about half of the individuals who take part in sports, drop out within a short period (Dishman, 2003:43; Krinanthi *et al.,* 2010:42). Research done by Williams (2013:36) coincides with the previous research by showing a decrease in participation in sport and physical activities including tennis, dance, running, weight lifting and cycling. It is also

commonly found that 50% of all adults who begin participating in a sport or exercise program will drop out within three to six months (Williams, 2013:36). Therefore, commitment-related research is crucial, as this will facilitate managers, sport providers, sport events and fitness professionals as it could be used as a guide for designing effective retention strategies (Krinanthi *et al.,* 2010:42). Participation in sport has shown to increase happiness and reduce effects of stress (Kuo, 2013:1705). In addition, the participation in sport leads to social benefits including improved physical and mental health as well as academic achievement (Kuo, 2013:1705). A commitment that leads to higher leisure involvement will promote feelings of joy and happiness for the participant, motivating individuals to make sport the central habit of their lives (Wiley, Shaw & Havitz, 2000:20; Kuo, 2013:1706). The integration of sport and associated benefits into the daily lives of individuals may increase people's life satisfaction as well as their physical and psychological health (Kuo, 2013:1706). Motivating athletes to continue participation and to be committed to a sport will also lead to psychosocial development, a higher self-esteem, and higher academic/professional achievements, emotional and psychological well-being. This will help minimise negative behaviour (Barnett & Weber, 2008:3; Hall, 2013:2).

4.12 Conclusion

The goal of this chapter was to critically analyse commitment and related theories in an endurance sport context. Commitment can be seen as the frequency or intensity of involvement in a sport. It can also be seen as the willingness to spend money, time and energy that can be regarded as sport involvement. Commitment furthermore is related closely to various antecedents such as resistance to change, involvement, attitude, and loyalty as well as consumer behaviour. Previous studies have shown that commitment leads to a relationship between consumer behaviours (for example purchase behaviour) and experiences such as service performance and satisfaction. It thus becomes clear that commitment is an important psychological aspect to research. This is especially true for the sport industry. Sport commitment can be seen as a psychological state representing the desire and resolve to continue participation in a particular athletic programme, specific sport or sport in the general. Different conceptual models were developed to show the influence of commitment on other antecedents. The Sport Commitment Model (SCM), which forms the basis of this study, was developed to give a more theoretical explanation for an athlete's commitment to the sport. The Sport Commitment Model originates from the Investment Model, The Social Exchange Theory, and the Interdependence Theory. The SCM hypothesises that enjoyment, personal investment, social constraints, involvement opportunities and social support act as attractors to keep individuals participating (strengthen commitment), while the involvement alternatives decrease individuals participating (weakens commitment).

Sport commitment can be seen as a complex concept as there are different types of commitment within sport such as attraction-based commitment and entrapment based commitment. Different factors also influence commitment and commitment and the factors that influence, differs from one individual to another with regard to demographics, motivation, type of sport, and skill level. Therefore, commitment may change over time. The aforementioned factors such as demographics are all factors that are integrated into the research framework which will be reviewed in Chapter 6 (c.f. 6.2). Some authors have applied the SCM in different sport contexts. It was found that enjoyment was the most influential positive predictor of sport commitment. Various studies also found that demographic variables have a direct influence on commitment and that sport commitment has an influence on variables such as motivation, continued participation, sport identity and positive behavioural intentions. These behavioural intentions include participants to spend more money, greater media consumption, higher overall satisfaction, more frequent training and return participation. Sport commitment can be seen as an important variable to research as it will help sport events realise that if participants have a positive experience while they participate in the event, it will lead them to maintain their involvement and become committed to the event. Mullin *et al.* (2007:79) concur by stating that in order to sustain the sport tourism and event industry the dependency of frequent and committed participants must be realised (Casper & Stellino, 2008:94). Sport commitment also leads to additional benefits such as sport event enhancement, effective sport marketing, loyalty, resistance to change and continuous participation, consequently decreasing sport withdrawals and increasing an overall healthier population. This research is fundamental in a South African context seeing that sport commitment has not been focused on in an endurance and tourism context. This study, therefore, has combined different variables and factors to ensure greater sport and event commitment and increased sport tourism. In Chapter 5 the literature from the preceding three chapters are applied to the South African sport context.

5 ENDURANCE SPORT TOURISM AND EVENTS IN SOUTH AFRICA

Never say never because limits like fears are often just an illusion – Michael Jordan -

5.1 Introduction

The goal of this Chapter is to analyse the current state of endurance sport tourism and events in South Africa. Sport can be regarded as one of the most important attractions within the boarder tourism strategy of a country. Recurring events, especially endurance events have become very popular and have seen increased participation, spectating and media coverage. This popularity can be attributed to the fact that these events present a truly authentic and unique experience as each event is different regarding duration, setting, management, route and the type of participants that the events attract. Sport commitment can be seen as an important variable to research as it will help sport events realise that a positive experience while participating will lead participants to maintain their involvement and become committed to the event.

This chapter combines the literature from the previous chapters and examines endurance sport in the South African context. The chapter firstly look at sport tourism in developing countries and more specifically the sport and sports tourism strategy in South Africa. An extensive analysis on the current state of sport tourism in South Africa follows. The chapter reviews research executed regarding endurance sport research in South Africa. After that follows a brief historical overview of sport in the country. The last part of the chapter focuses on the current sport events in South Africa. The chapter particularly reflects on the profile and motives of various endurance athletes that participate in these events.

5.2 Sports tourism in developing countries

Sports tourism can be a key component of destinations' tourism supply, as it helps destinations stand out amongst their competitors and increase competitiveness (Department of Tourism, 2010:1). The sports tourism industry can also be seen as an ever-increasing industry focusing on the target planning of developing countries (Swart, 2005:38). Furthermore, it can have a valuable contribution to the economic development of cities and regions in less developed countries (Turco, Swart, Bob & Moodley, 2003:223; Saayman & Uys, 2003:293; Chalip & McGuirty, 2004:267-268). Homafar, Honari, Heidary, Heidary and Emami (2011:34) add that sport tourism is, therefore, an effective tool to deal with poverty and unemployment, increasing economic growth and social welfare of communities in underdeveloped countries. Research has shown that regions with sport as a tourism attraction has helped improve individuals' quality of life and has contributed to the economic welfare of local communities (Swart & Bob, 2007:374). Sport also provides a sense of purpose, generates community pride and celebrates

a country's unique culture (Weed & Bull, 2004:16; Swart & Bob, 2007:374). Local communities gain facilities that would normally be inaccessible to them, for instance in rural or coastal settings (Weed & Bull, 2004:16; Hritz & Ross, 2010:120). Local sports clubs also get the opportunity to coach and provide greater access to facilities for tourists (Hritz & Ross, 2010:120). Gratton, Shibli and Coleman (2005:986) state that when less developed cities host sport events, it leads to social and economic benefits (Gratton *et al.,* 2005:987). A successful sports event can project a new image and create a new identity for a host city (Higham, 2005:234) which is invaluable for many developing countries' cities seeing that most of these cities do not have well-known tourist attractions; however sports events can attract tourists and enhance tourism in the area (Saayman, 2012:154). This also in return can give residents a chance to travel to their country and compete or attend different sports events. The development of sport and tourism facilities must consider, therefore, both tourism and local use. Sports events should thus consequently be included in a country's broader tourism strategy and must aim to enhance the profile of a city (Swart & Bob, 2007:375).

In South Africa, similar to other developing countries, the hosting of sport events is a critical part of a broader tourism strategy that is aimed at enhancing the profile of cities and the country as a whole (Kotze, 2006:285; Department of Sport and Recreation South Africa [SRSA], 2012:1). Sports have benefited most of the big markets including Japan, Germany, and the United States and have increasingly become an important component of the global tourism economy (Getz, 2008:403; City of Cape Town, 2015:118; Giampiccoli, Lee & Nauright, 2015:229). South Africa has mostly focused on bidding and hosting mega sport events (Cup of Nations, 2010 FIFA Soccer World Cup, BMX World Championships, ICC Champions Trophy, FIFA Confederations Cup, The 1995 Rugby World Cup, The 2003 Cricket World Cup) to increase tourism (Kotze, 2006:286; Cornelissen, Bob & Swart, 2011:307). Durban, which is a coastal city in South Africa, won the bid to host the 2022 Commonwealth Games (Giampiccoli *et al.,* 2015:234), the country however lost the bid in early 2017 due to lack of capital. It is however argued that the focus on events as one sub-segment of sport tourism, and especially mega-events, limits the capacity of sport tourism (Swart & Bob, 2007:373). Another problem that occurs in developing countries such as South Africa is that tourism and recreation agencies rarely form associations (Department of Environmental Affairs and Tourism [DEAT], 2005:12; Swart & Bob, 2007:376). Most links that occur are on an ad hoc basis, that mostly focuses on the main events and are uncoordinated and focused on short-term goals. World-wide many agencies and structures that are responsible for sport and tourism development are established separately with different visions, cultures, and agendas (Commonwealth of Australia, 2000:23; Swart & Bob, 2007:379). Sports events are also strongly linked to a re-imaging process with aims of urban regeneration and development of

sports stadia as well as increasing tourism (Kotze, 2006:285). Hence, sport tourism strategies should be an important consideration for event organisers as it will help ensure no tourism opportunities are lost. In addition, it confirms that sport the participant and spectator markets are better understood (Swart & Bob, 2007:380). It also becomes necessary for developing countries to form a holistic understanding of sports tourism to enable further growth of the industry. This can be done by establishing linkages and alliances between sport and tourism sectors where resources and information are shared among stakeholders. If this is achieved, it will help identify opportunities and mechanisms that will maximise tourism benefits of sports activities and sports events (Commonwealth of Australia, 2000:22; Swart & Bob, 2007:379).

The National Department of Sport and Recreation in South Africa is mostly tasked with delivering sport and recreation opportunities for the masses as well as enhancing high-performance sport, while the development of tourism falls within government departments. Consequently, sectorial and interrelated areas such as sport tourism are being neglected (Department of Tourism, 2011:39; Swart & Bob, 2007:380). It, therefore, becomes difficult to develop a sport tourism strategy in a country such as South Africa seeing that a development policy liaison does not take place across spheres of government (Swart & Bob, 2007:380). Sports development such as training and event participation has been an important feature in the post-apartheid transformation of South Africa (Chappell, 2005:2; Swart & Bob, 2007:374). There is however still a problem with facilities and skills development as the focus has always been on a few sports and limited to particular regions. Literature suggest to those governments in developing countries, whether national or local, not having the capital to host mega sports events like the Olympic Games or World-Cup, to consider the hosting of smaller sports events (Matheson & Baade, 2004:1085). A well-organised recurring smaller sports event with media coverage could generate much-needed income and contribute towards the re-imaging of the host city or country (Kotze, 2006:291; Kotze & Visser, 2008:70).

South Africa should thus do more to promote smaller, local sports events amongst athletes and tourists abroad. Some of these events, such as the Two Oceans and Comrades marathons, the Cape Town Cycle Tour and the Dusi and Berg River canoe marathons, are presented in some of the most scenic areas of South Africa. This is a significant factor seeing that it gives sports tourists the opportunity to engage in tourism when they come to South Africa to attend, or participate in these events. Furthermore, according to Giampiccoli *et al.* (2015:245), localised events have been presented in many of the nine South African provinces for decades and will likely continue for many years ahead. Therefore, awareness of these events will continue to grow beyond regional and national boundaries. These events are more sustainable, less expensive and have a much greater economic impact on the region in the

long term when compared to mega-events. These events are also less vulnerable to global economic crises and attract a niche market of recurring participants and spectators drawn both locally and globally (Giampiccoli *et al.,* 2015:245). Year-to-year fluctuations of these events have much less long-term effects on tourism numbers or economic development. Also, a much larger share of wealth can remain in South Africa. Therefore, the recurring events sectors need more attention from government and need to play an equally significant role in future economic and tourism development planning (Giampiccoli *et al.,* 2015:245). The next section will report on the current sports tourism industry in South Africa.

5.2.1 Sport and sports tourism strategy in South Africa

Recent studies have shown exciting sport development initiatives in some African countries. These developments have led to substantive policy developments and significant transformation (Maralack, Keim & de Coning, 2013:253; De Coning & Keim, 2014:296). South Africa, however, does not have a coordinated national sport tourism strategy that is aimed at proactively growing sports events in the country (DEAT, 2005:9; Swart & Bob, 2007:379; Knott, 2015:212; Giampiccoli *et al.,* 2015:245). The key elements of a sport tourism strategy include industry coordination, education, training, infrastructure, government regulation, research, and data collection, evaluation of the economic benefits and the successful implementation of the strategy (Swart & Bob, 2007:375; City of Cape Town, 2015:118). In November 2011, the National Sport and Recreation Indaba declared that the key role of Government is to create the applicable policy, legislative and regulatory frameworks and to support an enabling environment for the equitable delivery of sport and recreation (SRSA, 2012:8). South Africa is not likely to depend on a single policy intervention but may require a multi-scaled set of projects, consisting of a heterogeneous combination of strategies. In the projects, typical various role-players will enact the said strategies. Furthermore, the projects will be set in a variety of institutions and will have to operate at various geographical scales (Maralack *et al.,* 2013:253).

When looking at the sports policy in the South African context, the following challenges were identified by Maralack *et al.* (2013:253):

- The key challenge that government and sports organisations grapple with is the constant flux in legislation, policy, institutions, strategies and plans. The most critical challenge that has emerged recently proves to be the need to align various policy processes and outcomes with the National Sports Plan. Also, is evident the responsibility to take account of changes in institutional mechanisms that shape the sports environment in South Africa;
- Members of civil society have noted that although the South African Government has developed effective policies and legislation that promotes the development of sport in the

country, the high turnover of senior political and administrative leadership (ministers, directors, chief directors, and general directors) leads to unnecessary and constant changes to strategies and policies;

- There are inconsistencies and reduced effectiveness in implementing government policies and strategies lower in the institutional hierarchy;
- Since there is such a flux in leadership and changes in policies, strategies, and plans, the implemented plans never get the chance to mature. Also, there is never sufficient time to truly monitor, evaluate and adapt mechanisms. Therefore, the success or lack of success of a certain policy or aspects of the policy is not sufficiently developed and taken into account. Some of the policies can be, therefore, excellent. Yet, the struggle remains in implementing, evaluating and monitoring these sport policies; and
- A critical concern raised is the prevalence of politics within sports, both from government and civil society. It is argued that national government and its provincial counterparts have put policies in place to accommodate civil society sports bodies that will administer spots at every level in the country.

Sport in schools was identified as a further key challenge for the South African sport industry. Physical education was taken out of the curricula in the mid-1990s. One civil society respondent emphasised, “this is where the country lost all the momentum to provide an excellent platform for sport development”. The lack of physical education at schools resulted in fewer learners being active in sport (Maralack *et al.,* 2013:253). The consensus among role players in sport has been reached that sports at schools need to be revitalised to reap the inherent social and health benefits intrinsic to youth sport. In 2012, physical education was formally reintroduced in the policy agenda. On the other hand, extracurricular activities have become an optional activity at most disadvantaged schools in South Africa due to the lack of facilities and resources. A draft School Sport Policy has recently been developed, encouraging sporting activities, including physical education as a formal subject in school. The policy aims at regulating access and delivery of school sports for all learners, irrespective of ability, across all schools and to clarify roles and responsibilities of all role players in delivery and funding (Uys, Bassett, Draper, Micklesfield, Monyeki, de Villiers & Lambert, 2016:267). Authorities in some provinces, like the Western Cape, had put together structures and practices to support the development of sport in schools namely the Western Cape Provincial Sports Department’s regional school sports policy and the formal Directorate of School Sports that coordinate and promote schools in conjunction with the Provincial Department of Education (Maralack *et al.*, 2013:258).

Another major challenge for sport in South Africa is the imbalance of sport participation. Maralack *et al.* (2013:264) highlight this further and state that when one looks at participation in sport in South Africa, it becomes necessary to acknowledge the historical and contextual realities of race and socio-economic groups in the country. Some of the key themes that have featured in many policy and legislative documents include, addressing previously disadvantaged groups regarding their race and socio-economic status, the need for mass-participation programmes within schools, youth training and at-risk programmes as well as effective utilisation of civil society groups to increase participation and recreation in South Africa. Eight priority areas were identified (South African Government, 2017:1). One of the most important priorities was to motivate communities to take up an active lifestyle and to channel those with a talent for development into the competitive areas of sports. In studies that analyse the general participation rates in the country, it is evident that the participation levels in South Africa are low and unevenly spread across both socio-economic groups and sport types (Maralack *et al.,* 2013:265). The Human Sciences Research Council shows that only 25% of the population of 49 million people take part in sports. On the other, 24% have had no interest in sports or recreation. A significant preventive factor is the weakness of the South African school sport system. Statistics show that 33% of people who participate in sport were exposed to the sport at school and that participation in organised sport during school is a significant predictor of sport participation as an adult (Maralack *et al.*, 2013:265).

According to Maralack *et al.* (2013:265), based on information gathered between 2007 and 2009 (most recent statistics available), the most popular participation sports in South Africa is a mixture of formal sports such as soccer, road running, swimming and netball, but also less formalised sports such as exercise, walking, gym exercising and aerobics. An important finding is the fact that more and more individuals join mass-participation exercises such as walking groups. When looking at the socio-economic spread of participants, it is clear that more upper-income residents participate in sports and recreation than lower-income residents. This has important implications for the sports policy in South Africa as sports institutions and clubs need to be more accessible for all income groups, as well as to a larger variety of sport types.

During the National Sport and Recreation Plan consultative process (SRSA, 2012:8) four transversal issues that support an active and winning nation were identified:

- Sport and recreation participation must be accessible to all South Africans with equal opportunities through the adoption of transformation initiatives;
- To adapt the sporting codes and ensure a wider participation base that will lead to international success;

- To ensure ethical behaviour is upheld and contribute to improved governance in sport; and
- Clear guidelines must be provided to amateur as well as professional athletes to make sure that the rights of all athletes under 18, are protected.

Sport is thus a medium to attract and increase tourism, contributes to Sports for Peace and Development, promotes Sports and the Environment and is the platform for national government priorities. As to the researcher's knowledge, no similar report has been done to determine the competitiveness of the South African sport industry; the next section highlights the main findings of this report (DEAT, 2005:1-62). In 2005, the Department of Environmental Affairs and Tourism oversaw a report that determined the competitiveness of the South African sports industry (DEAT, 2005:6-12). The report included a framework, which gave an overview of the drivers of sports industry competitiveness. These drivers include: Context for Strategy and Rivalry (industry dynamics and growth and value of the industry); Government (government structure and governments role and responsibilities); Demand Conditions (Interest levels of South Africans in sports and sporting codes with the greatest interest); Factor (Input) Conditions (Profit and losses, the quality and specialisation of the sports industries input in South Africa); Related and Supporting Industries (Multiplying effect on other industries and relationship with other sectors). These drivers were used to identify the strengths and weaknesses within the South Africa's sport industry.

The following conclusions concerning the South African sport industry were made:

- There is a lack of proper communication and uniform decision-making within the different sport types (codes);
- Clear priorities have been outlined for the Government, but there are still not clearly defined roles and strategies with the aim of economic growth through the sport industry;
- South Africa is the ideal destination to host sport events, but there is a lack of sponsorship across the different sport codes, lack of facilities in different areas and the cooperation of various sport bodies;
- The country has a strong sport culture, but only certain parts of the country and population are included in the sport industry; and
- Most importantly, there are not strong linkages between industries especially the tourism industry.

Concerning linkages between industries, the Department of Environmental Affairs and Tourism (DEAT, 2005:62) identified certain shortcomings when it comes to the linkage of sport and tourism in South Africa, these include:

- Poor communication: There are consistently poor communication and coordination between the tourism and sport sectors;
- Limited cooperation: Tourism and sport do not leverage each other's channels into target markets though there are definite overlaps;
- Limited channels for input: Smaller event organising committees often lack representation from tourism;
- There are limited packages: The tourism industry lacks insight into the fan/spectator and participant base to develop appropriate packages and channels for distributing information;
- Potential misaligned incentives: Some sport types do not encourage international tourists, but instead focus on growing the share of domestic (non-travelling) tourists; and
- There is a poor alignment of calendars: Most sport events are not planned to coincide with periods of low tourism activity.

It is clear that the sport and tourism industry are one of the most important linkages for South Africa, and this is further highlighted in Figure 5.1

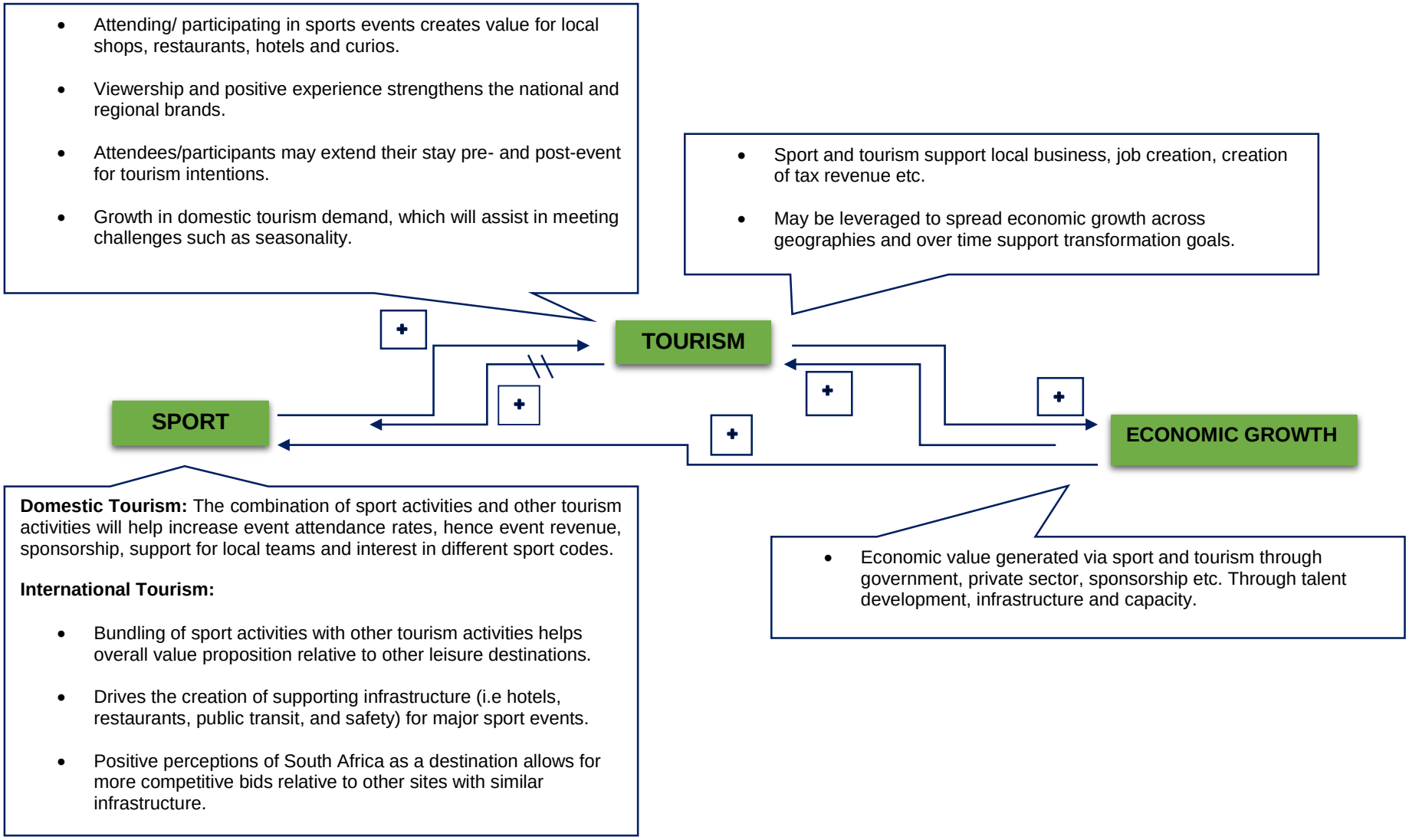


Figure 5-1: Importance of Linkages with Tourism and Sport

Source: Adapted from DEAT (2005:61)

As seen from Figure 5.1 the linkage between sport and tourism in South Africa is critical to ensure the economic growth in the country. The linkage includes the following benefits (DEAT, 2005:62):

- Generating income for local businesses such as hotels, restaurants, shops and curios, as it leads to job creation;
- The strengthening of the South African national brand;
- Creating a tourism spin-off before/after sport events;
- Growth of domestic tourism, domestic attendance, and participation in sport events, and thereby decreasing seasonality more;
- Spreading economic growth across geographical borders;
- Creating economic value through the reinvestment from government, sponsors, and the private sector via sport and tourism;
- The creating and development of infrastructure; and
- Improving the perception of South Africa as a sport destination.

From the benefits mentioned above it becomes clear that sport and tourism are inseparable. This is particularly the case for South Africa and is further reviewed in the section to follow.

5.2.2 The current state of sport tourism in South Africa

In 2012 the South African Cabinet approved the National Sport and Recreation Plan (referred to as the NSRP). The first strategic objective state: “To improve the health and well-being of the nation by providing mass participation opportunities through active recreation” (Strydom, 2013:980). The amendment of the National Sport and Recreation Act (NSRA) in 2007 defines the responsibility of each governmental level and provides the legislative and executive authority in the different spheres of government. This ensures that each operates within the framework of cooperative governance (Maralack *et al.,* 2013:255). At the top is the Department of Sport and Recreation (SRSA), which is responsible for developing, coordinating and monitoring a comprehensive system by a broadly agreed national strategy. The aim of this body, through its function, is to ensure that a sports development system is in place and fully operational. Therefore, the government realises the importance of a more physically active population to improve people’s health and well-being (Strydom, 2013:980). The popularity of the sport in the country is increasingly rising, since the domestic tourism market comprises of 4% sports tourism in South Africa (City of Cape Town, 2015:1). The sport industry contributes approximately 2% to the gross national product of the country (South African Info, 2015:1). It was revealed that more than 10% of foreign visitors come to South Africa to watch or participate in sport events, with spectators accounting for 60% to 80% of these arrivals (South African Info, 2015:1). Although South Africa has a strong sporting culture, the demand for sport only focuses on a few sports,

and it does not translate into attendance or participation for the majority of the population (DEAT, 2005:62).

In 1996, the sports tourism industry was identified in the 1997 White Paper as a niche product for the Development and Promotion of Tourism in South Africa (DEAT, 1996:40). The development of this segment mostly focused on the provision of facilities, training, marketing and promotion of the sport, with sports events being the focus on achieving growth in the tourism industry. In 1997, the South African government launched a sports tourism campaign, South Africa Sports Tourism (SAST). SAST was part of a theme-based initiative through which existing sports events received promotional support. It was also realised that sporting events and recreational activities should be developed to benefit the tourism sector and that the countries' extensive recreational resources are known as main attractions to both international and domestic tourists (DEAT, 2005:62). In 2002 the SAST-campaign came to demise, nevertheless the South African Tourism (SAT) and the Department of Environmental Affairs and Tourism (DEAT) still developed a national event strategy. This strategy focused on understanding the extent and nature of the national impacts of events (DEAT, 2010:8). Once the sport and recreation industry in South Africa was considered, authorities approved the National Sport and Recreation Plan (NSRP) in 2011. The NSRP's main aim was to nurture a vibrant sports system that encourages growth and development of the sport sector and the equitable delivery of sport to all in order to ensure that South Africa is both an active and winning nation. The NSRP details the broad objectives of the White Paper on Sport and Recreation and outlines the three most important pillars of implementation as: (i) Active nation; (ii) Winning nation; and (iii) Enabling environment (Maralack *et al.,* 2013:255). It, however, becomes imperative that South Africa not exclusively focus on mega sports events. The South African sport strategy should consider all levels of participation and a range of sport types, including recurring as well as once-off events.

Sport tourism is a fast-growing industry in South Africa with the country benefitting after successfully hosting three World Cup Events (the 1995 Rugby World Cup, the 2003 Cricket World Cup, and the 2010 FIFA Soccer World Cup) (SRSA, 2012:4). The country also has world-class venues and a supporting infrastructure, which makes the hosting of a large variety of sport events possible (South African Info, 2015:1). Sport tourism can thus benefit South Africa, as sport-related activities will attract tourists from the northern Hemisphere during their winter months (Swart & Bob, 2007:376). The Sports and Event Tourism Exchange (SETE) is one of the organisations that were launched in South Africa to promote sports and tourism to position South Africa as a sport tourism destination (Exhibition Association Southern Africa [EXSA], 2013:1). Another main goal of SETE is to align the whole of Africa as a destination that has the potential of hosting international events and teams (for training as well as to participate in events), especially in off-season months (EXSA, 2013:1). In 2012, South Africa was named the world's leading sports

tourism destination. This gave impetus to the country's strategy to grow sports tourism (Gauteng, 2012:1). The chief marketing officer of South African Tourism, Roshene Singh, stated that sports tourism is a viable route towards achieving the country's tourism goals (Gauteng, 2012:1). The sports sponsorship industry is also rising in South Africa with sponsorship values increasing by 19.6% between 1990 and 2002, with the 2002 sponsorship spend totalling R2.7 Billion (Mothilall, 2012:6).

Currently, the public and private sectors are financing South African sports. In the public sector, national government (SRSA) sports budget is R 820.880 million well short of the estimated ZAR 10 billion requested by the national minister in his 2013 budget speech. The overall budget's annual strategic imperatives influence the main expenditure categories. Due to the hosting of the 2010 FIFA World Cup, expenditure for this event accounted for 44%; and 37% of the budget was spent on mass participation programmes in 2011. A small proportion of the budget (1%) was devoted to facilities as this was regarded as a local government function and the national government plays an advocacy role. The private sector sponsorship market has experienced turbulence over the past five years influenced by hosting the 2010 World Cup. For example, 2011 experienced a growth of 0.3% over 2010, while sponsorship reverted to its normal growth trajectory of 6.8% between 2011 and 2012 (Maralack *et al.,* 2013:260). Although sponsorship from sport organisations in the private sector is growing, it is not spread equally among all sports types. For example, of the 80 sports types surveyed in 2012, the top five sports types (soccer, rugby, cricket, motor racing and golf) received 70% of all sports sponsorship spend. The remaining sports types, including tennis, athletics, swimming, basketball and gymnastics, receive 30% of the total spend. Therefore, while the government seeks to provide equity in the sports system through its strategies, the private sector spends remains focused on high-profile sports. This results in many mass-based sports types struggling to survive and to share the limited resources.

Saayman and Rossouw (2008:12) indicated that an event like the 2010 FIFA World Cup earned South Africa an estimated R7, 6 billion. In corroboration with this concern, it is believed that South Africa should not only focus on hosting major events like FIFA World Cup but also host on-going sustainable events across different sports categories to drive future tourism and economic growth (Gauteng, 2012:1). This led to the inauguration of South Africa Sports Tourism (SAST) to further develop the sports tourism market, especially for the international market (Dwyer & Fredline, 2008:496). It is believed that smaller-scale events hosted in South Africa will not only have a considerable economic impact, but also lead to business entrepreneurship and profitability within the tourism industry (McIntosh, Goeldner & Ritchie, 1995:167-190; Giampiccoli *et al.,* 2015:232). Turco *et al.* (2003:223) carried out an investigation on the social-economic impact of the Comrades Marathon and Investee Cycling Tour. They found that an event such as the Comrades

Marathon generated a revenue of R20 million from 58000 tourists. Saayman, Rossouw and Saayman (2008:116) used the input-output and multiplier analysis and found that the 2008 Cape Argus Cycle Tour cost R80.7 million yet generated R131 million. Thus, this event yielded a 1.40 multiplier effect, and additionally created 1403 jobs. In 2011, The Cape Epic generated an estimated R199 million for the Western Cape economy (Department of Economic Development and Tourism [DEDET], 2011:11). The economy of Cape Town benefited by an estimated R500 million, according to Cape Town Routes Unlimited CEO, Calvyn Gilfellan (Von Ulmenstein, 2011:1). Saayman and Saayman (2012b:220) did a study to determine the economic impact of The Comrades Marathon by using the social accounting matrix (SAM). An analysis of the results indicates that the event generated approximately R137 million of which the athletes contributed R98 million, spectators R12.6 million and organisers/sponsors R26.5 million. The event also created 560 job positions.

Kotze (2006:282-293) executed a study on the Two Oceans Marathon in the Western Cape and reviewed other smaller scale events in South Africa. He found that these small-scale events had more value for the development of a country compared to larger events (Kotze, 2006:282). Saayman and Saayman (2014:154) add that it is important to examine smaller events that are not as reliant on public funding, and in most cases are privately funded. These events are more frequent because they take place on a much more regular basis and can thus be seen as more beneficial (Saayman & Saayman, 2014:154). Some of these events such as the Two Oceans and Comrades marathons, the Cape Argus Cycle Tour and the Dusi and Berg canoe marathons are hosted in some of the most popular tourist destinations in South Africa. This can help boost tourism, as sport tourists can also engage in tourism when they travel to South Africa to attend or participate in these events (Kotze, 2006:292). Also, Gibson, Kaplanidou and Kang (2012:160-170) studied six small-scale sports events and made it clear that smaller-scale sports events are consistent with a community's infrastructure. They conclude that human and cultural capital may be a feasible form of sustainable tourism development. Wilson (2006:70) furthermore argues that smaller and less visible events should be the new focus, seeing that these events produce a worthwhile gain to host communities. This will lead to long-term sustainability and extend the sports tourism calendar (Kotze, 2006:291; Giampiccoli *et al.*, 2015:230).

In a study by Giampiccoli *et al.* (2015:229-248), the authors compared sports mega-events and recurring localised sports events in South Africa to determine the contribution of tourism and economic development. They found when comparing the economic impact of three localised events (Comrades Marathon, Dusi Canoe Marathon, and Midmar Mile) and the 2010 FIFA Soccer World Cup that in a five-year period, the three events approximately equalled the impact of the mega-event on the KwaZulu-Natal province (Giampiccoli *et al.,* 2015:243). It is, however, worth mentioning that these events have been present in this Province for many years (Comrades

Marathon since 1921, Dusi Canoe Marathon since 1951 and Midmar Mile since 1973). Evidently, these events will continue for many years ahead, thus making these types of events more sustainable, less expensive and guarantees a greater long-term economic impact within the province (Giampiccoli *et al.,* 2015:243). These events are also less vulnerable to global economic downturns as these events attract a niche market of recurring international and local participants and spectators (Giampiccoli *et al.,* 2015:245). Therefore, year-to-year fluctuations will have less of an effect on the number of tourists and economic impact because a larger share of wealth will remain in South Africa. Consequently, South Africa has managed to host recurring localised events, especially endurance sport events, an aspect that was considered in more detail in Chapter 3. With this in mind, it turns out to be necessary to sketch the different types of endurance sports events and research in South Africa.

5.3 Endurance sports events and research in South Africa

The sport industry makes up a significant share of South Africa's GDP (Gross Domestic Product), which is comparable to developed countries around the world (DEAT, 2005:17). Since the end of apartheid, South Africa has positioned itself as the African destination for hosting global sport mega-events (Cornelissen, 2004:42). Additionally, South Africa is distinct in the fact that it is the only sub-Saharan African country, which can promote itself as a serious candidate for bidding and hosting mega, international sport events (Cornelissen, 2004:42). Therefore, the current South African policy and economic development strategies place much focus on the global sport mega-event market. Despite the large-scale focus on the mega event market, South Africa holds many successful recurring sports events where control is retained locally (Giampiccoli *et al.,* 2015:229). According to Giampiccoli *et al.* (2015:229), these events are beneficial as they utilise existing facilities, attract a large number of participants and spectators and have gained more media attention. Sports events in South Africa are also being used to attract more people to a destination, create a positive image of the destination and help minimise seasonal fluctuations (Saayman & Rossouw, 2008:2; Bob & Swart, 2010:72; O'Reilly, Armenakyan, Lu, Nadeau, Heslop & Cakmak, 2016:282). With these benefits of sports events in mind, it is not surprising that many countries, including South Africa, host localised endurance events. This is even truer since more destinations, including South Africa, realise that there is a greater emphasis on personal physical fitness and well-being. These events are also seen as a means to achieve specific objectives, for example raising funds for charity (Saayman & Saayman, 2012a:124). According to Morgan (2014:1), South Africa is the ideal destination to host endurance sports events, because of the country's climate and contrasting landscapes. Davie (2014:1) states that South Africa is possibly the world's toughest endurance sport destination and attracts thousands of athletes of different ages and abilities in order to compete in some of the biggest races in the world.

The country hosts some endurance events that fall into different categories. The first category refers to “on foot”. There are two world-renowned ultra-marathons in this category, namely the Comrades Marathon and the Old Mutual Two Oceans Marathon (hereafter referred to as the Two Oceans Marathon). The Two Oceans Marathon first took place in 1970 and had the primary purpose of endorsing the scenic beauty of Cape Town (Saayman & Saayman, 2012a:125). The most famous marathon in South Africa, however, has a much longer pedigree. Vic Clapham was a soldier returning from World War I and introduced the Comrades Marathon in 1921 in a way to remember his fallen comrades. The Comrades is now the largest ultra-marathon event in the world (Kruger & Saayman, 2013a:71). The second category is known as “on wheels”. South Africa hosts the world’s largest individually timed cycling event, which is the Cape Town Cycle Tour and The Momentum 94.7 Cycle Challenge hosted in Johannesburg (Kruger & Saayman, 2014:140). The Cape Town Cycle Tour was started in 1977 to raise awareness of the need for cycle paths in Cape Town (Saayman & Saayman, 2012a:124). In the same category are the two larger mountain biking races, the ABSA Cape Epic as well as Sani2C. The Cape Epic is a mountain bike race which combines the urban environment of Cape Town with the more remote sport of mountain biking. The event is seen as one of the most eminent mountain biking events in the world (Kruger & Saayman, 2014:140). The last and third category is the “on and in water” category. This category includes three prominent canoe marathons namely the Dusi Canoe, Fish Canoe and Berg River canoe-marathons. The Midmar Mile also falls in this category as it is the world’s largest open water swimming event that is held over two days (Morgan, 2014:1). The Midmar Mile began in 1973 when petrol restrictions limited travel to other events afield (Sookrajh, 2008:74; Saayman & Saayman, 2012a:124). It is clear that whether a participant enjoys participating on dry land or water; prefer wheels or feet; choose mountains or tar there is a large variety of endurance events being hosted in South Africa.

5.4 A historical overview of endurance events in South Africa

Saayman (2012:49-50) summarises the history of sport in South Africa during different time periods: The Colonial Era, Sport Apartheid Era and the Post-Apartheid Era. Each of these time periods are consequently discussed.

5.4.1 The Colonial Era: 1652

The South African sport industry is relatively young in comparison to other countries and was only established between 1890 and 1910. The main influence came from Britain (Arnaud, 2002:19). The British settlers, but especially the British army played a vital role in establishing sport in South Africa. The first official sport meeting was held in 1869 and can be seen as the start of sport tourism in the country. One of South Africa’s first sport tourists was the cyclist, Laurent Meintjies, who visited Britain in 1893, shortly after a team of South African athletes travelled to England to participate in the British Amateur Athletic Championships. According to the Human Sciences

Research Council (HSRC) report, the history of South African sport until 1982 mainly focused on big sport events, the establishment of sport bodies and achievement highlights. The first half of the ninetieth century was heralded by the Anglo-Boer War (1899-1902), followed by the First World War (1914-1918) and the Second World War (1936-1947). These three major events had a significant influence on international sport (Saayman, 2012:49).

5.4.2 Sport Apartheid: 1948-1994

The change in the white-controlled government to the National Party government in 1948, led to the establishment of national, provincial and local sport clubs (Booth, 1998:155). Sport policy and laws were formulated to enforce apartheid im all facets of sport (Booth, 1998:156). Unfortunately, this policy led to severe resistance nationally and internationally with sport boycotts that almost cut off South African sport entirely from the outside territories (Booth, 1998:158). Sport tours to and from South Africa came to a complete standstill. In the early eighties, the National Government realised that change was needed to ensure justice and fairness in sport and it was suggested that some of the country's most central apartheid laws to be drastically changed. Apartheid in sport and within South Africa ended in 1994 when the African National Congress (ANC) took over as the new government. An entirely new sport consideration was launched which focused on optimal integration of democracy, fairness and justice (Allison, 1993:156).

5.4.3 Post-apartheid 1994 and onwards

After 1994, South African sport had gone into a new era. This era comprised six major changes within the sport industry (Cornelissen, 2004:44). Firstly, South Africa had unrestricted movement and open access to participate or attend anywhere in the world. Secondly, sport professionals were initiated in most sports, seeing that more athletes could see sport as their main income. The third aspect was the fact that many more participants were competitive and participation numbers in events increased drastically. South Africa was also introduced into the World Championships. Fourthly, sport administrators and officials became professional. In the fifth place, sport attracted more sponsorship, and many sport codes became brands such as the Springboks (the SA national rugby team) and the Proteas (the SA national cricket team). Lastly, the new era gave way to sport tourism, which was a previously unknown phenomenon in South Africa. This led to sport becoming one of the sectors of the tourism industry (Cornelissen, 2004:44). The most important facet of this aspect is the fact that people travelling for sport increased substantially, with more sport events, more spectators and sport participants travelling to and from South Africa. It is clear that sport and sport tourism only started to develop after 1994. However, the fact that South Africa was banned from taking part in many international events led to the creation of many localised sport events. Most of these localised events are endurance sport events, which despite the Apartheid-era, showed signs of annual growth and expansion. This led to an array of

endurance events held across the country (Giampiccoli *et al.,* 2015:229). These different endurance events are reviewed in the following section.

5.5 Endurance events currently held in South Africa

Figure 5.2 highlights some of the biggest and well-known endurance events currently held in South Africa. It is important to note that the endurance event market is not limited to these events and that these events were chosen only for discussion purposes. These events are selected based on the large number of participants they attract and their popularity in the country. Each of these events will be evaluated according to the number of participants, history, and uniqueness.

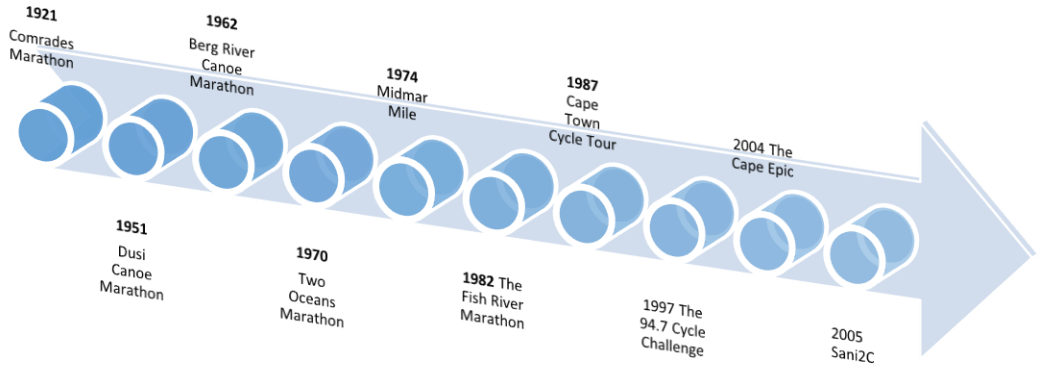


Figure 5-2: The timeline of South African endurance events

Source: The authors own compilation

5.5.1 The Comrades Marathon

The Comrades Marathon is a world-renowned ultra-marathon of 86 kilometres (56 miles) and takes place in KwaZulu-Natal between the cities of Pietermaritzburg and Durban (Kruger & Saayman, 2013a:71). The Comrades Marathon is seen as a South African national treasure and attracts thousands of runners, spectators and television viewers each year (Kruger & Saayman, 2013a:71). The Comrades was run for the first time on 24 May 1921 (Empire day) and with an exception of a break during World War II, it has taken place every year. In 2017, the event celebrated its 92nd race and to date over 300 000 runners have completed the race, making it the world's largest and oldest ultra-marathon race.

5.5.2 The Dusi Canoe Marathon

Canoeing is popular in South Africa and led to the formation of the Unlimited Dusi Canoe Marathon, which is arguably the world's most prestigious canoe (or rather, kayak) three-day race,

taking place between Pietermaritzburg and Durban in KwaZulu-Natal (Kruger & Saayman, 2013b:1158). Ian Player organised the first Dusi Canoe Marathon to start on 22 December **1951**. The race had a non-stop and no limit format. Eight paddlers entered the race, but only one paddler finished the race in a time of six days, eight hours and 15 minutes. In 1956, the event became a three days race over fears for paddler safety when paddling at night. Today the Dusi Canoe Marathon starts at the Natal Canoe Club at Camps Drift and pulls about **2000** competitors annually.

5.5.3 The Berg River Canoe Marathon

In **1962** the first Berg River Canoe Marathon was hosted. The four-day event is held in the winter month of July. The event route is from Paarl to Piketberg and from there it bends west across the coastal plain to Velddrif, covering 230 kilometres. It is regarded as the longest canoe marathon in the country and attracts more than **200** paddlers each year (Berg River Marathon, 2014:1).

5.5.4 The Two Oceans Marathon

The inaugural event took place in **1970,** and it is proclaimed as "the world's most beautiful marathon". The Two Oceans Marathon is a 56-kilometre ultra-marathon and 21-kilometre half-marathon that is annually held in Cape Town on the Saturday of Easter Weekend. The event attracts 9200 runners for the ultra-marathon and over 16000 for the half-marathon (Kotze, 2006:287). The event provides a significant economic injection for the economy of Cape Town (Kotze, 2006:291).

5.5.5 The Midmar Mile

The most popular open-water swimming event in South Africa is the Halfway Midmar Mile, which was first held in **1974.** It was officially recognised as the "World's Largest Open Water Swimming Event" by the Guinness Book of World Records (Kruger, Saayman & Ellis, 2011:60). The event has been held at the Midmar Dam located north of Pietermaritzburg in KwaZulu-Natal and in 2009 the event attracted **13 755** finishers (Kruger *et al*., 2011:60). Considering the size of the event, it gives a good representation of the open water swim market in South Africa.

5.5.6 The Fish River Marathon

The first Fish River Marathon took place in **1982** with 77 competitors taking part. Dave Alexander and Knut Olav Bang initiated the event and today the race draws some of the world's marathon paddlers. The event is held over two days starting in the Eastern Cape, Cradock and attracts an average of **1500** paddlers annually (Hansa Fish River Canoe Marathon, 2014).

5.5.7 Cape Town Cycle Tour

The Cape Town Cycle Tour (previously known as the Cape Argus Pick n Pay Cycle Tour) is hosted in Cape Town and is South Africa's largest cycling event as well as the largest individually timed cycle race in the world (Streicher & Saayman, 2010:121).The first ever Cape Town Cycle Tour was organised in **1987** by Bill Mylrea and John Stegmann to draw attention to the need for cycle paths in South Africa. The Cape Town Cycle Tour is part of five cycling events taking place over a period of one week. Starting a week before the Cycle Tour, these other events include: Tricycle Tour (for children under 6 year of age), Junior Cycle Tour (kids between 6 and 12 years of age), MTB Challenge (Mountain bike race) and the Giro del Capo (5 day professional stage race, the last stage of the race being the Cycle Tour). The race consists of amateur and professional cyclists while the number of foreign cyclists is increasing. In 2015, the event attracted approximately 35000 cyclists from around the world. These great many cyclists give a good representation of road cyclists in South Africa (Kruger, Myburgh *et al.,* 2016:380).

5.5.8 The 94.7 Cycle Challenge

The first edition of this mass-participation race was held in **1997** and is seen as the world's second largest timed cycle race. The race is recognised by the cycling's world governing body, the UCI, as a model to the cycling world. Today the event is held every third Sunday of November in Johannesburg, with between **20 000 and 30 000** participants competing in the 94.7km course every year. In 2012, a "fun ride" was introduced and took place the day before the main event (Telkom 94.7 Cycle Challenge, 2016:1).

5.5.9 The Cape Epic

The Absa Cape Epic is one of South Africa's biggest endurance mountain bike events attracting over 1300 participants (ABSA Cape Epic, 2016:1). This mountain bike race is held each year in the Western Cape with the first race being held in **2004**. The race covers about 700 kilometres and lasts eight days that consist mostly out of gravel paths, rocky uphill, river crossings, technical downhill, and routes in the forest (ABSA Cape Epic, 2016:1). The event mostly attracts elite professional mountain bikers from around the world. An average of **1300** individuals makes up about 650 teams (of two) taking part each year.

5.5.10 The Sani2C

February 2005 saw the inaugural Sani2C, which was highly successful and in 2017, celebrated its 13th anniversary. This event has been voted by different publications as the best mountain bike race in the country, due to a challenging mix of surfaces, climbs and descents in the Drakensberg Mountains and sweeps all the way down to the KwaZulu-Natal coast at Scottburgh. The event attracts 1400 trail riders each year that takes part in three different events (distances) (KAP Sani2C, 2016:1).

Evidently, there are a considerable number of endurance events currently held in South Africa. Each of these events has a distinct history and a diverse market of participants that take part in these events. The profiles of the different endurance participant markets, as identified in previous research, are analysed in the following section.

5.6 The profile and motives of various endurance athletes participating in South African events

As Murphy and Bauman (2007:193) recommend, research should seek to establish a more in-depth demographic profile of endurance participants, in particular, those participating in the event for the first time and those who were previously inactive. Previous research about typical endurance athletes indicated that these individuals were mostly Caucasian, had a bachelor's degree or higher and earned an income of $75 000 (approximately R 106 70 00) and more annually. These athletes also spend a significant amount of time training for the event and planned to participate in another endurance event within the next three months (Rauter, 2014:7).

5.6.1 Profile of South African endurance sport athletes

In a South African context, studies focusing on smaller scale endurance sport events from different perspectives have emerged. **Motivation to participate** has been well researched and centre around various endurance events. Kruger *et al.* (2011:59-79) identified the motivation of participants to take part in an open-water swimming event (Midmar Mile). The authors also determined the motivation of participants to take part in the Dusi Canoe Marathon (Kruger & Saayman, 2013b:1158-1173). The same authors compared the motives of the road cyclists and mountain bikers to participate that participated in the Cape Argus and Cape Epic respectively (Kruger & Saayman, 2014:137-152). Kruger and Saayman (2013a:71-92) furthermore looked at participants' motives to compete in the Comrades Marathon. Fairer-Wessels (2013:83-103) in a similar study observed the motivation and behaviour of Comrades Marathon participants. Myburgh, Kruger and Saayman (2014a:117-134) researched the motivation of triathletes taking part in Ironman South Africa. Most recently Kruger, Myburgh and Saayman (2016:380-403) studied the motives to participate in the Cape Town Cycle Tour (as mentioned previously known as the Cape Argus). Collectively the studies that focused on the motives of endurance sport participants found that endurance athletes' main motivation to participate is for the *challenge* and *intrinsic achievement*. The **economic impact** is another field that had been thoroughly researched within the sport tourism literature. Kotze (2006:282-293) investigated the impact of the Two Oceans Marathon on the city of Cape Town. Turco *et al.* (2003:223-239) investigated the impact of different events regarding size, national and international exposure at a municipality level in Durban. Saayman *et al.* (2008:100-122) examined the economic impact of the Cape Argus Pick n Pay Cycle Tour, while the most recent study was done by Giampiccoli *et al.*

(2015:229-248). The authors compared global sport mega-events and recurring localised sport events in South Africa. Jointly the economic impact studies show the importance of smaller-scale events as a tourism development tool. Each of the events provided a large economic injection for the economy of the host destination. The economic impact research also found that year-to-year fluctuations of these sport events have much less long-term effects on tourism numbers or economic development. Moreover, a much larger share of the wealth remains in South Africa.

Closely related to economic impact is **spending.** Saayman and Saayman (2012a:124-138) studied the determinants of spending in three major sporting events in South-Africa, which included the Two Oceans Marathon, The Argus Cycle Tour and Midmar Mile. Kruger, Saayman and Ellis (2012:1203-1227) examined the determinants of visitor spending of the participants and spectators at the Two Oceans Marathon. Kruger, Botha and Saayman (2012:108-122) considered the relationship between visitor spending and repeat visits through an analysis of spectators at the Two Oceans. Kruger and Saayman (2015:63-82) surveyed the differences in spending when running the two different routes (known as up and down runs) of the Comrades Marathon. The studies that focused on spending of endurance athletes collectively found that different sport events have different determinants of spending. The spending of endurance participants is mostly depended on socio-demographic, behavioural and motivational factors. Within the smaller-scale endurance event categories, **other research topics** have also emerged. Sookrajh (2008:66-86) focused on the relationship between nature-based sports events and the physical environment by using the Midmar Mile as a case study. This study revealed that natural environments provide ideal locations for sport tourism events and simultaneously sport events provide ideal opportunities for environmental education. Kruger and Saayman (2012:63-77) focused on the factors that contribute to creating a memorable spectator experience at the Two Oceans Marathon. This research identified that *Amenities and Marketing* was the most important aspect for creating a memorable spectator experience and highlighted the important role spectator's play in sport tourism. Myburgh, Kruger and Saayman, (2014b:1010-1039) compared first time and repeat triathletes that participate in Ironman South Africa. The research presented clear and significant differences between first time and repeat triathletes in terms of their demographic profile, behaviour and participation motives. This supports the notion that sport participants cannot be regarded as a homogenous target group. Kruger, Saayman and Hallmann (2016:95) in their research about mountain bikers' intention to return to participate in an event, found that the motive *dedication* and the variable country influenced the intention to return visits.

Myburgh, Kruger and Saayman (2014c:1-22) also applied age based market segmentation on triathletes. Results revealed that age, as a segmentation variable is a successful way to segment triathletes. The study also interestingly found that a triathlon is a life-span sport and older participants can extend their participation into their late 60s and early 70s. Lastly, Burnett

(2010:72-84) looked at sport-related research trends in South African universities. The author found that in a South African context inter-institutional collaboration is a unique body of knowledge that is as much grounded in theory as in the context for which it should bear practical relevance. The question, however, arises where it all started. The next section gives an overview of the history of endurance events in South Africa.

The main findings of the most notable studies conducted among endurance sport athletes in South Africa are summarised in Table 5.1. Please note that the profile of the athletes are based on the study which are highlighted in bold.

Table 5-1: Demographic profile and behaviour of endurance participants in South Africa

Endurance event	The Midmar Mile	The Cape Town Cycle Tour	The Two Oceans Marathon	Comrades Marathon	The Absa Cape Epic	The Unlimited Dusi Canoe Marathon	Ironman South Africa
Author(s)	**Kruger *et al.* (2011:70)**	Streicher and Saayman (2010:126)	**Kruger, Saayman *et al*. (2012:1211)**	Saayman and Saayman (2012b:220)	Kruger, Saayman *et al.* (2016:100)	**Kruger and Saayman (2013b:1163)**	**Myburgh (2014:135)**
	Saayman and Saayman (2012a:133)	Saayman and Saayman (2012a:133);	Saayman and Saayman (2012a:133)	**Kruger and Saayman (2013a:83)**	**Kruger and Saayman (2014:145)**		Myburgh *et al*. (2014a:127)
		Kruger and Saayman (2014:145)	Kruger, Botha *et al.* (2012:119)	Kruger and Saayman (2015:73)			
		Kruger, Myburgh *et al.* (2016:394)					
Socio-Demographic Information							
Gender	Male (59%); Female (41%)	Male (74%); Female (26%)	Male (65%); Female (35%)	Male (73%); Female (27%)	Male (89%); Female (11%)	Male (85%); Female (15%)	Male (78%); Female (22%)
Average Age	32 years	42 years	39 years	42 years	39 years	35 years	39 years
Home language	English (79%)	English (59%); Afrikaans (39%)	English (58%); Afrikaans (30%)	Afrikaans (46%); English (37%); Other (18%)	English (44%); Afrikaans (25%); Other (31%)	English (59%)	English (59%); Afrikaans (27%); Other (14%)
Province of residence	KwaZulu-Natal (59%); Gauteng (30%)	Western Cape (48%); Gauteng (25%);	Western Cape (42%); Gauteng (29%)	Gauteng (40%); KwaZulu-Natal (16%);	Outside RSA boarders (43%); Gauteng (25%); Western Cape (20%)	KwaZulu-Natal (75%); Gauteng (14%)	Gauteng (35%); Outside RSA boarders (28%)
Marital Status	Single (47%); Married (44%)	Single (64%)	Married (51%)	Married (64%)	Single (58%)	Married (51%)	Married (56%); Single (23%)

Level of Education/ Occupation	Diploma/Degree (30%); Student (31%) Professional (26%)	Diploma/Degree (37%); N/A	Diploma/Degree (36%); Management (13%); Professional (26%)	Diploma/Degree (34%); N/A	Postgraduate (32%); Professional (29%)	Diploma/Degree (36%); Professional (30%); Management (11%); Self-employment (11%)	Diploma/Degree (36%); Professional (31%)
Behavioural Patterns							
Average size of travelling group	6 people	3.49 people	2.2 people	5.96 people	3.34 people	4 people	2.74 people
Average number of previous participation	4 times	4.25 times	3 times	5 times	1.52 times	7 times	1.86 times
Average spending per person	R1 506.33	R3 959.95	R4 157.28	R7 520.00	R20 181.32	R6 772 .00	R19 595.00
Average length of stay	1 night	5 nights	5 nights	4.30 nights	8 nights	1 night	5.27 nights
Initiator of participation	Self (46%)	Self (48%)	N/A	Self (62%)	Self (45%)	N/A	Self (77%)

Source: The authors own compilation based on the existing literature.

The following summary can be made from the different endurance sport participant profiles from the information set out in Table 5.1:

- Most of the participants that take part in endurance events are male, with female participants being the minority in all of the earlier said endurance event studies. It is also confirmed by international studies on endurance athletes that endurance events attract more male participants than females as is evident in Kaplanidou and Gibson (2010:169), Hallmann and Breuer (2010:227), Getz and McConnell (2014:72) as well as Fotiadis, Vassiliadis and Yeh (2016:237). Other studies did however find that the gender of endurance athletes was evenly distributed between males and females (Beaton, Funk, Ridinger & Jordan, 2011:132; Ridinger, Funk, Jordan & Kaplanidou, 2012:132);
- When looking at the average age of endurance participants, it is clear that in comparison with other athletes the participants in the endurance market is relatively older, with the average age being between 32-42 years. This outcome of participants being of older age when an endurance athlete is supported by Taylor and Shanka (2008:949); Hoffman and Wegelin (2009:2191); Ritchie, Tkaczynski and Faulks (2010:418); Beaton *et al.* (2011:132); Ridinger *et al.* (2012:132); as well as Fotiadis *et al*. (2016:237);
- The oldest participants (average of 42 years) take part in the Cape Town Cycle Tour. This corresponds with research on international cyclists (Getz & Andersson, 2010:476) and the Comrades Marathon, which supports research done by Rauter (2014:10) on marathon runners;
- English is the home language of most of the endurance participants, with the exception of the Comrades Marathon participants who are mostly Afrikaans. The Comrades Marathon, The Cape Epic as well as Ironman South Africa also have significant percentages of participants who speak foreign languages, thus implying a significant number of international participants;
- KwaZulu-Natal, Gauteng and the Western Cape are the provinces that are the most represented at all of the events. This can be because most of these events take place in the KwaZulu-Natal and Western Cape provinces. Also, Gauteng is seen as the economic hub and high-income province of the country. The Cape Epic and Ironman South Africa events also attract a large number of participants from outside the South African borders;
- The majority of endurance participants are married, which corresponds with the endurance studies done by Rauter and Doupona Topič (2014:912), Getz and Andersson (2010:476), Funk, Jordan, Ridinger and Kaplanidou (2011:258), Beaton *et al.* (2011:132) as well as Getz and McConnell (2014:72). Endurance participants are also highly qualified with either a diploma or degree. This corresponds with studies done by Getz and Andersson (2010:476) as well as Hallmann and Breuer (2010:227);
- Endurance participants travel in medium-sized groups of between two to six people. The Midmar Mile attracts the largest groups, made up of six persons;

- The number of times endurance athletes have previously participated in an event, varies between two to four times. Cape Epic participants have previously participated in the least number of races (1.52 times) while the Dusi Canoe Marathon participants have previously participated in the most races (7 times before);
- The average spending differs, although most of the events have a high average expenditure, which is supported by international authors such as McGehee, Yoon and Cárdenas (2003:315) and Wicker, Breuer and Pawlowski (2010:214). The participants of the Midmar Mile have the lowest spending, while participants in the Cape Epic and Ironman South Africa spend the most money during their stay in the area where the event is held;
- Most participants spend one to five nights in the event area, with Cape Epic participants staying the most nights (8 nights) in the area; and
- The endurance participant mainly initiates participation in the events by him/herself.

The main findings that was summarised in this section above can be compared to a study of Ferreira (2015:196-197), in which a critical assessment was done of sport consumption at endurance events in South Africa. The following key conclusions regarding the profiles of endurance sport participants were:

- Cycling and marathon participants are mostly English speaking married males, and in their late thirties and early forties. These participants are well educated and have professional careers. They mostly originate from the Western Cape province and are willing to spend the generous amount on travelling expenses associated with their event participation;
- In correlation with previous research, it was found that older cyclists and marathon runners tend to stay involved with the sport, irrespective of age;
- Considering the behaviour of all the endurance sport participants, it is found that these participants will visit tourism attractions in the event area although their sport and holiday destinations mostly differ. It is, however, important to note that the study found that participants are willing to alter their travelling according to their sport activities and participation; and
- It was also found that endurance sport participants engage in a variety of sport events to enhance their skills and capabilities.

5.6.2 Motivation of South African endurance sport participants

An array of studies that surveyed the motives of endurance participants in South Africa had been done. The motives of different endurance participants in South Africa are reviewed in Table 5.2. Please note that the profile of the athletes are based on the study which are highlighted in bold.

Table 5-2: The motives to participate in different South African endurance events

Endurance event	The halfway Telkom Midmar Mile	The Pick n Pay Cape Argus Cycle Tour	The Old Mutual Two Oceans Marathon	Comrades Marathon	The Absa Cape Epic	The Unlimited Dusi Canoe Marathon	Ironman South Africa
Author(s)	**Kruger *et al.* (2011:70)**	Streicher and Saayman (2010:126)	**Kruger, Saayman *et al*. (2012:1211)**	Saayman and Saayman (2012b:220)	Kruger, Saayman *et al.* (2016:104)	**Kruger and Saayman (2013b:1163)**	**Myburgh (2014:110)**
	Saayman and Saayman (2012a:133)	Saayman and Saayman (2012a:133)	Saayman and Saayman (2012a:133)	**Kruger and Saayman (2013a:83)**			Myburgh *et al.* (2014a:127)
		Kruger and Saayman (2014:145)	Kruger, Botha *et al.* (2012:119)	Kruger and Saayman (2015:73)	**Kruger and Saayman (2014:145)**		
		Kruger, Myburgh *et al.* (2016:394)					
MOTIVES TO PARTICIPATE IN THE EVENT							
	Intrinsic achievement	*Event attractiveness*	*Intrinsic achievement and affiliation*	*Intrinsic achievement*	*Event novelty*	*Intrinsic achievement*	*Intrinsic achievement and control*
	Socialisation and escape	*Escape and relaxation*	*Socialisation and escape*	*Socialisation and escape*	*Achievement*	*Enjoyment and adventure*	*Group affiliation and socialisation*
		Personal motivation		*Exploration and competitiveness*	*Teamwork*	*Event attractiveness*	*Event novelty*
				Family togetherness			*Health and fitness*
				Commitment			*Challenge*
							Respect and risk
							Inner vie

Source: The authors own compilation based on the existing literature.

The main motives found in previous South African endurance participant studies can be compared with other studies, which found similar motives for endurance participants. The motives include ***intrinsic achievement*** that was found by Gill, Gross and Huddleston (1983:5); Weiss and Duncan (1992:178); Masters and Ogles (1995:69); Croft, Gray and Duncan (1999:3); Jamber (1999:353); Case and Branch (2001:118); McDonald, Milne and Hong (2002:105); Grand'Maison (2004:87); Gillett and Kelly (2006:239); LaChausse (2006:305); Lee, Graefe and Li (2007:360), Tribe Group (2009:26); Streicher and Saayman (2010:128); Galloway (2010:523), O'Connell (2010:53); Lovett (2011:52); Buckley (2012:961); Galloway (2012:260) as well as Lamont and Kennelly (2012:244). ***Fun and entertainment*** was identified by Brodkin and Weiss (1990:260) and Gillett and Kelly (2006:241) while ***socialisation, escape and relaxation*** was found by researchers such as Schneider and Backman (1996:140); Kim, Borges and Chon (2006:961); Lee *et al*. (2007:360); Galloway (2010:523), O'Connell (2010:53), Galloway (2012:260), Buckley (2012:961); Lamont and Kennelly (2012:245) as well as Wicker, Hallmann, Prinz and Weimer (2012:22). ***Event attractiveness/novelty*** as a motive to participate in sport was revealed by authors such as Streicher and Saayman (2010:128). ***Achievement*** was revealed by Rauter and Doupona Topič (2010:37) as well as Getz and McConnell (2011:328) while ***challenge*** was identified by Grand'Maison (2004:87); Tribe Group (2009:26) and Smith (2010:4), while ***respect and risk*** was observed by Smith (2010:21).

The main motives as seen in the above section can be compared to a study done by Ferreira (2015:196-197). The author made a critical assessment of sport consumption at endurance events in South Africa. Endurance participants have the desire to be self-complete, which is evident with the two most important motivational factors being *challenge* and *intrinsic achievement.* These two motivational factors were also found in most of the previous endurance studies. *Challenge* was the most influential motivational factor for all endurance sport participants to take part in endurance events. *Intrinsic achievement* was the most influential factor for marathon runners, road cyclists, mountain bikers as well as open-water swimmers.

The findings from the previous research presented clear and significant differences between first time and repeat triathletes in terms of their demographic profile, behaviour and participation motives. This supports the notion that endurance sport participants cannot be regarded as a homogenous target group.

5.7 Conclusion

In South Africa similar to other developing countries, the hosting of sport events is a critical part of a broader tourism strategy. However, focus is mainly kept on mega-events. It becomes necessary that alliances between sport and tourism sectors be formed where resources and the information are shared among stakeholders. This will help identify opportunities and mechanisms that will maximise tourist benefits of sports activities and events. Unfortunately, the South African sport tourism strategy/policy is currently not coordinated to ensure proactive growth. This is a difficult task seeing that South Africa cannot rely on a single policy but requires a multi-scaled set of projects consisting of heterogeneous combinations of strategies, and multiple role-players that are situated in a variety of institutions operating at various geographical scales. South Africa also faces different challenges with regard to the growth of sport tourism. Some of these difficulties include that policy processes. In addition, outcomes are not aligned, and there is a lack of physical education in schools. There are also an imbalance of sport participation and not strong enough linkages between industries. One of the most important linkages is the link between sport and tourism because it will lead to more income, decreased seasonality, ensure economic growth across geographic boundaries, cause development of infrastructure and improve people's perception of the country. In observing the current state of sport tourism in South Africa, the development of sport events has become a priority as the Government realised the importance of an active population in order to improve people's health and well-being. There has been a growth in both domestic and foreign travel for sport tourism reasons, and the country now features world-class venues and supporting infrastructure that makes a larger variety of sport events possible.

Endurance events in South Africa are not only rich in history but can also be seen as one of the most well-liked past-times of many South Africans. The country has a variety of landscapes and a climate that is ideal for these types of events. Recurring endurance events can be attributed to the fact that these events present a truly authentic and unique experience for each event is different regarding duration, setting, management, route and the type of participant the events attract. Endurance events include marathons, mountain biking, canoeing, road cycling, and triathlons. These events are seen as an ideal way to create a positive image of South Africa and attract more international tourists, as well as to motivate more local tourist to travel in their country. Several studies have been executed on endurance participants that take part in these events, including studies regarding motivation to participate, spending, economic impact as well as a variety of other topics. Currently there is, however, a gap in endurance sport research in South Africa, because none of the studies had specifically focused on the commitment of endurance athletes. Previous research had focused on the differences between first and repeat participants and how repeat participation represents

loyalty towards an event. The factors that contribute to the commitment of endurance athletes are however still unknown and this gap will be filled by this current study. Reflecting on the profile of different endurance athletes who have participated in some of the most well-known events in the country, the following can be concluded; these athletes are older, well-educated, mostly married, have high incomes and mostly originate from Gauteng, Western Cape and the KwaZulu-Natal provinces. Furthermore, these participants tend to stay for a few nights in the event area, have high average spending and will most likely participate in the event more than once. These participants are the own initiators of their participating and are primarily motivated by intrinsic *achievement and challenge*. In order to compare the results of relevant previous research studies with the current results, Chapter 6 is divided into two parts. The first part focuses on the methods that were used for data analysis, while the second part presents the results of the descriptive statistics.

6 METHOD OF RESEARCH AND DESCRIPTIVE RESULTS

Commitment is what transforms a promise into reality – Abraham Lincoln -

6.1 Introduction

This chapter aims to examine the relevant methodological considerations, which the study applied and to present the descriptive results of the research as obtained from the survey. In the first instance, the chapter looks at the research framework developed from the previous literature as discussed in Chapters 2 to 5. The survey applied a questionnaire design based on the discussion in Chapters 2 to 5 and which is again discussed in detail in the first part of this chapter. Secondly, a discussion follows on the sampling method and survey. The third stage forms the last part and presents the descriptive results. The results are of particular importance as it shows how the research framework was tested to design the final framework to be presented in Chapter 8.

6.2 Research framework and development of questionnaire

The preceding literature chapters were crucial in the development of the questionnaire (see Appendix A), which was based on the research framework for the sport commitment of endurance athletes in South Africa as applied in the study. Figure 6.1 illustrates this research framework and shows where the aspects included in the framework (from the existing literature) were measured in the questionnaire. The next section consequently discusses the framework in detail.

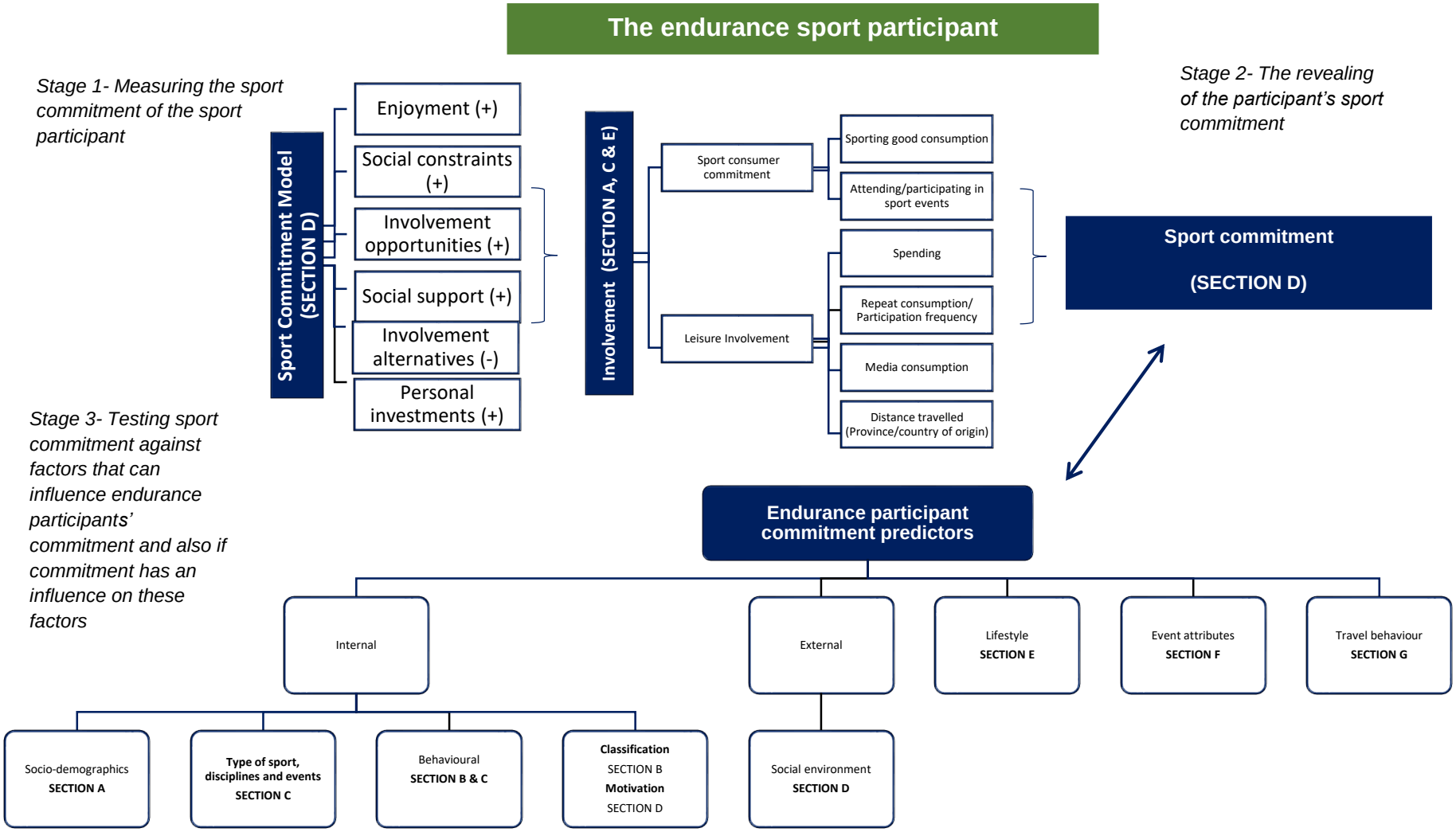


Figure 6-1: Research framework of endurance sport commitment

Source: Researchers' complication based on the existing literature

As illustrated in Figure 6.1, the research framework starts with the sport participants under investigation in this study i.e. endurance sport athletes in South Africa. This research framework was used to develop the questionnaire, which was completed online by various endurance athletes. To test commitment, a three-stage process was followed. The *first stage* included the measurement of sport commitment, which was done by applying two relevant theories obtained from the literature namely the Sport Commitment Model **(Section D in the questionnaire)** and Involvement **(Sections A, C, and E)**. Chapter 4 indicated an array of models/theories that can measure or determine sport commitment. For the purpose of this study, the two theories mentioned above is regarded as the most appropriate to apply in the context of the research and the most applicable from the perspective of an endurance sport participant. The Sport Commitment Model has six variables to measure sport commitment, which include enjoyment, social constraints, involvement opportunities, social support, involvement alternatives and personal investments (c.f. 4.6). Closely related to the Sport Commitment Model is involvement, which is also frequently used as a way to measure sport commitment. The two most important variables of involvement are sport consumer commitment as well as leisure involvement. Sport consumer commitment is mostly measured through the consumption of sport goods (e.g. spending money on sport equipment, accessories and clothes) **(Section E),** and through the attendance and participation in sport events **(Section E)**. Leisure involvement, on the other hand, includes spending **(Section E)**, participation frequency **(Section C)**, media consumption **(Section E)** as well as the distance travelled to participate in events **(Section A)**.

The *second stage* sought to determine the main factors that lead to sport commitment. However seeing that the commitment of endurance participants and the factors that influence this commitment formed the goal of the framework, further testing is required. This led to *stage three* where sport commitment was tested against the participant of endurance sport's key commitment predictors (variables). These predictors can have a positive or negative influence on commitment. However, commitment can also influence these variables either positively or negatively. These predictors were divided into five categories. Firstly, there are the internal predictors that include the demographic characteristics of participants **(Section A)**, motivation and classification of the type of endurance athlete **(Sections B and D)**, preferred type of sport, disciplines and events **(Section B)** as well as behaviour such as when participants decide to register for an event **(Section B and Section C)**. The second sub-category involves external predictors, which are the social environment (the social support or constraints from athletes' peers, family and friends) **(Section D)**. The third category is lifestyle (how athletes adapt their lifestyle in terms of different aspects such as fitness, travelling, and media consumption) **(Section E)**. The fourth category is the event itself **(Section F)** and the last category, travel

behaviour **(Section G)**. It is, however, important to note that certain aspects and factors overlap. This is crucial to consider during the testing of the different aspects. The premise of the research framework is that if these five categories are tested in combination with the measurement of sport commitment, it will ultimately lead to endurance sport commitment. Statistical analysis will also help to determine which of the variables has the strongest influence on commitment, which in return may result in several benefits for sport events and sport tourism in the country. These benefits include loyalty and continuous participation, decreasing sport withdrawal and increasing overall healthier lifestyle, effective sport marketing, sport event enhancement and an increase in sport tourism. The following section uses the different variables in the research framework to explain the development of the questionnaire.

6.2.1 Questionnaire development within each stage of the research framework

Table 6.1 summarises the various concepts and variables included in the questionnaire based on the research framework. The type and nature (continuous, categorical or Likert-scale) of each question are indicated as well as the corresponding section(s) in the questionnaire. The summary shows that each component included in the research framework (Figure 6.1) was measured in the questionnaire.

Table 6-1: Questions included in questionnaire based on research framework

Aspect(s) in the research framework	Section(s) in questionnaire	Type of question(s)	Applicable variable(s) included and adapted		Question number(s) measuring variable(s)
The Sport Commitment Model	**Section D**	5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)	Commitment		**Questions 22.20-22.22**
			Enjoyment (+)		**Questions 22.1 & 22.2**
			Social constraints (+)		**Questions 22.17 & 22.18**
			Involvement opportunities (+)		**Questions 22.6-22.16**
			Social support (+)		**Question 22.19**
			Involvement alternatives (-)		**Question 22.5**
			Personal investments (+)		**Questions 22.3 & 22.4**
Involvement	**Imbedded in various sections**	Various depending on the nature of the question [open, close-ended or 5-point Likert scale of extent (1=not at all, 2=a little, 3= to a moderate extent, 4- = a lot and 5=totally)]	Sport consumer	Sporting good consumption	**Questions 24.11-24.12**
				Attending/participating in sport events	**Questions 24.5 & 24.21**
			Leisure involvement	Spending	**Questions 23 (A-J)**
				Repeat consumption/ participation frequency	**Question 16-21**
				Media consumption	**Questions 24.16 -24.20 & Questions 24.22-24.23**
				Distance travelled (Province/Country of origin)	**Question 4**
Internal predictors	**Sections A**	Various depending on the nature of the question (mostly categorical)	Socio-demographic characteristics	Place of residence	**Question 4**
				Marital status	**Question 5**
				Gross annual income	**Question 6**
				Highest level of education	**Question 7**
				Field of profession	**Question 8**
				Job title	**Question 9**
				Gender	**Question 1**
				Year of birth	**Question 2**
				Home language	**Question 3**
	Section B	Various depending on the nature of the question (mostly categorical)		Type of endurance sports	**Question 10a**

			Type of sports, disciplines and event participation	Primary endurance sport	**Question 10b**
				Type of sport events	**Question 11**
				Category of events	**Question 12**
	Section B	Categorical	Classification	Type of endurance athlete	**Question 13**
	Section D	5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)	Motivation	Main reasons why participants continue their participation (Also seen as a commitment predictor- Involvement opportunities)	**Questions 22.6-22.16**
	Section C	Categorical	Behaviour	Best age to start participating in endurance events	**Question 14**
				Best age to stop participating in endurance events	**Question 15**
				Number of hours spent on training	**Question 16**
				When do you register to participate	**Question 21**
External predictors	**Section A and C**	Various depending on the nature of the question (mostly categorical) and a 5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)	Social environment	Social support	**Question 22.19**
				Social constraints	**Question 22.17 & 22.8**
				Financial Influences	**Question 6 & 22.4**
Lifestyle adaption	**Section E**	23 statements on a 5-point Likert scale of extent (1=not at all, 2=a little, 3= to a moderate extent, 4- = a lot and 5=totally)	Lifestyle	Healthy lifestyle	**Questions 24.1-24.4**
				Event & travel lifestyle	**Questions 24.5-24.7 & 24.21**
				Training lifestyle	**Questions 24.8 & 24.9**
				Social support lifestyle	**Question 24.10**
				Sport consumption lifestyle	**Questions 24.11, 24.12 & 24.14**

				Media consumption	**Questions 24.16-24.20 & 24.22-24.23**
				Philanthropy lifestyle	**Questions 24.13 & 24.15**
Event attributes	**Section F**	20 statements measured on a 5-point Likert scale of importance (1=not at all important, 2=slightly important, 3=moderately important, 4=important and 5=extremely important)	Event attributes important when selecting an endurance event to participate in	Event location	**Questions 25.1, 25.3, 25.5 & 25.6**
				Event standing	**Questions 25.4, 25.7-25.9 & 25.15**
				Event characteristics	**Questions 24.12-24.14, 24.16, 24.18 & 24.20**
				Event familiarity	**Questions 25.17 & 25.19**
				Event affordability	**Question 25.2**
				Event cause	**Questions 25.10**
				Tourist preference	**Question 25.11**
Travel behaviour	**Section G**	10 travel behaviour statements measured on a 5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)	The influence of commitment on travel behaviour	Family and Friends	**Question 26.1**
				Tourist attractions	**Questions 26.2-26.3 & 26.8-26.9**
				Travel opportunity	**Questions 26.4 & 26.7**
				Destination preference	**Questions 26.4 & 26.6**
				Length of stay before and after the event	**Questions 27 & 28**

Source: Researchers' own complication based on the questionnaire

Table 6.2 shows the various questions asked and the various studies consulted as discussed in the literature review chapters. Most questions have been tested in different studies, applied to different areas and on different types of athletes. It is important to note that some of the questions asked were adapted to suit the endurance athlete market as well as the South African context. Additionally, the endurance sport industry, as well as the various event organisers that formed part of the research, gave valuable insight into which questions would be most suitable. The following steps were followed to design and validate the questionnaire:

Step 1 Translational validity: content validity and face validity

Content validity was undertaken to determine whether the content of the questionnaire was appropriate and relevant to the study purpose. The content validity gives an indication if the questions that are asked, reflect a complete range of the attributes under study (DeVon, Block, Moyle-Wright, Ernst, Hayden, Lazzara, Savoy & Kostas-Polston, 2007:157; Parsian & Dunning, 2009:3). To assess the content validity of the current questionnaire, the researchers designed a research framework (Figure 6.1) for sport commitment of endurance athletes by undertaking a thorough literature review (Table 6.2) and seeking the opinion of event organisers in the endurance sport industry. The face validity, on the other hand, evaluates the appearance of the questionnaire regarding feasibility, readability, consistency of style and formatting, and the clarity of the language used (DeVon *et al.,* 2007:156; Parsian & Dunning, 2009:3). The questionnaire used in this study was firstly sent to a statistician to make sure that the questions asked on, specifically the Likert scales, would be appropriate for different statistical analyses. Secondly, the questionnaire was sent to a language editor who made sure that the words and phrases used were clear and that the endurance athletes clearly understood the meaning of each question to ensure the best answers to ease the process of data interpretation. Lastly, the Google Forms design for the questionnaire ensured that style and formatting were utilised in a consistent and user-friendly manner.

Table 6-2: Variables included in questionnaire and author(s) consulted

Q's	Question/variable	Based on and adapted from author(s)
SECTION A: DEMOGRAPHIC DETAILS		
1.	**Gender**	Streicher and Saayman (2010); Kruger, Saayman and Ellis (2011); Saayman and Saayman (2012a); Kruger, Saayman and Ellis. (2012); Kruger, Botha and Saayman (2012); Kruger and Saayman (2012); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh, Kruger and Saayman (2014a); Myburgh, Kruger and Saayman (2014b); Myburgh, Kruger and Saayman (2014c); Kruger and Saayman (2015)
2	**Year of birth**	Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Kruger, Botha *et al.* (2012b); Kruger and Saayman (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
3	**Home language**	Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Kruger, Botha *et al.* (2012); Kruger and Saayman (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
4	**Place of residence in South Africa**	Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Kruger, Botha (2012); Kruger and Saayman (2012); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c)
5	**Marital status**	Streicher and Saayman (2010); Kruger *et al.* (2011); Saayman and Saayman (2012a); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
6	**Gross annual income**	Saayman and Saayman (2012a); Kruger and Saayman (2013b);
7	**Highest level of education**	Kruger *et al.* (2011); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c)
8	**Field of your profession**	Kruger *et al.* (2011); Kruger, Botha *et al.* (2012); Kruger and Saayman (2014); Kruger and Saayman (2015) (Categories included also recommended by event organisers)
9	**Job title**	Stamm and Lamprecht (2011) (Categories included also recommended by event organisers)
SECTION B: ENDURANCE SPORT AND DISCIPLINES		
10a	**What type of endurance sport do you take part in?**	Stamm and Lamprecht (2011)
10b	**Indicate the primary endurance sport you participate in**	Hall (2013)
11	**Name the endurance sport event(s) you prefer to participate in**	James and Ross (2004)

12	**In what category of endurance event(s) do you normally participate**	LaChausse (2006); Saayman and Saayman (2012a); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c)
13	**What type of endurance athlete would you classify yourself as?**	Scanlan, Ravizza, and Stein (1989); Bowles, Rissel and Bauman (2006); Casper and Andrew (2008); Rauter and Doupona Topič (2014)
14	**What do you think the best age to start participating in endurance events?**	Ford, Ward, Hodges and Williams (2009); Ronkainen, Ryba and Nesti (2013); Allen and Hopkins (2015)
15	**What is the best age to stop participating in endurance events?**	Ronkainen *et al.* (2013); Allen and Hopkins (2015)
SECTION C: PARTICIPATION FREQUENCY		
16	**How many hours do you train per week?**	Augaitis (2005); Baker, Côté and Deakin (2005); Casper, Gray and Stellino (2007); Wicker, Breuer and Pawlowski (2009); Wicker, Breuer and Pawlowski (2010); Funk, Jordan, Ridinger and Kaplanidou (2011); Wigglesworth, Young, Medic and Grove (2012). Fernandes, Correia, Abreu, and Biscaia (2013); Hall (2013); Ringuet-Riot, Cuskelly, Auld and Zakus (2014); Schnell, Mayer, Diehl, Zipfel and Thiel (2014)
17	**How often do you take part in non-competitive endurance events?**	Baker *et al.* (2005); Wicker *et al.* (2009); Wicker *et al.* (2010); Stamm and Lamprecht (2011); Rauter (2014)
18	**How many years have you been competitively participating in endurance events?**	Baker *et al.* (2005); Wigglesworth *et al.* (2012); Fernandes *et al.* (2013); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
19	**On average how many competitive endurance events do you participate in per year?**	Augaitis (2005); Baker *et al.* (2005); Bowles *et al.* (2006); White (2008); Kaplanidou and Gibson (2010); Beaton, Funk, Ridinger and Jordan (2011); Funk *et al.* (2011); Wigglesworth *et al.* (2012); Rauter (2014)
20	**Are you planning to take part in more endurance events in the future?**	Chalip, Green and Hill (2003); Taylor and Shanka (2008); Hallmann and Breuer (2010); Kaplanidou and Gibson (2010) Gibson, Kaplanidou and Kang (2012); Kruger and Saayman (2013a); Kruger and Saayman (2015)
21	**When do you typically register to participate in a competitive endurance event?**	Kruger and Saayman (2014)
SECTION D: SPORT COMMITMENT		
22.1	**I enjoy participating in endurance sport**	Scanlan, Carpenter, Lobel and Simons (1993); Scanlan, Carpenter, Schmidt, Simons and Keeler (1993); Carpenter, Scanlan, Simons and Lobel (1993); Weiss, Kimmel and Smith (2001); Scanlan, Russell, Beals and Scanlan (2003); Scanlan, Russell, Wilson, and Scanlan (2003); Augaitis (2005); Weiss and Weiss (2003); Weiss and Weiss (2006); Weiss and Weiss (2007); Casper and Andrew (2008); Casper and Stellino (2008); Scanlan, Russell, Magyar and Scanlan (2009); Ingledew Markland and Ferguson (2009); Weiss, Weiss and Amorose (2010); Ritchie Tkaczynski and Faulks (2010); Streicher and Saayman (2010); Egli, Bland, Melton and Czech (2011); Kruger *et al.* (2011); Beaton *et al.* (2011); Funk *et al.* (2011); Ridinger, Funk, Jordan and Kaplanidou (2012); Kruger, Saayman *et al.* (2012); Saayman and Saayman (2012a); Fairer-Wessels (2013); Gibson *et al.* (2012); Hall (2013); Scanlan, Russell, Scanlan, Klunchoo and Chow (2013); Kruger and Saayman (2013b); Kruger and Saayman (2014); Kruger and Saayman (2015)

22.2	**I have fun while participating in endurance sport**	Scanlan, Carpenter, Schmidt *et al.* (1993); Scanlan, Carpenter, Simons, Schmidt and Keeler (1993); Carpenter *et al.* (1993); Weiss *et al.* (2001); Scanlan, Russell, Wilson *et al.* (2003); Augaitis (2005); Weiss and Weiss (2006); Bennett, Mousley, Kitchin and Ali-Choudhury (2007); Weiss and Weiss (2007); Casper and Andrew (2008); Lonsdale, Hodge and Rose (2008); Taylor and Shanka (2008); Ingledew *et al.* (2009); Getz and Andersson (2010); Beaton *et al.* (2011); Hall (2013); Scanlan *et al.* (2013)
22.3	**I put lots of time, energy and effort into training and participating in endurance sport**	Scanlan, Carpenter, Simons *et al.* (1993); Carpenter *et al.* (1993); Weiss *et al.* (2001); Scanlan, Russell, Beals *et al.* (2003); Scanlan, Russell, Wilson *et al.* (2003); Weiss and Weiss (2003); Augaitis (2005); Weiss and Weiss (2006); Weiss and Weiss (2007); Casper and Stellino (2008); Scanlan *et al.* (2009); Getz and Andersson (2010); Weiss *et al.* (2010); Hall (2013); Scanlan *et al.* (2013)
22.4	**I invest lots of money in endurance sport**	Scanlan, Carpenter, Simons *et al.* (1993); Carpenter *et al.* (1993); Weiss *et al.* (2001); Scanlan, Russell, Wilson *et al.* (2003); Augaitis (2005); Weiss and Weiss (2006); Weiss and Weiss (2007); Casper and Andrew (2008); Getz and Andersson (2010); Hall (2013); Scanlan *et al.* (2013); Getz and McConnell (2014)
22.5	**There are other more attractive sport activities I prefer to take part in**	Scanlan, Russell, Beals *et al.* (2003); Scanlan, Russell, Wilson *et al.* (2003); Augaitis (2005); Weiss and Weiss (2003); Weiss and Weiss (2006); Weiss and Weiss (2007); White (2008); Scanlan *et al.* (2009); Weiss *et al.* (2010); Hall (2013); Scanlan *et al.* (2013)
22.6	**Continued participation in endurance sport makes me feel confident**	Deci and Ryan (1985); Acevedo, Dzewaltowski, Gill and Noble (1992); Scanlan, Russell, Beals *et al.* (2003); Ogles and Masters (2003); White (2008); Ritchie *et al.* (2010)
22.7	**Continued participation in endurance sport gives me social status**	Scanlan, Russell, Beals *et al.* (2003); Ogles and Masters (2003); Bennett *et al.* (2007); Ingledew *et al.* (2009)
22.8	**Continued participation in endurance sport keeps me fit and in shape**	Ogles and Masters (2003); Bennett *et al.* (2007); Taylor and Shanka (2008); Brown, O'Connor and Barakatsas (2009); Filo, Funk and O'Brien (2009b); Ingledew *et al.* (2009); Getz and Andersson (2010); Peric (2010); Ritchie *et al.* (2010); Egli *et al.* (2011); Funk *et al.* (2011); Kruger, Saayman *et al.* (2012); Fairer-Wessels (2013); Kruger and Saayman (2013b); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
22.9	**Continued participation helps me attain certain goals**	Ogles and Masters (2003); Peric (2010); Egli *et al.* (2011); Lamont and Kennelly (2012) Fairer-Wessels (2013)
22.10	**Continued participation in endurance sport helps me delay the effects of ageing**	Ingledew *et al.* (2009); Lamont and Kennelly (2012)
22.11	**Continued participation in endurance sport relieves me from stress**	Ingledew *et al.* (2009); Brown *et al.* (2009); Egli *et al.* (2011); Funk *et al.* (2011); Lamont and Kennelly (2012)
22.12	**Continued participation in endurance sport gives me the opportunity to do something exciting**	Funk, Filo, Beaton and Pritchard (2009); Peric (2010); Ritchie *et al.* (2010); Rauter and Doupona Topič (2014)

22.13	**Continued participation in endurance sport gives me the opportunity to be with friends**	Scanlan, Carpenter, Simons *et al.* (1993); Augaitis (2005); Ogles and Masters (2003); Weiss and Weiss (2003); Kyle, Absher, Norman, Hammitt and Jodice (2007); Funk, Toohey and Bruun (2007); Bennett *et al.* (2007); Taylor and Shanka (2008); White (2008); Ingledew *et al.* (2009); Funk *et al.* (2009); Getz and Andersson (2010); Ritchie *et al.* (2010); Getz and McConnell (2011); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Fairer-Wessels (2013); Kruger and Saayman (2013b); Kruger and Saayman (2014); Hall (2013); Kruger and Saayman (2015)
22.14	**Continued participation in endurance sport gives me an opportunity to travel**	Scanlan, Russell, Beals *et al.* (2003); Getz and Andersson (2010); Lamont and Kennelly (2012); Kruger, Saayman *et al.* (2012); Kruger and Saayman (2013a)
22.15	**Continued participation in endurance sport gives me a feeling of accomplishment**	White (2008); Brown *et al.* (2009); Funk *et al.* (2009); Fairer-Wessels (2013); Kruger and Saayman (2014)
22.16	**Continued participation in endurance sport challenges me**	Taylor and Shanka (2008); Ingledew *et al.* (2009); Filo *et al.* (2009b); Brown *et al.* (2009); Getz and Andersson (2010); Ritchie *et al.* (2010); Egli *et al.* (2011); Funk *et al.* (2011); Getz and McConnell (2011); Gibson *et al.* (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
22.17	**I feel pressure from my significant others to keep participating in endurance sport**	Scanlan and Lewthwaite (1986); Scanlan, Carpenter, Simons *et al.* (1993); Carpenter *et al.* (1993); Weiss *et al.* (2001); Scanlan, Russell, Wilson *et al.* (2003); Weiss and Weiss (2003); Augaitis (2005); Weiss and Weiss (2006); Weiss and Weiss (2007); Mullin Hardy and Sutton (2007); Casper and Andrew (2008); Lonsdale *et al.* (2008); Ingledew *et al.* (2009); Lamont and Kennelly (2012)
22.18	**I only participate because of social pressures**	Carpenter *et al.* (1993); Weiss *et al.* (2001); Scanlan, Russell, Beals *et al.* (2003); Weiss and Weiss (2003); Scanlan, Russell, Wilson *et al.* (2003); Weiss and Weiss (2006); Weiss and Weiss (2007); Mullin *et al.* (2007); Casper and Stellino (2008); Scanlan *et al.* (2009); Weiss *et al.* (2010); Scanlan *et al.* (2013)
22.19	**Family and friends provide me with consolation and like to watch me and support me while I participate in endurance sports**	Scanlan and Lewthwaite (1986); Scanlan, Carpenter, Schmidt *et al.* (1993); Mulvihill, Rivers and Aggleton (2000); Weiss *et al.* (2001); Scanlan, Russell, Beals *et al.* (2003) Scanlan, Russell, Wilson *et al.* (2003); Weiss and Weiss (2003); Weiss and Weiss (2006); White (2008); Scanlan *et al.* (2009); Weiss *et al.* (2010); Ritchie *et al.* (2010); Hall (2013); Scanlan *et al.* (2013)
22.20	**I am dedicated and will adapt my lifestyle to continue the practice of endurance sport**	Scanlan, Carpenter, Simons *et al.* (1993); Carpenter *et al.* (1993); Weiss *et al.* (2001); Weiss and Weiss (2003); Augaitis (2005); Casper *et al.* (2007); Casper and Andrew (2008); Casper and Stellino (2008); Ritchie *et al.* (2010); Peric (2010); Beaton *et al.* (2011); Ridinger *et al.* (2012); Fairer-Wessels (2013); Fernandes *et al.* (2013); Hall (2013)
22.21	**I will do anything not to abandon endurance sport**	Weiss *et al.* (2001); Augaitis (2005); Weiss and Weiss (2006); Fernandes *et al.* (2013)

22.22	**I am committed to continue participation in endurance sport**	Carpenter *et al.* (1993); Acevedo *et al.* (1992); Weiss *et al.* (2001); Ridinger *et al.* (2012); Chu and Wang (2012)
SECTION E: LIFESTYLE AND FINANCIAL COMMITMENT		
23	**Indicate how much money per year was spend on average on the listed sporting goods/activities (As listed below)**	
23a	**Event registration**	Davies (2002); Craggs and Schofield (2009); Kruger, Saayman *et al.* (2012)
23b	**Club membership**	Davies (2002); Wicker *et al.* (2010)
23c	**Nutritional products**	Wicker *et al.* (2010)
23d	**Equipment and gear**	Davies (2002); Wicker *et al.* (2010); Kruger, Saayman *et al.* (2012); Kruger and Saayman (2014)
23e	**Sporting clothes and accessories**	Wicker *et al.* (2010)
23f	**Magazine subscriptions**	Wicker *et al.* (2010)
23g	**Travel related expenses**	Davies (2002); Wicker *et al.* (2010); Dixon, Backman, Backman and Norman (2012); Gibson *et al.* (2012); Kruger and Saayman (2014)
23h	**Gym membership**	Wicker *et al.* (2010)
23i	**Medical services**	Wicker *et al.* (2010); Kruger, Saayman *et al.* (2012); Kruger and Saayman (2014)
24.1	**I adopted a strict, healthy diet**	Lamont, Kennelly and Wilson (2012)
24.2	**I supplemented with vitamins and other nutritional products**	Jeukendrup (2011)
24.3	**I have a strict training programme**	Toporkov (2014)
24.4	**I adapt my sleeping patterns when training and participating in events**	Lamont *et al.* (2012)
24.5	**I constantly search for events to participate in and adapt my work schedule to suit my endurance sport activities**	Lamont *et al.* (2012)
25.6	**I plan holidays around my endurance sport**	Lamont *et al.* (2012)
25.7	**I plan my travel to fit in with the events I participate in**	Getz and Andersson (2010)
25.8	**I hired a coach to help me with my training**	Scanlan and Lewthwaite (1986); Scanlan, Carpenter, Lobel *et al.* (1993)
25.9	**I joined a sports club or gym**	Getz and Andersson (2010); Beaton *et al.* (2011)
25.10	**I motivate my friends and family to become involved (as spectators and participants)**	Getz and McConnell (2011)
25.11	**I invest in the best training equipment and sport gear**	Davies (2002); Casper *et al.* (2007); Lamont *et al.* (2012); Fernandes *et al.* (2013)
25.12	**I invest in the best sportswear and accessories**	Davies (2002); Casper *et al.* (2007); Lamont *et al.* (2012); Fernandes *et al.* (2013); Getz and McConnell (2014)
25.13	**I make donations to sport development programmes**	Woolf, Heere and Walker (2013)
25.14	**I actively attend sport lifestyle expos to keep up to date with the latest trends and sports gear**	Weed and Bull (2009)
25.15	**I'm actively involved in youth sport development programmes**	Lim, Warner, Dixon, Berg, Kim, and Newhouse-Bailey (2011)
25.16	**I watch sports on TV**	Florek, Breitbarth and Conejo (2008); Fernandes *et al.* (2013)
25.17	**I subscribe to sport magazines or newspapers**	Fernandes *et al.* (2013)
25.18	**I read sport magazines or newspapers**	Getz and Andersson (2010); Getz and McConnell (2014)

25.19	**I listen to sport on the radio**	Fernandes *et al.* (2013)
25.20	**I read about and watch sport on the internet**	Fernandes *et al.* (2013)
25.21	**I attend and support other sport events (that I do not participate in)**	Fernandes *et al.* (2013)
25.22	**I actively follow sport on social media**	Shipway, Holloway and Jones (2013)
25.23	**I use sport-related apps on my phone or personal computer**	Shipway *et al.* (2013)
SECTION F: EVENT ATTRIBUTES		
25.1	**The event is close to my home city or town**	Streicher and Saayman (2010); Miragaia and Martins (2015)
25.2	**The event registration and travel costs are affordable**	Getz and Brown (2006); Getz and Andersson (2010); Getz and McConnell (2014); Miragaia and Martins (2015)
25.3	**The event has an interesting race course or location**	White (2008); Getz and Andersson (2010); Capriello and Rotherham (2011); Panyik, Costa and Rátz (2011); Getz and McConnell (2011); Fotiadis and Vassiliadis (2012); Getz and McConnell (2014)
25.4	**The event has a good challenge and reputation**	Bennett *et al.* (2007); Getz and Andersson (2010); Hallmann and Breuer (2010); Lamont *et al.* (2012); Getz and McConnell (2014)
25.5	**The event location has many things to do and places to see**	Chalip *et al.* (2003); Dixon *et al.* (2012); Getz and McConnell (2014)
25.6	**The event is ideally located in terms of climate and altitude**	Chalip *et al.* (2003); White (2008)
25.7	**The event has international standing**	Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
25.8	**The event will help me qualify for other events**	Getz and Andersson (2010); Getz and McConnell (2011); Kruger *et al.* (2011); Saayman and Saayman (2012a); Kruger and Saayman (2013b); Kruger and Saayman (2014)
25.9	**The event is well organised**	Florek *et al.* (2008); Getz and Andersson (2010); Kaplanidou and Gibson (2010); Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Getz and McConnell (2014); Kruger and Saayman (2015)
25.10	**Participation in the event will benefit charity**	Bennett *et al.* (2007); Taylor and Shanka (2008); Filo *et al.* (2009b); Getz and Andersson (2010); Getz and McConnell (2011)
25.11	**I've never participated in the event before**	Lamont *et al.* (2012); Getz and McConnell (2014)
25.12	**The event is challenging**	Streicher and Saayman (2010); Getz and McConnell (2011); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013a)
25.13	**The event has pre-events that involve the whole family**	Funk and James (2001); Shone and Parry (2004); Getz and McConnell (2014)
25.14	**The event has different categories I can participate in**	Hallmann and Breuer (2010); Saayman and Saayman (2012a)
25.15	**The event attracts world's best endurance athletes**	Getz and Andersson (2010); Kruger, Saayman *et al.* (2012); Getz and McConnell (2014)

25.16	**The event gives away a lot of prize money**	Acevedo *et al.* (1992); Krüger (1995); Taylor and Shanka (2008); Getz and Andersson (2010); Getz and McConnell (2014)
25.17	**The event has a loyalty programme**	Funk *et al.* (2011)
25.18	**The event gets a lot of media exposure and coverage**	Getz and Andersson (2010); Getz and McConnell (2014)
25.19	**The event takes place annually**	Streicher and Saayman (2010); Kruger *et al.* (2011); Kruger, Saayman *et al.* (2012); Saayman and Saayman (2012a); Kruger and Saayman (2013a); Kruger and Saayman (2013b); Kruger and Saayman (2014); Myburgh *et al.* (2014a); Myburgh *et al.* (2014b); Myburgh *et al.* (2014c); Kruger and Saayman (2015)
25.20	**The event is easily accessible**	Miragaia and Martins (2015)
SECTION G: SPORT COMMITMENT AND TRAVEL BEHAVIOUR		
26.1	**Family and friends can accompany me to endurance events**	Getz and Andersson (2010); Kruger and Saayman (2013a); Kruger and Saayman (2015)
26.2	**I visit tourist attraction before during and/or after participating in endurance events**	Taks, Chalip, Green, Kesenne and Martyn (2009); Gibson *et al.* (2012); Kruger and Saayman (2013a); Kruger and Saayman (2013b)
26.3	**Participation in endurance sport gives me the opportunity to travel**	Kruger, Saayman *et al.* (2012); Kruger and Saayman (2013a); Kruger and Saayman (2015)
26.4	**My sport participation and holiday destination(s) are separate**	Kruger and Saayman (2015)
26.5	**I travel in the area where my endurance event takes place**	Kruger and Saayman (2013a)
26.6	**I only choose a holiday destination if it gives me the opportunity to travel overseas**	Kruger and Saayman (2013a)
26.7	**I see my endurance sport participation as an opportunity to travel overseas**	Getz and Andersson (2010); Lamont and Kennelly (2012)
26.8	**My sport participation gives me an opportunity to explore the city/town that I participate in**	Kruger and Saayman (2015)
26.9	**I plan my sport participation in order to see different attractions and destinations**	Getz and Andersson (2010); Lamont *et al.* (2012); Kruger and Saayman (2013a); Kruger and Saayman (2015)
26.10	**I plan to return to the destinations I have participated in for holiday purposes**	Kruger and Saayman (2013a); Kruger and Saayman (2015)
27	**Specify the number of days you usually arrive in advance at the destination before the event takes place in order to prepare**	Kaiser, Alfs, Beech and Kaspar (2013)
28	**How many days do you stay in the event area after the event (e.g. for sight-seeing)**	Kaiser *et al.* (2013)

Source: Authors own compilation

Step 2 Construct validity: factor analysis

Construct validity refers to the degree to which the items on an instrument relate to the relevant theoretical construct (Kane, 2001:322; DeVon *et al.,* 2007:156). It refers to the degree to which the intended independent variable (construct) relates to the proxy independent variable (indicator) (Parsian & Dunning, 2009:4). When an indicator consists of multiple items, factor analysis is used to determine construct validity. The sampling population for factor analysis in the current study was (n =498) endurance athletes who take part in different endurance events in South Africa. The sample was drawn through a non-probability sampling technique. The researcher decided to use exploratory factor analyses to measure the construct validity of the questions asked (Commitment- Section D, Questions 22.1-22.22; Lifestyle- Section E, Questions 24.1-24.23; Event attributes- Section F- Questions 25.1-25.20 and Travel behaviour- Section G- Questions 26.1-26.10). The study makes use of exploratory research because it tends to solve new problems on which little or no previous research exist (Brown, 2006:43). This is applicable to the current study as commitment of endurance athletes are not measured in the South African context yet. The exploratory factor analysis is discussed in more detail later in the Chapter 7 (c.f. 7.2).

Step 3 Reliability tests: internal consistency (Cronbach's alpha)

Once the validity procedures were completed, reliability was calculated. Reliability refers to the ability of a questionnaire to consistently measure an attribute and how well the items fit together, conceptually (Considine, Botti & Thomas, 2005:20; DeVon *et al.,* 2007:160; Pallant, 2013:101). Cronbach and Shavelson (2004:392) suggest a certain number of issues to consider when determining reliability. Firstly, the researcher should examine the Internal Consistency Reliability within an instrument, as this will give an indication of how well the items fit together conceptually (DeVon *et al*., 2007:160). In addition, the researcher should compute a total score of all the items to estimate the consistency of the whole questionnaire. Internal consistency is measured in two ways: Split-Half reliability and Cronbach's alpha correlation coefficient (Parsian & Dunning, 2009:4). For the purpose of this study, the Cronbach's alpha and inter-item correlations were computed to examine the internal consistency of the endurance participant commitment questionnaire. The section that discusses the results of the factor analyses (c.f. 7.4.2.3) also elaborates further on these issues determining reliability.

6.3 Sampling method and survey

Unfortunately, there is currently no statistics available on the exact number of endurance sport participants in South Africa. When using the formula (c.f. 1.7.2.2) that Krejcie and Morgan (1970:608) suggest, the appropriate sample size for a population larger than 100 000 people is at least 384 questionnaires. Since it is tough to calculate the exact number of endurance athletes in South Africa, the researcher decided to consult the number of participants that take part in endurance events, as these statistics are readily available. The largest endurance events (e.g.

Cape Town Cycle Tour and the Comrades Marathon) in South Africa can allow a maximum of 35 000 participants each year (Cape Town Cycle Tour, 2016:1). The number of participants is restricted as the routes can only allow a number of athletes, for if the number of participants increases so does the risk of accidents (Kruger, Myburgh & Saayman, 2016:381). Therefore, the most appropriate sample size for this study was set at 500 questionnaires, which then also take into account the importance of precision and completeness.

An electronic questionnaire was developed and distributed through Google Forms. The online survey was sent to different endurance athletes in the country. An online survey was chosen for the following reasons:

- The cost of computer hardware and software continues to decrease thus the popularity of the internet increases. This then leads to more segments of society having access to the Internet for communication and information usage (Nie, Hillygus & Erbring, 2002:215; Wright, 2005:4). In previous endurance event research it was found that most endurance athletes have high annual incomes (c.f. 5.6). The assumption can be made that most of these athletes will thus have access to the internet. The assumption is furthermore supported by the fact that registration for events are also mostly done online.
- Most organisations have moved online for marketing and communications purposes, thus allowing researchers access to a variety of populations, which is affiliated with these groups (Wright, 2005:4). This is particularly the case for endurance events and clubs, since most communication with their participants and club members is done via their websites, newsletters via email or social media platforms such as Facebook and Twitter.
- These days the Internet is the ideal domain for conducting survey research. Virtual communities are thriving as people regularly participate in discussions about a large variety of issues and interests (Tidwell & Walther, 2002:318; Wright, 2005:4). This is also true when considering the endurance sport market as athletes regularly share exercise tips, diets, training programmes and other tips for event participation (Mullin, Hardy & Sutton, 2014:19).
- The internet also allows access to groups of people who would be difficult, if not impossible to find through other channels (Haythornthwaite & Wellman, 2002:1). In comparison to many other traditional survey research methods, it would be difficult to reach a large number of similar people who share specific interests, attitudes, beliefs, and values regarding an issue, problem, or activity (Wright, 2005:4). This is particularly the case with the present study for with the current resources and time available, it would be difficult to conduct destination-based surveys at all the major endurance events in South Africa.
- One of the biggest advantages of online-based surveys is the fact that it saves time for researchers because Internet-based surveys can reach thousands of people, despite being separated by geographic distances (Bachmann & Elfrink, 1996:31; Taylor, 2000:51;

Yun & Trumbo, 2000:1; Garton, Haythornthwaite & Wellman, 1999:75; Llieva, Baron & Healey, 2002:370). Since most endurance events take place in different provinces in South Africa throughout the year, it would take considerable time and financial resources to conduct a survey at each event, besides the time it would take for data capturing and statistical analysis of each survey.

- Online surveys can also save money by moving to an electronic medium from a paper format (Bachmann & Elfrink, 1996:31; Couper, 2000:484; Llieva *et al.,* 2002:372). Destination-based surveys where respondents are required to complete a questionnaire tend to be time-consuming and costly because costs such as printing, data entry and travelling to the destination needs to be covered (Llieva *et al*., 2002:372).
- The newer online survey software and web survey services are mostly free to use, while others cost very little. Google Forms, which was utilised in the current study, is free software allowing users to create and distribute surveys online (De Vaus, 2013:85).
- When compared to paper format questionnaires, the online method ensures comprehensive questionnaires, for respondents are only able to move on to the next question if they completed the previous question. This ensures completeness, which facilitates the data analysis (De Vaus, 2013:140).

This research was based on a quantitative approach. Bruner, Hensel and James (2005:931) describe a quantitative method as descriptive in nature that determine the relative relationship between variables. The study also follows an exploratory research design since this is the initial research and forms the basis for more conclusive research (Singh, 2007:64). Exploratory research is the chosen design because no previous research has focused on the commitment factors of South African endurance athletes in a tourism context. The advantages of exploratory research include the fact that it is flexible and can adapt to change; it is effective in laying the groundwork for future studies; it gives a greater understanding of a subject and helps hone subsequent research questions and can greatly increase the usefulness of a study's conclusions (Brown, 2006:43; Singh, 2007:64). The survey followed a non-probability sampling approach as it was sent to larger endurance events. The study applied therefore a convenience or availability sample to gather data from different types of endurance athletes (e.g. road cyclists, mountain bikers, marathon runners, triathletes, canoeists). Unfortunately, after the survey ran online for several months, it was realised that there was not an even distribution of athletes taking part in the various endurance sports. It was therefore decided to approach different endurance clubs to distribute the number of questionnaires evenly between the various main endurance sports in South Africa.

Consequently fifteen endurance events and clubs where approached to form part of the survey. The events that were involved in the survey included: The Standard Bank Ironman African

Championships (triathlon); Momentum 947 Cycle Challenge (road cycling); The Dusi Canoe Marathon (canoeing); Nedbank Sani2C (mountain biking); The Comrades Marathon (marathon running); and Tsogo Sun Amashova Durban Classic (road cycling). The following clubs shared the online survey with their club members: Triathlon South Africa (triathlon); Canoeing South African (canoeing); Adventure racing (trail running); Massive adventures (trail running and mountain biking); Vortex cycling club (road cycling); Ultra-trail Cape Town (trail running); and Potchefstroom Cycling Club (road cycling). The different clubs and events shared the link to the survey through newsletters and on their websites and social media platforms such as Facebook and Twitter. The clubs informed endurance athletes to follow a "link" in order to complete the questionnaire voluntarily online. A cash price incentive was offered to motivate participants to take part in the survey. Although an incentive was given, it was still difficult to get enough respondents to participate in the survey. Therefore, in order reach the 500 questionnaire target the clubs and events were constantly reminded to inform their participants/members to complete the questionnaire, which unfortunately was a timely process. The survey ran from 1 March 2015 to 30 November 2015 and 498 athletes completed questionnaires out of a possible 500 questionnaires that were returned and included in the statistical analysis. It, therefore, encompassed more than the required number of questionnaires according to Krejcie and Morgan's (1970:608) formula, thereby validating the sample.

6.4 Statistical analysis and results

The data was exported to Microsoft Excel© and analysed by using SPSS Version 23 (2016). The analysis consisted of five stages, namely a descriptive analysis, which revealed the profile of respondents. The current chapter also discusses this descriptive analysis stage. The other five stages included four exploratory factor analyses, an analysis of significant differences between the identified factors and socio-demographic and behavioural characteristics, correlation analyses and lastly structural equation modelling. Chapter 7 discusses the results from these analyses. The next section explains the descriptive analyses and results.

6.4.1 Profile of respondents

The profile of respondents is divided into different sections and starts with the demographic profile, followed by endurance sport and disciplines, participation frequency, lifestyle adaption, event attributes and travel behaviour.

Table 6-3: Demographic profile of endurance participants

DEMOGRAPHIC PROFILE	ENDURANCE ATHLETES
Gender	**Male (81%)** Female (19%)
Age	< 19 years (1%)

	20-24 years (2%) **25-34 years (23%)** **35-49 years (51%)** **50-64 years (20%)** 65+ years (3%) **Average age of 42 years**
Language	**English (63%)** Afrikaans (34%) Other languages (3%) *Other languages included: German, French and Dutch*
Province of residence	**KwaZulu-Natal (20%)** **Western Cape (22%)** **Gauteng (41%)** Free State (1%) Northern Cape (0%) Eastern Cape (5%) North West (6%) Mpumalanga (2%) Limpopo (1%) Other countries outside RSA borders (2%) *Other countries included: Dubai, United States, Brazil and France*
Marital status	**Married (66%)** Not married (8%) Divorced (7%) **Single (17%)** Widow/er (1%) Other (1%) *Other relationship statuses include: Engaged and living together*
Gross annual income	< R20 000 (5%) R20 001- R140 000 (9%) R140 001- R221 000 (7%) R221 001- R305 000 (11%) R305 001- R431 000 (14%) R431 001- R552 000 (11%) **R552 001> (43%)**
Highest level of education completed	Grammar school (0%) High school or equivalent (17%) Vocational/technical school (3%)

	Some college (17%) **Bachelor's degree (39%)** Master's degree (17%) Doctoral degree (2%) Professional degree (5%)
Field of profession	Accounting (4%) Advertising (1%) Aerospace/ Aviation (1%) Agriculture/ Forestry/ Fishing (3%) Biotechnology (0%) Business/ Professional (6%) Business services (1%) **Computers (7%)** Communications (1%) Construction/ Home Improvement (5%) Consulting (4%) Education (3%) **Engineering/ Architecture (11%)** Entertainment/ Recreation (2%) Finance/ Banking/ Insurance (6%) Food Service (2%) Government/ Military (2%) **Healthcare/Medical (10%)** Internet (1%) Legal (3%) Manufacturing (5%) Marketing/ Market research/ Public relations (3%) Media/ Printing/ Publishing (1%) Mining (1%) Non-profit (1%) Pharmaceutical/ Chemical (1%) Research/ Science (2%) Real estate (1%) Retail (4%) Services (2%) Telecommunication (1%) Transportation/ Distribution (1%) Utilities (1%) Wholesale (2%) N/A- I do not work (1%) Prefer not to answer (0%)

Job title	Intern (3%) Entry level (8%) Analyst/ Associate (10%) **Manager (23%)** Senior Manager (18%) Director (12%) Vice President (1%) Senior Vice President (0%) C level Executive (2%) President or CEO (2%) **Owner (21%)**

6.4.1.1 Gender

As seen in Table 6.3 the majority of respondents were male (81%), while only 19% of respondents were female. The higher number of males that participate in endurance events corresponds with the results found in previous studies on different endurance discipline research, including **open-water swimming** (Kruger *et al.*, 2011; Saayman & Saayman, 2012a), **road cycling** (Bowles *et al.,* 2006; LaChausse, 2006; Kaplanidou & Vogt, 2007; Kotze & Visser, 2008; Brown *et al.,* 2009; Ritchie *et al.*, 2010; Streicher & Saayman, 2010; Saayman & Saayman, 2012a; Kruger & Saayman, 2014; Rauter, 2014; Kruger, Myburgh *et al.*, 2016, Fotiadis, Vassiliadis & Yeh, 2016), **marathon running** (McGehee, Yoon & Gárdenas, 2003; Ogles & Masters, 2003; Chalip & McGuirty, 2004; Kotze, 2006; Kotze & Visser, 2008; Getz & Andersson, 2010; Saayman & Saayman, 2012a; Kruger, Saayman *et al.,* 2012; Kruger, Botha *et al.,* 2012; Gibson *et al.,* 2012; Krugell & Saayman, 2013; Kruger & Saayman, 2013a; Getz & McConnell, 2014; Kruger & Saayman, 2015), **canoe paddlers** (Kruger & Saayman, 2013b), **mountain bikers** (LaChausse, 2006; Getz & McConnell, 2011; Kruger & Saayman, 2014; Getz & McConnell, 2014), **triathletes** (Hallman & Breuer, 2010; Myburgh *et al*., 2014a) and **other active event sport tourists** (Kaplanidou & Gibson, 2010). On the other hand, Rauter and Doupona Topič (2010); Funk *et al.* (2011); Beaton *et al.* (2011); Ridinger *et al.* (2012) and Rauter (2014) found in their respective studies done on runners that gender was evenly distributed between males and females. Similarly, Kaplanidou and Vogt (2007) found both males and females equally presented participants in a bicycle tour. A small number of studies such as a study done on a tennis event (Casper *et al.,* 2007) and a study focusing on charity-related sport events (Bennett *et al.,* 2007) found that more females participated in sport events than male participants did. The results of the present study, however, emphasises the need for more research among female endurance athletes in South Africa as various authors also indicated (*see* Saayman & Saayman, 2012a; Kruger & Saayman, 2013a; Myburgh *et al.,* 2014a; Myburgh *et al.,* 2014b).

6.4.1.2 Age

More than half of the endurance participants (51%) were between the ages 35 to 49 years old, followed by 23% that were between the ages of 25 and 34 years and 20% of the respondents who fell in the 50 to 64-age category. The average age of the endurance athletes who took part in the survey was 42 years old. This older average age of endurance athletes corresponds with previous research that also found the older average age in the following different types of **runners** (Ogles & Masters, 2003; McGehee *et al.,* 2003; Kotze & Visser, 2008; Hoffman & Wegelin, 2009; Rauter & Doupona Topič, 2010; Getz & Andersson, 2010; Beaton *et al.,* 2011; Ridinger *et al.,* 2012; Saayman & Saayman, 2012a; Krugell & Saayman, 2013; Kruger & Saayman, 2015), **cyclists** (Bowles *et al.,* 2006, Brown *et al.,* 2009; Ritchie *et al.,* 2010; Streicher & Saayman, 2010; Kruger & Saayman, 2014; Rauter, 2014; Kruger, Myburgh *et al.*, 2016; Fotiadis *et al.,* 2016), **mountain bikers** (Getz & McConnell, 2011, Getz & McConnell, 2014; Kruger & Saayman, 2014), **triathletes** (Hallmann & Breuer, 2010; Myburgh *et al.* 2014a) and **canoe paddlers** (Kruger & Saayman, 2013b). The older average age was also found in participants that take part in charity events (Bennett *et al.,* 2007; Taylor & Shanka, 2008) as well as other sports such as tennis, softball, archery and soccer which does not classify as endurance sports (Casper *et al*., 2007; Casper & Stellino, 2008; Gibson *et al.,* 2012). Previous research has found that most endurance athletes peak at 35 years of age (Tanaka & Seals, 2008). Studies such as Hunter, Stevens, Magennis, Skelton and Fauth (2011) found that the peak performance age of swimmers iss 20 years of age, marathon runners peaked at approximately between 28to 30 years of age, while peak performance in Ironman triathlons is around 33 and 34 years (Knechtle, Rüst, Knechtle, Rosemann & Lepers, 2012). However, considering the present results as well as previous literature concerning the older average age of endurance athletes, the notion that endurance sport can be considered as a life-span sport is supported, and older participants can extend their participation into their late 60s and early 70s (Myburgh *et al.,* 2014c).

6.4.1.3 Language

English was the majority of the respondents' (63%) home language, while 34% of the respondents were Afrikaans speaking and only 3% spoke other languages such as French and German. English being the foremost language of endurance athletes in South Africa was also found by Streicher and Saayman (2010); Kruger *et al.* (2011); Saayman and Saayman (2012a); Kruger, Saayman *et al.* (2012); Kruger, Botha *et al.* (2012); Kruger and Saayman (2013a); Kruger and Saayman (2014); Myburgh *et al.* (2014a) as well as Kruger, Myburgh *et al.* (2016) in their respective studies.

6.4.1.4 Province of residence

A significant number of respondents (41%) originated from the Gauteng province, followed by the Western Cape (22%) and KwaZulu-Natal (20%)This corresponds with the fact that these

provinces host most endurance events. Most research done in a South African context on endurance athletes have also found that most participants originate from the Gauteng, Western Cape and KwaZulu-Natal provinces. This includes research done on the **Two Oceans Marathon** (Kotze, 2006; Kotze & Visser, 2008; Kruger, Botha *et al.,* 2012; Kruger, Saayman *et al.,* 2012; Saayman & Saayman, 2012a; Krugell & Saayman, 2013), the **Cape Town Cycle Tour** (Streicher & Saayman, 2010; Saayman & Saayman, 2012a; Kruger & Saayman, 2014; Kruger, Myburgh *et al.,* 2016), the **Midmar Mile** (Kruger *et al.,* 2011), the **Cape Epic** (Kruger & Saayman, 2014), **Ironman South Africa** (Myburgh *et al.,* 2014a) and the **Comrades Marathon** (Saayman & Saayman, 2012b; Kruger & Saayman, 2013a; Kruger & Saayman, 2015).

6.4.1.5 Marital status

Respondents were mostly married (66%), while only some respondents (16%) indicated that they were single. Previous studies also found that most endurance athletes were married (McGehee *et al.,* 2003; Brown *et al.,* 2009; Rauter & Doupona Topič, 2010; Getz & Andersson, 2010; Funk *et al.,* 2011; Beaton *et al.,* 2011; Getz & McConnell, 2011; Ridinger *et al.,* 2012; Saayman & Saayman, 2012a; Kruger, Botha *et al.,* 2012; Kruger & Saayman 2013a; Kruger & Saayman, 2013b; Myburgh *et al.,* 2014a; Getz & McConnell, 2014; Kruger & Saayman, 2015).

6.4.1.6 Annual gross income, highest level of education, field of profession and job title

Most (43%) of the endurance participants indicated their income as more than R552 001 annually, with 14% of the participants earning between R305 001 to 431 000per annum. The high income of endurance athletes was also found in an array of previous studies (McGehee *et al.,* 2003; Chalip & McGuirty, 2004; Kaplanidou & Vogt, 2007; Casper *et al.,* 2007; Funk *et al.,* 2011; Getz & McConnell, 2011; Beaton *et al.,* 2011; Kaplanidou & Gibson, 2010; Ridinger *et al.,* 2012; Gibson *et al.,* 2012; Krugell & Saayman, 2013). A close link exists between income and level of education. In the analysis of the level of education of respondents, a high percentage had a bachelor's degree (39%). Previous studies also found that endurance athletes are well educated with either a diploma or a degree (McGehee *et al.,* 2003; Getz & Andersson, 2010; Hallmann & Breuer, 2010; Kruger *et al.,* 2011; Beaton *et al.,* 2011; Funk *et al.,* 2011; Ridinger *et al.,* 2012; Kruger, Saayman *et al.,* 2012; Gibson *et al.,* 2012; Getz & McConnell, 2011; Getz & McConnell, 2014; Myburgh *et al.,* 2014a; Kruger & Saayman, 2015; Kruger, Myburgh *et al.,* 2016; Fotiadis *et al.,* 2016). The highest percentage of participating respondents were in the Engineering or Architecture profession, followed closely (10%) with participating respondents that followed a career in Healthcare or Medical professions. Examining the job title of respondents revealed that the most respondents (23%) classified themselves as a manager, followed by 21% who were the owners of their companies.

The next results indicate the preference of participating respondents regarding the main disciplines in endurance sport and events.

Table 6-4: Endurance events and discipline preferences of participants

ENDURANCE SPORT AND DISCIPLINES	ENDURANCE ATHLETE	
Endurance sport(s) participants part take in (This question formed part of a multiple response answer; therefore, the percentages do not add up to 100%)	**Yes**	**No**
Marathon Running	**35%**	65%
Road Cycling	**49%**	51%
Mountain Biking	**66%**	34%
Canoe or Kayak races	17%	83%
Triathlons	**36%**	64%
Ski Paddling	6%	94%
Open-water swimming	19%	81%
Trail running	**38%**	62%
Obstacle course races	9%	91%
Adventure racing	13%	87%
Cross-country skiing	1%	99%
Decathlon	0%	100%
Endurance riding	3%	97%
Endurance motor racing	1%	99%
Mountain running	15%	85%
Rowing	1%	99%
Race-walking	1%	99%
Ultra-marathons	22%	78%
Other (*Other sports included: Orienteering, Duathlon and hiking*)	3%	97%
Primary endurance sport	**Mountain Biking (36%)** **Triathlon (19%)** **Cycling (10%)** **Canoeing (10%)** **Trail running (8%)** Running (7%) Marathon running (4%) Adventure racing (2%) Orienteering (1%) Paddling (1%) Open-water swimming (1%) Race walking (1%)	

Endurance sport events participants prefer to participate in (This question formed part of a multiple response answer, therefore it will not total to 100%. The events that had the highest percentages were emphasised, but seeing that there are so many endurance events not all events could be highlighted)	**Yes**	**No**
Ironman 70.3	**11%**	**89%**
Cape Town Cycle Tour	**18%**	**82%**
Dusi Canoe Marathon	**10%**	**90%**
Sani2C	**30%**	**70%**
Comrades Marathon	**11%**	**89%**
94.7 Cycle Challenge	**16%**	**84%**
Two Oceans Marathon	**10%**	**90%**
Midmar Mile	2%	98%
Cape Epic	5%	95%
Amashova	5%	95%
Wines2Whales	9%	91%
Berg River Canoe	3%	97%
Fish River Canoe	5%	95%
Full Ironman South Africa	**16%**	**84%**
Cape Town Ultra-Trail	7%	93%
Ironman 5150	3%	97%
Joberg2C	3%	97%
Berg & Bush	7%	93%
Hill2Hill	1%	99%
Other (*Other popular events included: Karoo2Coast, The Nissan Trailseeker Series, Trans Baviaans, Xterra and 3 Towers)*	**46%**	**53%**
Category of endurance event(s) (This question formed part of a multiple response answer, therefore the percentages do not add up to 100%))	**Yes**	**No**
Local Events	**85%**	**15%**
Regional events	61%	39%
National events	**84%**	**16%**
International events hosted in South Africa	48%	52%
International events	13%	87%
Charity events	39%	61%
Type of endurance athlete	Beginner (4%) Average athlete (16%) Obstacle challenger (1%)	

	Fitness participant (8%) Social participant (6%) **Intermediate athlete (35%)** Hard-core athlete (12%) **Veteran athlete (18%)**
Best age to start participating in endurance events	Under 20 years (15%) **21-30 years (47%)** **31-40 years (33%)** 41-50 years (4%) 51-60 years (1%) Over 60 years (0%)
Best age to stop participating in endurance events	**Never (34%)** 40-50 years (1%) 51-60 years (8%) **Over 70 years (33%)** Other (4%) *Other options included: When you are physically incapable and when you feel it is time*

6.4.1.7 Endurance sport(s) participants part take in, primary endurance sport and endurance sport events participants prefer to participate in

As seen in Table 6.4 the most popular endurance sports respondents take part in are mountain biking (66%), road cycling (49%); trail running (38%); triathlons (36%) and marathon running (35%). This corresponds with the endurance events that were included in the survey. Stamm and Lamprecht (2011) similarly found that the most popular endurance sports in Switzerland are mountain biking as well as road cycling. Furthermore, Getz and McConnell (2011) found that when studying the event travel careers of mountain bikers it is clear that they develop their competitive portfolios by participating in road cycling, trail running, road running, as well as triathlon events. Getz and McConnell (2014) did a similar study on the event travel careers of trail runners and found that these participants also participate in road cycling, triathlons, and swimming. Kruger *et al.* (2011) did a study on open-water swimmers and found that the athletes also participate in marathon running, cycling and canoeing. In the current research study's survey question that respondents should indicate which is their primary endurance sport that they prefer to take part in, most indicated mountain biking (36%), followed by triathlons (19%), cycling (10%), canoeing (10%) and trail running (8%). The majority (46%) of respondents specified that they participate in other endurance events (not listed) such as Karoo2Coast, The Nissan Trail Seeker Series, Trans Baviaans, Xterra and Three Towers. Furthermore, the most prevalent endurance events respondents participate in, features the Sani2C (30%); Cape Town Cycle Tour (18%); Full

Ironman South Africa (16%), 94.7 Cycle Challenge (16%); Comrades Marathon (11%); Dusi Canoe Marathon (10%); and the Two Oceans Marathon (10%).

6.4.1.8 Category of endurance event(s) and classification of endurance athletes

In the view of the category of events that the endurance athletes participate in, the majority of respondents indicated that they participate in both local events (85%) (e.g. Potchefstroom marathon) and national events (84%) (e.g. 94.7 Cycle Challenge). A relative percentage of respondents (35%) classified themselves as intermediate athletes, which indicates they are at a stage of searching for more challenging events and disciplines. On the other hand, a lower percentage of respondents (18%) classified them as veteran athletes, which shows that they feel endurance sport is part of their lifestyle and gives them self-fulfilment. Previous research had also categorised endurance athletes into these various groups. LaChausse (2006) classified road cyclists and mountain bikers according to their activity level, competition level, and experience level. This led to three categories, namely competitive, non-competitive, and leisure cyclists. Likewise, Ritchie *et al.* (2010) divided cyclists into different groups by their skill level. The three groups were novice, intermediate and advanced cyclists. Most cyclists classified themselves as intermediate cyclists, which is similar to the finding in the current study. An array of other studies has also clustered endurance athletes, such as Chalip and McGuirty (2004) that clustered runners according to their motivation. This clustering resulted in three groups, which are dedicated runners, running tourists, active runners, and runners who shop. Simpson, Post, Young and Jensen (2014) did a study on ultra-marathon runners and divided the participants according to their experience level, and three groups emerged. These three groups are, the inexperienced, experienced, and elite marathon runners. Baker *et al.* (2005) clustered triathletes as expert group triathletes, mid-pack and back of the pack triathletes. Lovett (2011) also divided triathletes by how competitive they classified themselves. Three groups were formed, namely low competitiveness, medium competitiveness, and high competitiveness triathletes. Casper and Andrew (2008) executed a study on the sport commitment of tennis players and divided the athletes into groups according to their experience level, which led to the beginner, intermediate and advanced athlete. It was found that each of these groups had different factors that influenced their sport commitment and had varying levels of commitment.

6.4.1.9 Best age to start participating in endurance events and best age to stop participating in endurance events

According to respondents (Table 6.4), the best age to start participating competitively in endurance events is between the ages 21 to 30 years (47%), whereas the best age to stop participating in endurance events is never (34%) or older than 70 years (33%). To the researcher's knowledge, no previous study has measured these questions in an endurance sport context.

Table 6.5 evaluates the participation frequency of endurance athletes who took part in the survey.

Table 6-5: Participation frequency of endurance athletes

PARTICIPATION FREQUENCY	ENDURANCE ATHLETE
Hours per week training	Less than 4 Hours (3%) **4-8 Hours (42%)** **8-12 Hours (40%)** More than 12 Hours (15%)
How often do participants take part in non-competitive endurance events	I do not take part at all (21%) **Once a month (35%)** **Two to three times a month (32%)** Two to three times a week (9%) More than three times a week (3%)
Number of years participants have been competitively participating in endurance events	**0-5 years (48%)** **6-10 years (19%)** 11-15 years (11%) 16-20 years (7%) 21 years and more (15%) **Average of 10.36 years**
Number of competitive endurance events per year	None (0%) 1-2 events (15%) **3-4 events (37%)** 5-6 events (19%) 6-7 events (9%) **More than 8 events (20%)**
Planning to take part in more endurance events in the future	**Yes (92%)** No (8%)
When do you register to participate in competitive endurance events	I decide spontaneously (11%) A week before (3%) A month before (19%) **As soon as registration opens (58%)** Other (9%) *Other options included, When I am financially equipped, more than a month before, depends on the popularity of the event and a year before.*

6.4.1.10 Hours per week training

Most of the endurance athletes (42%) who took part in the survey indicated that they train between 4 and 8 hours per week, closely followed by 40% of respondents who train between 8 to 12 hours a week. This corresponds with findings of Rauter and Doupona Topič (2010) that marathon

runners train an average of 5.69 hours a week. Rauter (2014) also found that cyclists train an average of 6.45 hours a week.

6.4.1.11 Frequency of participation in non-competitive endurance events and number of year's participants have been competitively participating in endurance events

A fair percentage (35%) of respondents indicated that they take part in non-competitive endurance events once a month, with similar percentage (32%) respondents that participate in two to three non-competitive events a month. The majority of respondents (48%) have been competitively participating in endurance events for 5 years or less, followed by 19% who have been competing for between 6 to 10 years. The average duration that respondents have been competitively participating in endurance events is 10 years. This corresponds with a study done by Ritchie *et al.* (2010) on bicycle club members in Australia where the authors found that most cyclists had participated in events for less than 10 years. Correspondingly, Ogles and Masters (2003) found that marathon runners who participated in different Midwestern marathons, had on average a running career of 9 years. McGehee *et al.* (2003) on the other hand found that recreational runners have been participating in events for an average of 16 years, which is longer than that of marathon runners.

6.4.1.12 Number of competitive endurance events per year

Most (37%) of respondents take part in three to four competitive endurance events a year, whereas 20% of the athletes take part in more than eight endurance events per year. Other studies have found similar results. However, the results differ from one sport discipline and participant to the next. Ridinger *et al.* (2012) found that marathon runners participate in an average of seven organised events a year, while Rauter (2014) discovered that marathon runners participate in an average of 5.86 events a year. Another study done on marathon runners learned that they planned to participate in an average of eight events per year (Getz & McConnell, 2014). Kruger and Saayman (2013a) found in a study done on Comrades marathon runners that the serious runners participate in 4.54 events a year while recreational runners participate in 3.43 events annually. McGehee *et al.* (2003) also did a study on recreational runners and observed that they take part in an average of six road races a year. Comparably Funk *et al.* (2011) found that recreational runners participate between two and five events a year. When considering cyclists, Rauter (2014) established that recreational cyclists participate in an average of 7.91 events per year. Lovett (2011) documented that triathletes participate in more than six triathlons per year, whereas the mountain bikers in the same study stated that they would participate in an average of six events per year. Another study done on mountain bikers found that these athletes participate in an average of 5.16 events annually (Getz & McConnell, 2011). In an age-based segmentation study done by Myburgh *et al.* (2014c) on Ironman South Africa, younger triathletes (≤30 years old) participated in 3.40 events, while Adept triathletes (31-40 years old) participated

in 5.93 events, mature triathletes (41-50 years old) in 4.23 events and senior triathletes (51+ years old) in 3.67 triathlon events per year. Kruger and Saayman (2013b) did a study on canoeist and identified that recreational canoeists participate in 5.37 events a year, intermediate canoeists in 5.76 and serious canoeists in 9.23 events annually.

6.4.1.13 Intention to take part in endurance events in the future

The majority of respondents (92%) revealed that they were planning to take part in more endurance events in the future. This is encouraging when compared to a study of Ridinger *et al.* (2012) that found 60% of the participants planned to participate in more endurance events the upcoming year. A study of Kruger and Saayman (2014) found that 66% of recreation runners, compared to 82% of serious runners, planned to take part in the Comrades Marathon again the following year. In a study about open-water swimmers Kruger *et al.* (2011) established that 72% of zealous swimmers (these are predominately local residents participating for intrinsic achievement), planned to take part in the event again. In contrast, 87% of the preponderant swimmers (enthusiastic swimmers that mainly swim for the fun and entertainment and will travel longer distances to participate) indicated that they would be swimming in future events.

6.4.1.14 When participant register to participate in competitive endurance events

The most of respondents (58%) indicated that they register to participate in competitive endurance events as soon as the registration opens (Table 6.5). It is important to note when the registration for the event opens as most events registration opens about six to eight months prior to the event, but it differs from event to event. This contradicts research done by Kruger and Saayman (2013a) on marathon runners who found that recreational runners register a month before the event, while serious runners tend to make the decision spontaneously. Kruger and Saayman (2014) did a study to compare the motives of mountain bikers and road cyclists. It was revealed that road cyclists see their event participation as an annual commitment, while the mountain bikers register for their events a year before the event takes place. This shows that both mountain bikers and road cyclists do not see their event participation as a spontaneous decision and plan in advance in order to participate in endurance events.

The next table reveals the factors that influence an endurance athletes' sport commitment.

Table 6-6: The factors that contribute to the commitment of endurance athletes

Factors about sport commitment *5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)*	**Mean Value**	**Std. Deviation**
I enjoy participating in endurance sport	**4.70**	**0.61**

Continued participation in endurance sport keeps me fit and in shape	**4.64**	**0.62**
Continued participation in endurance sport challenges me	**4.63**	**0.63**
Continued participation in endurance sport gives me the opportunity to do something exciting	**4.60**	**0.65**
I have fun while participating in endurance sport	**4.57**	**0.70**
Continued participation in endurance sport gives me a feeling of accomplishment	4.56	0.66
Continued participation in endurance sport relieves me from stress	4.49	0.70
Continued participation helps me attain certain goals	4.36	0.72
I am committed to continue participation in endurance sport	4.30	0.72
Continued participation in endurance sport makes me feel confident	4.29	0.71
I put lots of time, energy and effort into training and participating in endurance sport	4.27	0.79
Continued participation in endurance sport gives me the opportunity to be with friends	4.13	0.82
I am dedicated and will adapt my lifestyle to continue the practice of endurance sport	4.08	0.82
Continued participation in endurance sport gives me an opportunity to travel	4.06	0.89
I invest lots of money in endurance sport	4.00	0.97
Continued participation in endurance sport helps delay the effects of ageing	3.82	0.93
I will do anything not to abandon endurance sport	3.68	1.07
Family and friends provide me with consolation and like to watch and support me while I participate in endurance sports	3.52	1.03
Continued participation in endurance sport gives me social status	3.38	1.06
There are other more attractive sport activities I' prefer to take part in	2.20	0.88
I feel pressure from my significant others to keep participating in endurance sport	2.12	0.97
I only participate because of social pressures	1.46	0.68

6.4.1.15 Factors that influence an endurance athletes' sport commitment

Considering Table 6.6, the five most important factors regarding sport commitment for endurance athletes is most of all that they enjoy endurance sport with the highest mean value of 4.70. Then follows the reason because participants feel endurance sport participation keeps them fit and in

shape (4.64). The third most important factor for participants is the fact that endurance sport challenges them (4.63). The fourth highest mean value was 4.60 for the statement indicating that participants feel that continued participation in endurance sport gives them the opportunity to do something exciting. The fifth most important factor about sport commitment was that participants have fun while participating in endurance sport (4.57). The factor analyses sections (c.f. 15.4.2.3.1- 15.4.2.3.4) discuss these aspects, as well as the remaining Likert-scale questions in more detail. These sections also discuss the relevant literature pertaining to factors. The next table gives an indication of how endurance athletes adapt their lifestyle with regard to financial commitment.

Table 6-7: Financial commitment of endurance athletes

LIFESTYLE AND FINANCIAL COMMITMENT	
Currency of spending	South African Rand (R) (98%)
Event registration	**R7 904.01**
Club membership	R739.76
Nutritional products	R3 342.57
Equipment and gear	**R13 244.70**
Sporting clothes and accessories	R4 281.79
Magazine subscriptions	R262.86
Travel related expenses	**R9 907.85**
Gym membership	R2 063.45
Medical services	**R7 051.08**
Other	R1 502.55
Total average spending	**R50 300.61**

6.4.1.16 Average spending per person on different spending categories

Table 6.7 shows that respondents on average spend the most money on the following categories per year, equipment and gear (R 13 244.70), travel-related expenses (R9 907.85), event registration (R 7 904.01) and medical services (R7 051.08). Consequently, the total spending of average endurance athletes per year is R50 300.61. McGehee *et al.* (2003) similarly found that recreational runners spend an average of $640.40 (R8646) on running-related expenses per year and another $940 (R12 690) on travelling expenses. Wicker *et al.* (2010) did a study on the average spending per year of German sport club members, and found that cyclists spend an average of €400 (R6115), mountain sport participants €422 (R6452), and swimming participants €400 (R6115) per year. The high average total spending of endurance athletes was also evident in studies done in South Africa. In this regard, triathletes had the highest spending of all endurance athletes, which amounted to R25 065.82 per person (Myburgh *et al.,* 2014a); mountain bikers had the second highest spending of R20 181.32 (Kruger & Saayman, 2014) and marathon

runners had the third highest spending of R10 330.37 (Kruger & Saayman, 2015). However, these studies did not measure average spending on an annual basis. The next section discusses how endurance athletes adapt their lifestyle to accommodate their endurance event participation.

Table 6-8: Lifestyle adaption of endurance athletes

Factors about lifestyle adaption to participate in endurance events ***5-point Likert scale of extent (1=not at all, 2=a little, 3= to a moderate extent, 4- = a lot and 5=totally)***	**Mean Value**	**Std. Deviation**
I motivate my friends and family to become involved (as spectators and participants)	**3.40**	**1.17**
I invest in the best training equipment and sport gear	**3.38**	**1.18**
I watch sports on TV	**3.37**	**1.30**
I read about and watch sport on the internet	**3.28**	**1.26**
I have a strict training programme	**3.22**	**1.02**
I joined a sports club or gym	3.18	1.51
I adopted a strict, healthy diet	3.16	0.95
I invest in the best sportswear and accessories	3.14	1.10
I adapt my sleeping patterns when training and participating in events	3.11	1.14
I use sport-related apps on my phone or personal computer	3.09	1.40
I plan my travel to fit in with the events I participate in	2.99	1.25
I plan my holidays around my endurance sport	2.96	1.24
I constantly search for events to participate in and adapt my work schedule to suit my endurance sport activities	2.95	1.18
I actively follow sport on social media	2.88	1.47
I supplement with vitamins and other nutritional products	2.88	1.19
I read sport magazines or newspapers	2.85	0.93
I attend and support other sport events	2.71	1.24
I listen to sport on the radio	2.26	1.26
I make donations to sport development programmes	2.17	1.04
I actively attend sport lifestyle expos to keep up to date with the latest trends and sports gear	2.05	1.11
I subscribe to sport magazines and newspapers	2.00	1.21

I hired a coach to help with my training	1.82	1.33
I am actively involved in youth sport development programmes	1.54	0.97

6.4.1.17 Lifestyle adaption of endurance athletes

Apart from the financial commitment, the majority of respondents as seen in Table 6.8 also indicated that they adapt their lifestyle in various ways. They have a strict, healthy diet (3.40).They have a strict training programme (3.38). They motivate their family and friends to get involved with endurance sport (3.37). They invest in the best training equipment and gear (3.28). They invest in the best sportswear and accessories (3.22). The next table examines the event attributes that attract endurance athletes to a certain event.

Table 6-9: The event attributes that have an influence on event choice

Event attributes that influences participants' choice to participate in endurance sport events ***5-point Likert scale of importance (1=not at all important, 2=slightly important, 3=moderately important, 4 important and 5=extremely important)***	**Mean Value**	**Std. Deviation**
The event is well-organised	**4.30**	**0.83**
The event has an interesting race course or location	**3.92**	**0.96**
The event has a good reputation	**3.85**	**0.97**
The event is challenging	**3.77**	**0.97**
The event is easily accessible	**3.75**	**1.06**
The event registration and travel costs are affordable	3.70	0.97
The event is close to my home city or town	3.26	1.13
The event location has many things to do and places to see	2.93	1.17
The event takes place annually	2.90	1.37
Participation in the event benefits charity	2.79	1.25
The event is ideally located regarding climate and altitude	2.61	1.16
The event will help me qualify for other events	2.60	1.29
I've never participated in the event before	2.59	1.28
The event has different categories I can participate in	2.49	1.27
The event attracts the world's best endurance athletes	2.25	1.31

The event has international standing	2.19	1.23
The event has “pre-events” that involve the whole family	2.08	1.19
The event gets a lot of media exposure and coverage	2.05	1.26
The event has a loyalty programme	1.88	1.15
The event gives away a lot of prize money	1.83	1.17

6.4.1.18 Endurance event attributes participants seek when choosing an event

This section confirms the event attributes which endurance athletes consider the most important when choosing an event to participate in. Firstly, with the highest mean value of 4.30 respondents considered a well-organised event as the most important attribute. Secondly, the event should have an interesting racecourse or location (3.92). The event having a good reputation is also an important attribute with a mean value of 3.85 followed by the affordability of the event registration and travel costs (3.77). Lastly, it is important that the event should be challenging (3.75) (Table 6.9). The next section highlights the most prominent ways in which endurance participation influences travel behaviour.

Table 6-10: Sport commitment and travel behaviour

How endurance sport participation influences travel behaviour *5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)*	**Mean Value**	**Std. Deviation**
Participation in endurance sport gives me the opportunity to travel	**3.67**	**0.99**
Family and friends can accompany me to endurance events	**3.58**	**0.99**
My sport participation gives me the opportunity to explore the city/town that I participate in	**3.40**	**1.14**
I travel in the area where my endurance event takes place	**3.19**	**1.03**
My sport participation and holiday destination(s) are separate	**3.16**	**1.07**
I visit tourist attractions before, during and/or after participating in endurance events	3.09	1.12
I plan to return to the destinations I have participated in for holiday purposes	2.86	1.08
I plan my sport participation in order to see different attractions and destinations	2.82	1.08
I only choose a holiday destination if it gives me an opportunity to train	2.70	1.21
I see my endurance sport participation as an opportunity to travel overseas	2.67	1.35
Number of days participants arrive in advance at the destination before the event takes place	0 days (5%) **1 day (46%)** 2 days (33%)	

	3 days (10%) More than 4 days (6%) **Average of 1.76 days**
Number of days participants stay in the event area after the event	0 days (22%) **1 day (44%)** 2 days (23%) 3 days (6%) More than 4 days (6%) **Average of 1.5 days**

6.4.1.19 Travel behaviour of endurance athletes

This section sets out the travel behaviour of respondents based on data analysis (Table 6.10). With a mean value of 3.67, respondents indicated that the participation in endurance sport gives them the opportunity to travel followed by family and friends that accompany them to endurance events (3.58). A large number of respondents felt that participating in endurance events also gives them the opportunity to explore the city/town they participate in (3.40). Furthermore, respondents indicated that they travel in the area where the event takes place (3.19). This is in contrast to respondents who stated that their sport participation and holiday destination are separate (3.16).

6.4.1.20 Number of days participants arrive in advance at the destination the event takes place and number of days participants stay in the event area after the event

In view of the number of days, participants stay before and after the event on average, the respondents arrive 1.76 days before the event and only stay 1.5 days after the event has ended. When compared to other studies on the length of stay of endurance athletes in South Africa, the following studies found similar results. Kruger *et al.* (2011) found that swimmers, as well as canoeists (Kruger & Saayman, 2013b) stay an average of one night in the event area. Thus, participants do not stay extra days before or after the event, because both events are single day events. Similarly, mountain bikers stay an average of eight nights in the event area. This is the exact duration of the event (Cape Epic) (Kruger & Saayman, 2014). Other studies found that endurance athletes stay longer than the duration of the event, for example Kruger, Myburgh *et al.* (2016) found that road cyclists stay an average of five nights, similar to marathon runners who stay either five nights (Kruger, Botha *et al.,* 2012) or four nights (Kruger & Saayman, 2015) in the event area. Myburgh *et al.* (2014a) found that triathletes also stay an average of five nights in the area where the event took place.

6.5 Conclusion

The goal of this chapter was to examine the relevant methodological considerations applied in this study and to present the descriptive results of the research as obtained in the survey. The chapter firstly focused on the research framework of which the preceding four literature chapters

form the base. The framework consists of three stages, which include the SCM, the Involvement Theory as well as other commitment predictors. The questionnaire measured each of these aspects. This chapter also revealed which variables from the research framework is included in the questionnaire and the type and nature of each question. Furthermore, the questionnaire was validated by analysing the content validity, construct validity as well as the internal consistency of each variable.

The results from the research confirmed the findings from previous research conducted in a South African endurance sport context. It was found and confirmed that endurance athletes is a unique market with a distinctive demographic profile, high training and participation frequency, high spending, specific event preferences and travel behaviour. The involvement theory measured commitment and confirmed that participants agreed commitment through their' repeat participation, spending and behaviour (c.f. 4.2). In addition, the endurance participants that participated in the study had a high level of involvement (which is seen in their repeat participation, training and event participation frequency as well as high spending), which can be directly linked to their commitment. It is however important to note that endurance athletes are not a homogenous market, especially with regard to their sport commitment. Thus, continued research critical importance. Chapter 7 builds on the current results by using the data for different analyses such as Factor Analysis, ANOVAs, *T-tests,* Spearman's Correlations as well as Structural Equation Modelling.

7.1 Introduction

In the previous chapter all the methodological considerations as well as the descriptive results were discussed. Chapter 6 also reviewed the research framework which was developed from previous literature. Chapter 7 presents the results from the multivariate analyses. Firstly, this chapter sets out the results from the four exploratory factor analyses in order to show the *commitment*, *event attributes*, *lifestyle* and *travel behaviour* factors of endurance athletes. Then follows the results from the t-tests and ANOVAs to show which internal and behavioural factors can either increase or decrease endurance athletes' commitment. Spearman's Correlation analyses were used to identify which factors were correlated to commitment. Structural Equation Models were implemented in order to identify which factors had a unique relation to commitment. Lastly, Mediation models were used to identify the mediators for the relationship between event attributes and commitment. The results are of particular importance as it shows how the research framework (c.f. 6.2) was tested to design the final framework that is presented as conclusion of this chapter.

7.2 Evaluation of the exploratory factor analyses

The first part of this chapter looks at the results found in the exploratory factor analyses. An evaluation of the steps involved with analysing and interpreting a factor analysis is presented as well as how each of these steps was applied in the current study. The section concludes in view of the results of the four exploratory factor analyses based on a different section of the questionnaire (Commitment, Lifestyle, Event Attributes and Travel Behaviour).

7.2.1 Understanding factor Analysis

The Statistical Product and Service Solutions (SPSS) have the capabilities of basic and advanced statistics. It is well known as professional statistical software with wide applications in many fields such as communications, medical treatments, the bank sector, security, insurance, manufactory, commerce, market research, scientific research and education (Chen & Xiao, 2012:1258). The factor analysis is one of the analyses on SPSS that can be seen as a data reduction technique. It takes a large set of variables and looks for a way the data may be reduced or summarised using a smaller set of factor components (Pallant, 2007:179, 2013:188). Rummel (1988:4) define a factor analysis as "an interdependence technique which primary purpose is to define the underlying structure among the variables in the analysis". Thus, factors are formed by looking for intercorrelations in a set of variables. It is furthermore used as a tool to reduce or summarise a large number of related variables to a few representative factors, before using these factors in other analysis, such as multiple regression or multivariate analysis of variance as applied in the

this current study (Pallant, 2007:179, 2013:188; Sreejesh, Mohapatra & Anusree, 2014:207). There are two approaches to a factor analysis, exploratory and confirmatory factor analysis. An exploratory factor analysis is done in the early stages of research to gather interrelationships among a set of variables and is widely utilised and broadly applied as a statistical technique in the social sciences (Osborne & Costello, 2009:131; Williams, Onsman & Brown, 2010:2). A confirmatory factor analysis, on the other hand, is executed later during the research process to confirm the specific hypothesis of theories concerning the structure underlying a set of variables (Pallant, 2007:179, 2013:188). **The current research had made use of exploratory factor analysis since the combination of variables in the current study has not been tested previously and has not been tested on different endurance athletes in South Africa.**

7.2.2 Steps involved in a factor analysis

The next section reviews the steps involved in conducting and interpreting a factor analysis. These steps were also followed in the research under investigation.

Step 1: Assessment of the suitability of the data for a factor analysis

There are two main issues to take into account when performing factor analysis, namely the sample size and the strength of the relationship between the variables. With sample size, the larger, the better since with small samples the correlation coefficients among the variables are less reliable (Pallant, 2007:180, 2013:190). General guidelines include Tabachnick's rule of thumb (Tabachnick & Fidell, 2013:613) that suggests having at least 300 cases for a factor analysis. Pallant (2013:215) suggests that sample sizes should be greater than 150. Other research such as the work of Comrey (1973) as cited by Williams *et al*. (2010:4) give a guide for sample sizes, which states 100 is poor, 200 as fair, 300 as good, 500 as very good and 1000 or more as excellent. Other authors feel that such rules of thumb can be misleading and does not take into account the complex dynamics of a factor analysis (MacCallum, Widaman, Zhang & Hong, 1999:84; Henson & Roberts, 2006:394; Williams *et al.,* 2010:4). **Considering the current study, a sample size of 498 was included in the factor analysis. The sample is very close to 500, which is according to the authors mentioned above, a very good sample size.**

Before the extraction of the factors, the SPSS generated two statistical analyses to help assess the factorability of the data (Williams *et al.,* 2010:5; Sreejesh *et al.,* 2014:217). The two analyses, named after statisticians, are called The Bartlett's test of sphericity (Bartlett, 1954:296) and the Kaiser-Meyer-Olkin (hereafter referred to as the KMO) measure of sampling adequacy (Kaiser, 1970:401, 1974:31). In view of the Bartlett's Test of Sphericity the factor analysis is appropriate when the Bartlett's Test is significant ($p < .05$). The KMO index ranges from 0 to 1 with a 0.60 suggested as the minimum value for a good factor analysis; if less than 0.60 the factor analysis is inadequate (Tabachnick & Fidell, 2013:613). **These stated guidelines were followed with**

each of the four factor analyses that were executed in the present study and are discussed in detail further on in this chapter. The next step is factor rotation, of which the in-depth discussion follows in the subsequent section.

Step 2: Factor extraction

The next step is to determine the smallest number of factors that can be used to best represent the interrelations among the set of variables (Pallant, 2007:181, 2013:190). There is a variety of approaches that can be used to extract the number of underlying factors. Tabachnick and Fidell (2013:614) recommend that researchers adopt an exploratory approach experimenting with different numbers of factors until a satisfactory solution is found. It is therefore up to the researcher to determine the number of factors that he/she considers that best describes the underlying relationship among the variables (Pallant, 2007:182, 2013:191). There are numerous ways to extract factors: Principal components analysis (PCA); Principal axis factoring (PAF); Image factoring; Maximum likelihood; Alpha factoring; and Canonical factoring (Thompson, 2004:5; Pallant, 2007:182; Tabachnick & Fidell, 2013:614). The principal components analysis and principal axis factoring are the most commonly used in published literature (Williams *et al.,* 2010:6). The principal component analysis is the default method in many statistical programs and is commonly used in an exploratory factor analysis. The principal component analysis is also recommended when no prior theory or model exists (Williams *et al.,* 2010:6). **A principal component analysis was therefore used in the current research since it was the default method, as no prior models exist.**

Furthermore, different techniques are used to assist in the decision concerning the number of factors to retain, including Kaiser's Criterion, Scree Test and Parallel analysis (Pallant, 2007:182, 2013:191). For the purpose of this research, the Kaiser-Meyer-Olkin's Measure of Sampling Adequacy was used, which is known as the Eigenvalue. The application of this rule, requires that only factors with an Eigenvalue of 1.0 or more are retained for further investigation (Pallant, 2007:182, 2013:191). Kaiser (1960:141) proposed this criterion and is probably the one most widely applied. Based on Kaiser's criterion, Eigenvalues greater than one represents the number of total variances, which that factor explains (Sreejesh *et al.,* 2014:217). **In the current study, only the factors with an Eigenvalue greater than one was chosen in each of the four factor analyses.** The rationale for the Eigenvalues greater than one criterion is that any individual factor should account for the variance of at least a single variable if it is to be retained for interpretation (Sreejesh *et al.,* 2014:217). In humanities, the explained variance is commonly as low as 50% to 60% (Hair, Anderson, Tatham & Black, 1995:89; Pett, Lackey & Sullivan, 2003:118).

Step 3: Factor rotation

The next step to take is the rotation method. The goal of rotation is to simplify and clarify the data structure (Osborne & Costello, 2009:135). There are two main approaches to the rotation in either orthogonal (uncorrelated) or oblique (correlated) factor solutions (Pallant, 2007:183, 2013:192). Orthogonal rotation, results in solutions that are easier to interpret and report. However, it requires the researcher to assume that the underlying constructs are independent (not correlated) (Tabachnick & Fidell, 2013:642; Pallant, 2007:183, 2013:192). Oblique rotation allows factors to be correlated, but they are more difficult to interpret (Williams *et al.,* 2010:9). Rotation, according to Thurstone (1948:224) refers to a simple structure. This involves each variable to load strongly on only one component and some strongly loaded variables to represent each component. As with the extraction method, there is a variety of choices. Varimax rotation is by far the most common choice for orthogonal methods of rotation (Osborne & Costello, 2009:136). The most commonly used oblique technique is the Direct Oblimin (Pett *et al.,* 2003:118; Osborne & Costello, 2009:136; Tabachnick & Fidell, 2013:643). In social sciences, the oblique technique is more common because it is expected that there will be correlations among factors since behaviour is rarely partitioned into units that function independently of one another (Osborne & Costello, 2009:136; Williams *et al.,* 2010:9). If the factors are truly uncorrelated orthogonal and oblique, rotation produces nearly identical results (Osborne & Costello, 2009:136). In the SPSS output the rotated factor matrix is interpreted after orthogonal rotation. In the application of oblique rotation, the pattern matrix is examined for factor/item loadings and the factor correlation matrix reveals any correlations between the factors (Osborne & Costello, 2009:136). **An oblique rotation was chosen for the present study since the author wanted to test the correlations between the different factors that influenced the participant's sport commitment. The pattern matrix was further examined to reveal the factor correlations.**

A correlation matrix should be used in the exploratory factor analysis to display the relationships between individual variables. The strength of the intercorrelations among the items is the investigation into the correlation matrix for evidence of coefficients greater than $r = 0.30$. If few correlations are above this level, the factor analysis may not be appropriate (Tabachnick & Fidell, 2013:644). In the examining of the factor loadings Tabachnick and Fidell (2001:623) cite 0.32 as a good rule of thumb for the minimum loading of an item, which equates to approximately 10% overlapping variance with the other items in the factor. According to Floyd and Widaman (1995:294), factor loadings are considered to be meaningful when they exceed 0.30 or 0.40. A “cross loading” item is an item that loads at 0.32 or higher on two or more factors. The researcher needs to decide whether a “cross loading” item should be dropped from the analysis, which may be a good choice if there are several adequate to strong loaders (0.50 or better) on each factor (Osborne & Costello, 2009:138). Ideally, the recommendation is three or more items loading on each component. It is, however, important to remember that a factor analysis is used as a data

exploration technique. This means that the interpretation and the use that a factor analysis is positioned for, is up to the researcher's judgement rather than any hard and fast statistical rules (Pallant, 2007:190, 192, 2013:189). **When looking at the factor analyses in the current research, only items with a factor loadings greater than 0.30 were considered as contributing to a factor (Steyn, 2000:2). With items that cross-loaded on two or more factors, the factor loadings of each was considered and the factor loading which was greater than 0.30 was categorised in the factor where its interpretability suited it best.** The next step is the interpretation of the factors identified and is discussed as Step 4.

Step 4: Interpretation

Interpretation involves that the researcher examines which variables are attributable to a factor and gives that factor a name or theme (Williams *et al.,* 2010:9). Henson and Roberts (2006:396) note "the meaningfulness of latent factors is ultimately dependent on researcher definition". The reason for thorough and systematic factor analysis is to isolate items with high loadings in the resultant pattern matrices. In other words, the search to find factors that is suitable to explain the majority of the responses (Williams *et al.,* 2010:9). **Step 4 applies to the current study, because each factor was labelled according to the items that were loaded on that specific factor. The factor name/theme therefore attempted to best describe the items loaded on that factor.** The last step of the process is testing the reliability of the factors identified. This is discussed in Step 5.

Step 5: Reporting errors with reliability measures

The reliability measures used in the current research is the Cronbach's Coefficient Alpha and the Inter-item correlation. The Cronbach's alpha is a tool for measuring the internal consistency of measurement scales (Homburg & Giering, 1996:8). Cronbach's Coefficient Alpha can be seen as the internal consistency reliability, which is measured by looking at the overall inter-item correlation between the identified concepts. To express it simply, it represents the degree to which respondents answered to the relevant items in a similar way. Cronbach's Alpha reliability coefficient normally ranges between 0 and 1 (Gliem & Gliem, 2003:87). The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale (Gliem & Gliem, 2003:87). George and Mallery (2006:231) provide the following rules of thumb: >0.90- Excellent; >0.80- Good; >0.70- Acceptable; >0.60- Questionable; >0.50 Poor; and <0.50- Unacceptable. When interpreting the alpha value, it should be kept in mind that its value depends on the number of indicators. For this reason, concepts with lesser indicators and lower values may be accepted (Cortina, 1993:101). Pallant (2007:95, 2013:101) adds that Cronbach alpha values are quite sensitive to the number of items in the scale. In the case of short scales (e.g. scales with fewer than ten items) it is common to find quite low Cronbach values (e.g. 0.50). Values above 0.70 are used to establish reliability (Nunnally, 1978:246). Acceptable values may

be as low as 0.40 for broadly defined constructs. In the case of a low Cronbach value, it may be more appropriate to report the mean inter-item correlation for the items (Pallant, 2013:101). Inter-item correlation is descriptive information about the correlation of each item with the sum of all remaining items (Gliem & Gliem, 2003:86). The recommended average inter-item correlations computed should lie between 0.15 and 0.50 for a factor to test reliable (Clark & Watson, 1995:316). Briggs and Cheek (1986:115) recommend the optimal range for inter-item correlation as 0.20 to 0.40. **To measure the reliability of the factors found in the current research the Cronbach alpha coefficients and inter-item correlations for each factor in the four Factor Analyses is discussed in the upcoming section.** The first factor analysis determined the factors that predict the sport commitment of endurance athletes.

7.2.3 Results from the exploratory factor analyses

This section reveals the results of the four exploratory factor analyses done to identify the factors that may influence the commitment of endurance respondents in South Africa. The first factor analysis focuses on the factors that have an influence on the participant's sport commitment. The second factor analysis reviews the lifestyle adaption factors that respondents harness to participate in endurance events. The third factor analysis looks at the event attributes, which respondents feel are important when choosing an event. The last factor analysis evaluates how endurance participation has an influence on the travel behaviour of endurance athletes. The sample size used in all four factor analyses was 498 endurance athletes (n=498). According to Williams *et al.* (2010:4) such a sample size can be seen as a very good sample. The five steps mentioned in the first part of this chapter were followed in each case. The four factor analyses were furthermore performed in SPSS version 23 and were subjected to a principal component analyses. An oblique (correlated) factor solution with Direct Oblimin was used for all the analyses, and all items that loaded on a factor with a loading greater than 0.30 was included. The relatively high factor loadings indicated a reasonably high correlation between the factors and their component items. In the case of items that cross-loaded on two or more factors, all items were retained at the factor where the factor loading was the highest (with all four factor analyses, no cross-loading items were moved to a different factor). The results are consequently discussed.

7.2.3.1 Results from the factor analyses: Sport commitment of endurance athletes

The suitability of the data for the factor analysis was firstly assessed. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.93, which exceeded the recommended value of 0.6 (Kaiser, 1970:401, 1974:31). Bartlett's Test of Sphericity (Bartlett, 1954:296) reached statistical significance ($p < 0.001$), which supported the factorability of the correlation matrix. Four commitment factors that accounted for 58% of the total variance were identified. Furthermore, all factors had relatively high reliability coefficients (Cronbach's Alpha), ranging from 0.53 (the lowest) to 0.92 (the highest). The average inter-item correlation coefficients showed values

between 0.24 and 0.55 that also implied internal consistency for all factors. Therefore, given the high reliability scores of the constructs, the factor analysis is considered reliable. The interpretation of each of the four factors is shown in Table 7.1, followed by a discussion of each factor.

Table 7-1: Factor analysis results from the commitment factors of endurance athletes in South Africa

Factors influencing sport commitment of endurance athletes	1	2	3	4
Factor 1: Enjoyment, personal investments and involvement opportunities				
I enjoy participating in endurance sport	.832			
Continued participation in endurance sport keeps me fit and in shape	.822			
Continued participation in endurance sport gives me the opportunity to do something exciting	.806			
Continued participation in endurance sport challenges me	.768			
I have fun while participating in endurance sport	.763			
Continued participation in endurance sport gives me a feeling of accomplishment	.729			
Continued participation in endurance sport relieves me from stress	.716			
Continued participation helps me attain certain goals	.637			
I put lots of time, energy and effort into training and participating in endurance sport	.528			
Continued participation in endurance sport makes me feel confident	.503			
I invest lots of money in endurance sport	.397			
Factor 2: Involvement alternatives and social constraints				
There are other more attractive sport activities I' prefer to take part in		.740		
I only participate because of the social pressures		.676		
I feel pressure from my significant others to keep participating in endurance sport		.617		
Factor 3: Dedication and social support				
I will do anything not to abandon endurance sport			.835	
I am dedicated and will adapt my lifestyle to continue the practice of endurance sport			.715	
Family and friends provide me with consolation and like to watch and support me while I participate in endurance sports			.667	
I am committed to continue participation in endurance sport			.546	
Factor 4: Status socialisation and travel				

Continued participation in endurance sport helps to delay the effects of ageing				.606
Continued participation in endurance sport gives me the opportunity to be with friends				.581
Continued participation in endurance sport gives me social status				.510
Continued participation in endurance sport gives me an opportunity to travel				.465
Total variance explained (Eigen value > 1)	58%			
Average inter-item correlation	0.55	0.42	0.24	0.30
Reliability coefficient (Cronbach's Alpha)	0.92	0.77	0.63	0.53
Mean Value	4.51	3.92	3.85	1.93

*Note: Scale used, 5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)

Factor 1: *Enjoyment, personal investments and involvement opportunities*

Enjoyment, personal investments and involvement opportunities was the most important factor with the highest mean value (4.51). The reliability coefficient was 0.92, and the average inter-item correlation was 0.55. This finding corresponds with a study done by Jeon and Ridinger (2009) on windsurfers where five unique constructs were found for sport commitment. The first factor was labelled *intrinsic motivators* and included *enjoyment, involvement opportunities* and *personal investments*. *Intrinsic motivators* explained most of the variance in sport commitment. This finding is supported by Krinanthi, Konstantinos and Andreas (2010) who found that there is a positive association between *intrinsic motivation* and commitment. In their research focusing on exercise and fitness groups, Alexandris, Zahariadis, Tsorbatzoudis and Grouios (2004), similarly found that the best predictors of commitment were *involvement opportunities, investment* and *enjoyment*.

Previous studies have also found that each of these constructs on their own can have a positive influence on sport commitment. Firstly, *enjoyment* as a predictor of commitment has been found by an array of authors such as Augaitis (2005), Sousa, Torregrosa, Viladrich, Villamarín and Cruz (2007), Casper, Gray and Stellino, (2007), Taylor and Shanka (2008), Brown, O'Connor and Barkatsas, (2009), Ritchie, Tkaczynski and Faulks (2010), Getz and McConnell (2011), Krinanthi *et al.* (2010), Beaton, Funk, Ridinger and Jordan (2011), Alexandris, Funk and Pritchard (2011), Funk, Jordan, Ridinger and Kaplanidou (2011), Hall (2013), Ridinger, Funk, Jordan and Kaplanidou (2012), Vallerand and Young (2014) as well as Getz and McConnell (2014). *Personal investment* also has a positive correlation with sport commitment, which has been realised by authors such as Augaitis (2005), Casper *et al.* (2007), Krinanthi *et al.* (2010) and Hall (2013). *Involvement opportunities* has also been learned to be one of the constructs that lead to sport

commitment by several authors, including Krinanthi *et al.* (2010), Chu and Wang (2012), Hall (2013) and Vallerand and Young (2014).

Similarly, *involvement opportunities* observed in the current study has been noticed in other studies done among endurance athletes. These involvement opportunities include: Improving confidence (Brown *et al*., 2009); Health outcomes (LaChausse, 2006; Brown *et al*., 2009; Vallerand & Young, 2014); Challenge (Taylor & Shanka, 2008; Ritchie *et al.,* 2010; Funk *et al.,* 2011; Lamont & Kennelly, 2012; Vallerand & Young, 2014; Getz & McConnell, 2014); Having a new and unique experience (Rauter & Doupona Topič, 2010); Physical benefits (Taylor & Shanka, 2008; Lamont & Kennelly, 2012; Fairer-Wessels, 2013); Goal pursuits (LaChausse, 2006; Lamont & Kennelly, 2012; Vallerand & Young, 2014); Achievement (Taylor & Shanka, 2008); and stress relief (Vallerand & Young, 2014).

Factor 2: *Involvement alternatives and social constraints*

Involvement alternatives and social constraints received the second highest mean value of 3.92 with a reliability coefficient of 0.77 and an average inter-item correlation of 0.42. To the researcher's knowledge, only one previous study has found *involvement alternatives* as a predictor of sport commitment. In a study done by Sousa *et al.* (2007) *involvement alternatives* were the best predictor of commitment of soccer players. In contrast to the current research, most previous research focusing on sport commitment has determined that *involvement alternatives* have a negative influence on commitment (Augaitis, 2005; Chu & Wang, 2012; Hall, 2013). In view of *social constraints*, a study regarding fitness respondents found that social constraints have a positive effect on commitment (Alexandris *et al.*, 2004). On the contrary, most studies have revealed that *social constraints* do not correlate with nor has a negative influence on commitment (Augaitis, 2005; Jeon & Ridinger, 2009; Krinanthi *et al.,* 2010). It is important to note that although *involvement alternatives and social constraints received* a high mean value in the current study; further analysis is needed to determine if the influence on commitment is either positive or negative. This test in relationship is reviewed later on in the chapter.

Factor 3: *Dedication and social support*

Dedication and social support had the third highest mean value of 3.85 as well as a reliability coefficient of 0.63 and an average inter-item correlation of 0.24. *Dedication* normally forms part of the commitment factor, which as a factor of sport commitment has been found in studies done by Krinanthi *et al.* (2010), Ridinger *et al.* (2012) as well as Fernandes, Correia, Abreu and Biscaia (2013). *Social support* has also been disclosed as positively correlated with sport commitment (Augaitis, 2005; Chu & Wang, 2012; Hall, 2013).

Factor 4: *Status, socialisation and travel*

Status, socialisation and travel received the lowest mean value of 1.93 with a reliability coefficient of 0.53 and an average inter-item correlation of 0.30. This finding corresponds with other influences such as *socialisation* and *social status*, which has been found to have a lesser influence on sport commitment (LaChausse, 2006; Taylor & Shanka, 2008; Funk *et al.,* 2011; Getz & McConnell, 2014). On the other hand, studies have revealed that *social experiences* and *social recognition* can be a motivator for sport participation (Funk, Toohey & Bruun, 2007; Brown *et al.,* 2009; Ritchie *et al.,* 2010). Similar to the other influence of *delaying the effects of ageing*, Funk *et al.* (2011) found that *health pressures* had the lowest mean values when it comes to the commitment of runners. Getz and McConnell (2011) have observed the influence, namely having the opportunity to travel through sport participation as a positive motivator, which contradicts with the current results.

7.2.3.2 Results from the factor analyses: Lifestyle commitment of endurance respondents

The Kaiser-Meyer-Olkin measure of sampling adequacy was calculated at 0.88 and Bartlett's test of sphericity reached statistical significance ($p < 0.001$). The data was, therefore, appropriate for a factor analysis. A five factor solution was chosen which accounted for 59% of the total variance. The five factors were labelled according to similar characteristics between their component items as seen in Table 7.2. When analysing the reliability coefficients, the lowest coefficient was 0.66 while the highest measured at 0.85. This indicated well-validated factors. The average inter-item correlation coefficients had values between 0.36 and 0.52. Therefore, all five factors were internally consistent for all factors. The analysis of all five steps, as mentioned in the previous sections, confirms that the following factor analysis can be regarded as trustworthy.

Table 7-2: The factor analysis results of the lifestyle adaption of endurance athletes

Lifestyle adaption factors of endurance athletes	1	2	3	4	5
Factor 1: Health and fitness					
I have a strict training programme.	.821				
I adapt my sleeping patterns when and participating in events.	.738				
I supplement with vitamins and other nutritional products.	.689				
I adopted a strict, healthy diet	.629				
I hired a coach to help me with my training	.591				
I joined a sports club or gym	.319				
Factor 2: Media consumption					
I read about and watch sport on the internet		.773			
I listen to sport on the radio		.741			
I watch sports on TV		.704			

I attend and support other sport events		.683			
I read sport magazines or newspapers		.682			
I use sport-related apps on my phone or personal computer		.663			
I actively follow sport on social media		.639			
Factor 3: Leisure and event participation					
I plan my holidays around endurance sport			.927		
I plan my travel to fit in with the events I participate in			.904		
I constantly search for events to participate in and adapt my work schedule to suit my endurance sport activities			.704		
I motivate my friends and family to become involved as spectators and participants			.367		
Factor 4: Sport development					
I'm actively involved in youth sport development programmes				.827	
I make donations to sport development programmes				.736	
I actively attend sport lifestyle expos to keep up to date with the latest trends and sports gear				.492	
Factor 5: Enhanced performance spending					
I invest in the best sportswear and accessories					.614
I invest in the best training equipment and sport gear					.556
I subscribe to sport magazines or newspapers					.456
Total variance explained (Eigen value > 1)	59%				
Average inter-item correlation	0.36	0.44	0.52	0.39	0.42
Reliability coefficient (Cronbach's Alpha)	0.75	0.85	0.81	0.66	0.68
Mean Value	2.89	2.92	3.07	1.92	2.84

*Note: Scale used, 5-point Likert scale of extent (1= not at all, 2= a little, 3= to a moderate extent, 4= a lot and 5= totally)

Factor 1: *Health and fitness*

Health and Fitness received the third highest mean value of 2.89 with a reliability coefficient 0.75, and the average inter-item correlation was 0.36. Getz and McConnell (2014) also found that behavioural measures of involvement such as "*I belong to a running/biking club or team*" received high mean values among both runners and mountain bikers. In a study done in the event travel careers of triathletes, Lamont, Kennelly and Wilson (2012) found that triathletes' event travel career priorities are very similar to the items found in Factor 1. These priorities include *being able to complete training on the frequent and consistent basis to achieve goals that have been set*, *discard habits that may be unhealthy in favour of living a healthier lifestyle* and *to remain fit and healthy*.

Factor 2: *Media consumption*

The second factor received the second highest mean value of 2.92, which indicates that respondents adapt their lifestyle to a moderate extent when it comes to *media consumption*. The factor has a reliability coefficient of 0.85 and an average inter-item correlation of 0.44. Getz and Andersson (2010) as well as Fernandes *et al*. (2013) support this factor. However, in both cases the factor received a low mean value, indicating respondents do not necessarily have increased *media consumption* due to their sport participation. On the other hand, Getz and McConnell (2014) observed high mean values for both mountain bikers and runners when asked the question "*I read a lot about running/biking in specialised magazines and both*".

Factor 3: *Leisure and event participation*

Leisure and event participation was seen as the most significant way respondents adapt their lifestyle to participate in endurance events, although this adaption is only to a moderate extent as seen from the mean value (3.07). The reliability coefficient was 0.81, and the average inter-item correlation was 0.52. This corresponds with a finding from Getz and McConnell (2014) that both mountain bikers and runners indicated that they spend money travelling to events each year. Lamont *et al.* (2012) revealed that one of the travel career priorities, very similar to the *Leisure and event participation* factor is the need for triathletes *to travel to triathlon events in locations that are appealing holiday destinations*.

Factor 4: *Sport development*

This factor received the lowest mean value of 1.92, which indicates that endurance athletes only adapt their lifestyle a little when it comes to *sport development*. This could be because these athletes participate in events that are more competitive and have less time for youth development and charity initiatives. The factor furthermore had a reliability coefficient of 0.66 and an average inter-item correlation of 0.39. In contradiction, Bennett, Mousley, Kitchin and Ali-Choudhury (2007) found that *involvement with charity* and *feeling a duty to participate* received high mean values, although the study was done on respondents who participated in a charity-affiliated event. Lamont *et al.* (2012) also found that triathletes like to *keep up with the latest equipment trends/fads*, which is similar to the lifestyle expos item in the current research.

Factor 5: *Enhanced performance spending*

Enhanced performance spending had the second lowest mean value of 2.84, which indicates that endurance athletes only has a little *enhanced performance spending* adaption because of their participation in endurance sport. The low rating of the factor might be because most of the respondents already own all the equipment needed to participate. The reliability coefficient was 0.68, and the average inter-item correlation was 0.42. Getz and McConnell (2014) found with regard the item "*each year I spend much money on mountain bike/running equipment*", higher

means for both runners and mountain bikers. Fernandes *et al.* (2013) also learned that *the purchasing of sporting goods* had the highest mean when studying the relationship between sport commitment and sport consumer behaviour of sport respondents of both individual and team sports, fitness and outdoor activities. Lamont *et al.* (2012) determined that triathletes *want to be able to own sport equipment that may boost their performance*. Therefore, *enhanced performance spending* is an important priority. Getz and Andersson (2010), on the other hand, found that *spending money on running* had low mean values.

7.2.3.3 Results from the factor analyses: Event attributes when choosing an endurance sport event

Considering the factorability of the data, the Kaiser-Meyer-Olkin measure of sampling adequacy measured at 0.89 and Bartlett's test of sphericity reached statistical significance ($p < 0.001$). Four event attribute factors with a total variance of 58% were identified. The event factor analysis had good internal consistency, with the Cronbach alpha coefficients ranging from 0.61 to 0.89. The average inter-item correlation coefficients values were between 0.34 and 0.51, which falls into the recommended range for reliability (Briggs & Cheek, 1986:115). Each of the five factors is categorised according to similar characteristics as shown in Table 7.3. Each factor is discussed after the presentation of Table 7.3.

Table 7-3: Results revealing the event attributes endurance athletes see as important when choosing an event

Important attributes endurance respondents seek when choosing an event	1	2	3	4
Factor 1: Attractiveness and exposure				
The event gets a lot of media exposure and coverage	.817			
The event has a loyalty programme	.798			
The event gives away a lot of prize money	.775			
The event attracts the world's best endurance athletes	.713			
The event has different categories I can participate in (professional, amateur, charity)	.703			
The event takes place annually	.695			
The event has international standing	.669			
The event will help me qualify for other events	.633			
The event has pre-events that involve the whole family (e.g. fun run, junior events)	.610			
Participation in the event benefits charity	.516			
Factor 2: Accessibility and affordability				
The event registration and travel costs are affordable		.835		
The event is close to my home city or town		.729		

The event is easily accessible (e.g. available information and easy registration process)		.451		
Factor 3: Challenge and reputation				
The event is challenging			.778	
The event has a good reputation			.778	
The event has an interesting race course or location			.705	
The event is well organised			.493	
I've never participated in the event before			.377	
Factor 4: Location and climate				
The event location has many things to do and places to see				.827
The event is ideally located in terms of climate altitude				.736
Total variance explained (Eigen value > 1)	58%			
Average inter-item correlation	0.46	0.36	0.34	0.51
Reliability coefficient (Cronbach's Alpha)	0.89	0.61	0.71	0.68
Mean Value	2.30	3.57	3.69	2.77

*Note: scale used 5-point Likert scale of importance (1=not at all important, 2=slightly important, 3=moderately important, 4 important and 5=extremely important)

Factor 1: *Attractiveness and exposure*

Attractiveness and exposure is seen as a slightly important event attribute to participate in endurance events as this factor received the lowest mean value (2.30). The reliability coefficient was 0.89, and the average inter-item correlation was 0.46. Likewise, Getz and McConnell (2011) found the lowest mean values for a mountain biking event was "*it helps me prepare for more important events*, and "*it gives away prize money* or *raises money for charity*". Getz and McConnell (2014) also noticed while studying a mountain biking and running event that the following considerations were unimportant: *Social considerations* like the party atmosphere and entertainment; *Prize money*, *Size or exclusivity of the event*; *Gifts, Media attention*; and *Major sponsors*. Fotiadis, Vassiliadis and Yeh (2016) learned that event attributes like entertainment also supported this finding. Additional aspects such as awards, as well as *parallel organised trade shows and exhibitors*, were also found to be a less important preference when choosing a cycling event. On the other hand, studies have found that the ***event's size and scope*** is a significant predictor for intent to repeat visitation of the sport event (Hallmann & Breuer, 2010). In view of studies that focused on motivation to participate, the factor - *event attractiveness* - has been found to be an important motivator to participate in different endurance events in South Africa (Streicher & Saayman, 2010; Kruger, Saayman & Ellis, 2012; Kruger, Botha & Saayman, 2012; Kruger & Saayman, 2013a; Kruger & Saayman, 2014). Similarly, *event novelty*, which is similar to the factor found in the current study, was revealed in several studies that focused on motives to participate in endurance events (Kruger, Saayman *et al.,* 2012; Kruger & Saayman, 2013a; Kruger & Saayman, 2014). Another similar factor was discerned in a study done regarding cyclists'

motivation to participate. The factor was labelled *international standing of the event* (Kruger, Myburgh & Saayman, 2016).

Factor 2: *Accessibility and affordability*

Accessibility and affordability received the second highest mean value of 3.57 with a reliability coefficient of 0.61 and an average inter-item correlation of 0.36. This resembles research done by Fotiadis *et al.* (2016) who found that the *registration costs* is an important attribute when choosing a cycling event. Similarly, Miragaia and Martins (2015) found that that *proximity, access and price* are all important attributes when selecting a winter sports destination. Getz and McConnell (2014) also discovered that running and mountain biking respondents regard *access to information* about the event as an important event attribute. In contrast, the *overall cost and entry fees* were not critical factors when choosing to participate a running or mountain biking event (Getz & McConnell, 2014).

Factor 3: *Challenge and reputation*

Challenge and reputation was the most important attribute when choosing an endurance event for participation. The factor had the highest mean value of 3.69 as well as a reliability coefficient of 0.71 and an average inter-item correlation of 0.34. Lamont *et al.* (2012) supported a *well-organised even*t with a *challenging route* as well as Getz and McConnell (2014). Getz and McConnell (2014) and Fotiadis *et al.* (2016) also found that the *scenery of the event* is an important attribute.

Factor 4: *Location and climate*

This factor received the second lowest mean value of 2.77 with a reliability coefficient of 0.68 and a reliability coefficient 0.51. Getz and McConnell (2011) found that mountain biking is so dependent on rugged terrain that the traditional concept of a *destination* does not apply, only the *site and route features* matter. Similarly, Getz and McConnell (2014) found that a *world-class city or destination* was unimportant for both runners and mountain bikers. Hallmann and Breuer (2010) on the other hand found when researching four different endurance sport events throughout Germany, that *sport event image* and *destination image* are significant predictors for the intent to revisit the sport event.

7.2.3.4 Results from the factor analyses: Endurance sport participation's influence on travel behaviour

When analysing the reliability of the factor analysis, it was clear that all factors had relatively high Cronbach's Alpha reliability coefficients, ranging from 0.66 (the lowest) to 0.83 (the highest) and the average inter-item correlation coefficients with values between 0.38 and 0.45 which implied internal consistency for all three factors. The Kaiser-Meyer-Olkin value was 0.88 exceeding the

recommended value of 0.60 (Kaiser, 1970:401, 1974:31). Bartlett's test of sphericity reached statistical significance ($p < 0.001$), supporting the factorability of the correlation matrix. Four travel behaviour factors with Eigenvalues exceeding one and explaining 63% of the total variance were found. Each of the three factors is characterised according to similar features of the component items, followed by a review of each travel behaviour factor (Table 7.4).

Table 7-4: The influence of endurance participation on travel behaviour

How endurance participation influences travel behaviour of endurance athletes	1	2	3
Factor 1: Individual travel opportunities			
I see my endurance sport participation as an opportunity to travel overseas.	.806		
I plan my sport participation in order to see different attractions and destinations.	.766		
I plan to return to the destinations I have participated in for holiday purposes.	.705		
My sport participation gives me an opportunity to explore the city/town that I participate in.	.702		
I only choose a holiday destination if it gives me an opportunity to train (e.g. facilities and resources).	.796		
Participation in endurance sport gives me the opportunity to travel.	.495		
Factor 2: Group travel opportunities			
Family and friends can accompany me to endurance events.		.821	
I visit tourist attractions before, during and /or after participating in endurance events.		.736	
I travel in the area where my endurance event takes place.		.430	
Factor 3: Holiday choice opportunities			
My sport participation and holiday destination(s) are separate			.956
Total variance explained (Eigen value > 1)	63%		
Average inter-item correlation	0.45	0.38	N/A
Reliability coefficient (Cronbach's Alpha)	0.83	0.66	N/A
Mean Value	3.02	3.29	3.16

*Note: 5-point Likert scale of agreement (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)

Factor 1: *Individual travel opportunities*

Respondents indicated that they were undecided when analysing if their endurance participation has an influence on their *travel opportunities*. This factor received the lowest mean value (3.02). The reliability coefficient was 0.83 and the average inter-item correlation was 0.45. Although the opportunity to travel was seen as less important in the current study, in a study done with regard to marathon runners it was established that different travel habits and experiences from past sport events influenced the way marathon runners spend their leisure time (Rauter & Doupona Topič,

2010). Similarly, respondents felt that their participation in mass sport events had been the main goal of many of their travels and therefore their holiday and event destination is the same place (Rauter & Doupona Topič, 2010). Kruger and Saayman (2013a) also found that many marathon runners see event participation as a *primary influence* indicating that respondents felt that their participation in sport sometimes influenced their holiday choice and travel behaviour. Furthermore, the authors learned that serious runners' participation more regularly influence their travel behaviour, while this was only sometimes the case for recreational runners.

Factor 2: *Group travel opportunities*

Respondents agreed that their participation in endurance events mostly influence the factor, *group travel opportunities*. The factor received the highest mean value of 3.29 with a reliability coefficient of 0.66 and an average inter-item correlation of 0.38. In a study done by Rauter and Doupona Topič (2010), it was found that *spending time with friends and family* was less important behaviour when travelling to an event. In a study regarding marathon runners, Kruger and Saayman (2013a) observed that serious runners visited other tourist attractions in the area coincidentally with the race. This finding was supported by McGehee*,* Yoon and Cárdenas (2003) and Funk *et al*. (2007) who revealed that participants with high levels of involvement in endurance running do more travelling to running events and the destinations where events are held.

Factor 3: *Holiday choice opportunities*

This factor received the second highest mean value of 3.16, and because the component "my sport participation and holiday destination(s) are separate" was included in this factor, there was no reliability coefficient or average inter-item correlation required. Kruger and Saayman (2013a) made a similar finding and found that many marathon runners regarded event participation as a *secondary influence* on their travel behaviour. These participants indicated that they preferred to take a holiday to a destination other than where they had to participate.

The next section reviews the results of the *t*-tests, which were done on gender, the category of endurance events respondents' participate in and if they were planning to participate in endurance events in the future.

7.3 Evaluation of the *t*-test results

Independent samples *t*-tests are done when a researcher wants to compare the mean scores on some continuous variable for two different groups of respondents (Coakes, 2005:73; Pallant, 2013:247). To complete a *t*-test, a researcher needs two variables, one categorical independent variable (e.g. males/females), and one continuous dependent variable (for example the identified factors from the four factor analyses discussed above) (Pallant, 2013:248). A *t*-test therefore shows whether there is a statistically significant difference in the mean scores for the two groups

(Pallant, 2013:248). Levene's test for equality of variances, determines which of the *t*-values that IBM SPSS provides, is the correct one to use (Kerr, Hall & Kozub, 2002:91; Pallant, 2013:249). If the significance value is greater than 0.05 then the null hypothesis is accepted, and one should use *equal variances assumed* line (Kerr *et al.,* 2002:71; Coakes, 2005:77; Pallant, 2013:250; Field, 2013:374). If the significance level of Levene's test is equal to or less than 0.05 it means that, the variances for the two groups are not the same. The researcher would then use the information in the second line of the *t*-test table seeing that *equal variances are not assumed* (Kerr *et al.,* 2002:71; Pallant, 2007:234, 2013:250; Field, 2013:374). If the *significant the value* in the *Sig. (2-tailed)* column is equal or less than 0.05, there is a significant difference in the mean scores on the independent variable for each of the two groups. If the value is above 0.05, there is no significant difference between the two means of these two groups (Pallant, 2007:235, 2013:250; Field, 2013:375). Effect sizes (*d*) were calculated as it provides an indication of the magnitude of the differences between groups (Pallant, 2013:250). The guidelines that Cohen gives for interpreting effect sizes are a 0.2=small effect, 0.5=medium effect and 0.8=large effect (Cohen, 1988 as cited by Pallant, 2013:251). For this current research study, *T*-tests were conducted to determine if there were any statistically significant differences between the independent variables or group of individuals based on the respondents' gender, event categories (local events, regional events, national events, international events hosted in South Africa, international events and charity events) and future intention to participate in events concerning the commitment, lifestyle, event attributes and travel behaviour factors.

7.3.1 Results of the *t*-tests: *t*-test comparison of gender with commitment, lifestyle adaption, event attributes and travel behaviour

An independent-samples *t*-test was conducted to compare the commitment, lifestyle adaption, event attribute and travel behaviour scores for males and females.

Table 7-5: *T*-test results for gender

Factor domains	Male (n=405)		Female (n=93)		F-value	Sig (*P*-value)	Effect size
	Mean (*M*)	Std. Dev.	Mean (*M*)	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.51	0.51	4.52	0.57	1.80	0.863	0.02
Involvement alternatives and social constraints	3.92	0.64	3.91	0.78	5.30	0.873	0.02
Dedication and social support	3.87	0.62	3.76	0.73	2.37	0.136	0.15
Status, socialisation and travel	1.93	0.62	1.91	0.60	0.01	0.755	0.04
Lifestyle adaption							

Health and fitness	2.85	0.79	3.09	0.85	1.66	0.008*	0.29**
Media consumption	3.00	0.93	2.59	0.98	0.04	0.001*	0.42**
Leisure and event participation	3.06	0.94	3.15	1.07	5.57	0.433	0.09
Sport development	1.94	0.82	1.83	0.72	1.49	0.218	0.14
Enhanced performance spending	2.91	0.89	2.55	0.94	0.34	0.001*	0.38**
Event attributes							
Attractiveness and exposure	2.32	0.90	2.25	0.85	0.05	0.466	0.08
Accessibility and affordability	3.56	0.78	3.60	0.84	2.62	0.684	0.04
Challenge and reputation	3.70	0.68	3.64	0.73	1.72	0.442	0.08
Location and climate	2.76	1.00	2.84	1.04	0.01	0.489	0.08
Travel behaviour							
Individual travel opportunities	3.63	0.81	3.67	0.69	0.45	0.055	0.22**
Group travel opportunities	4.50	0.40	4.36	0.49	0.02	0.845	0.02
Holiday choice opportunities	3.95	0.62	3.76	0.71	1.63	0.004*	0.33**

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

As seen in Table 7.5 there were no statistical significant differences between males and females concerning the commitment factors as well as the event attribute factors. Both genders rated these factors similarly. The most important commitment factor for both males and females was *enjoyment, personal investments and involvement opportunities* (*M* =4.51 & *M* =4.52 respectively), while the most important event attribute was the *challenge and reputation* of the event (*M* =3.70 & *M* =3.64 respectively). Statistical significant differences between genders with regard to lifestyle adaption was found based on *Health and fitness* (p = 0.008), *media consumption* (p = 0.001) and *enhanced performance spending* (p = 0.001). Statistical significant differences were also found concerning the travel behaviour of males and females for the factor *Holiday choice opportunities* (p = 0.004). The effect size differences revealed small differences (d= 0.42) with males adapting their lifestyle to a greater extent (*M* = 3.00) in terms of *media consumption* when compared to females (*M*= 2.85). Also a small effect size difference (d= 0.38) indicated that males tend to have a little more *(M* = 2.91) *enhanced performance spending* compared to females (*M* = 2.55). However, a small effect size difference (d= 0.29) indicated that females adapt their *health and fitness* a little more than males (*M* =3.09 & *M* =2.85 respectively). For the factor *holiday choice opportunities*, more males indicated that their participation and holiday destinations are kept separate (*M* =3.95 & *M* =3.76 respectively). Although the *Individual travel opportunities* factor had no statistical significant difference, the effect size showed a small difference (d = 0.22) with females having a higher mean of 3.67, while males had a mean value of 3.63. This shows females have a higher agreement that endurance participation influences *Individual travel opportunities* for them. Yet, to confirm these findings, more female respondents

are required in the sample – an aspect that remains challenging in endurance sport research in general.

7.3.2 Results of the *t*-tests: *t*-test comparison of local event participation with commitment, lifestyle adaption, event attributes and travel behaviour

An independent-samples *t*-test was conducted to compare the commitment, lifestyle adaption, event attributes and travel behaviour scores with the scores of respondents that participate in local events and those that do not participate in local events (e.g. Potchefstroom marathon). Please note that the researcher acknowledges that the statistically significant differences might be ascribed to the fact that the number of respondents that answered no, compared to yes, be very few. However, the findings are still relevant to discuss in order to gain a comprehensive overview of the results. This applies to the entire discussion and interpretation of the results.

Table 7-6: *T*-test results for local events that respondents had participated in

Factor domains	Yes (n=425)		No (n=73)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.52	0.52	4.47	0.54	0.03	0.525	0.08
Involvement alternatives and social constraints	3.90	0.66	4.02	0.71	0.11	0.162	0.17
Dedication and social support	3.83	0.64	3.95	0.66	0.07	0.144	0.18
Status, socialisation and travel	1.92	0.62	2.00	0.59	0.08	0.252	0.14
Lifestyle adaption							
Health and fitness	2.90	0.80	2.87	0.82	0.02	0.739	0.04
Media consumption	2.92	0.95	2.94	0.97	0.01	0.840	0.03
Leisure and event participation	3.07	0.96	3.11	1.02	0.02	0.705	0.05
Sport development	1.89	0.76	2.08	0.99	6.37	0.132	0.19
Enhanced performance spending	2.81	0.90	3.01	0.96	1.47	0.086	0.21**
Event attributes							
Attractiveness and exposure	**2.26**	**0.85**	**2.59**	**1.04**	**5.52**	**0.011***	**0.32****
Accessibility and affordability	**3.60**	**0.77**	**3.36**	**0.89**	**1.03**	**0.015***	**0.27****
Challenge and reputation	3.71	0.65	3.53	0.88	6.08	0.096	0.21**
Location and climate	2.74	1.00	2.96	1.08	0.63	0.090	0.20**

Travel behaviour							
Individual travel opportunities	2.99	0.85	3.19	0.89	0.56	0.068	0.22**
Group travel opportunities	3.28	0.80	3.33	0.84	0.01	0.596	0.06
Holiday choice opportunities	3.12	1.06	3.34	1.12	1.39	0.107	0.19

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

There were no statistical significant differences ($p < 0.05$) between respondents that participated in local events and those that do not, with regard to the commitment, lifestyle adaption and travel behaviour factors. There were, however, statistically significant differences based on two of the event attributes factors, namely *attractiveness and exposure* ($p = 0.011$) as well as *accessibility and affordability* ($p = 0.015$). When analysing the effect size differences, small differences ($d = 0.32$) were found with the *attractiveness and exposure* of the event which was a less important factor for respondents that take part in local events compared to those that do not ($M = 2.26$ versus $M = 2.59$ respectively). On the other hand a small effect size difference ($d = 0.27$), showed that *accessibility and affordability* was important for respondents when choosing a local event to participate in ($M = 3.60$) compared to respondents that do not take part in local events ($M = 3.36$). Small effect size differences were also found with regards the *challenge and reputation* ($d = 0.22$) as well as *location and climate* ($d = 0.20$) of the event. These effect size differences show that respondents who take part in local events regard *challenge and reputation* ($M = 3.71$) as more important, than those that do not take part in local events ($M = 3.53$). In contrast the *location and climate* was a less important attribute when choosing a local event ($M = 2.74$), while it was more important for respondents that do not take part in local events ($M = 2.96$). There was also a small effect size difference ($d = 0.22$) with the *enhanced performance spending* factor which indicated that respondents that do not participate in local events, adapt their lifestyle a little more ($M = 2.81$) than respondents that do not take part in local events ($M = 3.01$). A small effect size difference revealed ($d = 0.22$) that respondents that do not participate in local events also had a stronger agreement that they have more *individual travel opportunities* in comparison with those respondents that take part in local events (*M*= 2.99 *versus M*= 3.19).

7.3.3 Results of the *t*-tests: *t*-test comparison of regional event participation with commitment, lifestyle adaption, event attributes and travel behaviour

An independent-samples *t*-test was conducted to compare the scores for respondents that indicated they take part in a regional event (e.g. North West Cycling Championships) with those respondents that indicated they do not take part in a regional event. The scores were compared to those of commitment, lifestyle adaption, travel behaviour and event attributes.

Table 7-7: *T*-test results for regional events respondents participate in

Factor domains	Yes (n=305)		No (n=193)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.51	0.57	4.50	0.44	0.45	0.791	0.02
Involvement alternatives and social constraints	3.94	0.66	3.88	0.68	0.09	0.388	0.08
Dedication and social support	3.86	0.65	3.84	0.63	0.09	0.681	0.04
Status, socialisation and travel	1.93	0.63	1.93	0.59	0.28	0.979	0.01
Lifestyle adaption							
Health and fitness	**2.96**	**0.80**	**2.79**	**0.79**	**0.01**	**0.020***	**0.21****
Media consumption	2.90	0.95	2.95	0.96	0.04	0.625	0.04
Leisure and event participation	**3.20**	**0.91**	**2.87**	**1.03**	**6.28**	**0.001***	**0.32****
Sport development	1.94	0.79	1.89	0.83	0.29	0.494	0.06
Enhanced performance spending	2.88	0.87	2.78	0.97	4.66	0.219	0.11
Event attributes							
Attractiveness and exposure	2.27	0.88	2.36	0.91	0.37	0.260	0.10
Accessibility and affordability	3.53	0.75	3.63	0.86	2.07	0.143	0.12
Challenge and reputation	3.71	0.65	3.65	0.74	0.99	0.323	0.08
Location and climate	2.71	0.98	2.87	1.07	1.59	0.107	0.14
Travel behaviour							
Individual travel opportunities	3.07	0.84	2.94	0.87	0.82	0.088	0.15
Group travel opportunities	3.31	0.80	3.25	0.81	0.09	0.441	0.07
Holiday choice opportunities	**3.07**	**1.07**	**3.29**	**1.05**	**0.13**	**0.026***	**0.20****

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d)* are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

From Table 7.7 it is clear that there are statistically significant differences (small effect size differences) between respondents that participated in regional events compared to those who do not. Lifestyle factors that showed these differences were *health and fitness* (p = 0.020; d= 0.21) and *leisure and event participation* (p = 0.001; d= 0.32). A statistically significant difference was also evident based on the *holiday choice opportunities* factor (p = 0.026; d= 0.20). Respondents that participate in regional events had a slightly higher mean value of 2.96 indicated that they

adapt their lifestyle a little more in terms of *health and fitness* versus those that do not participate in regional events (*M* = 2.79). With *leisure and event participation* regional event respondents adapt their lifestyle to a larger extent (*M*= 3.20) when compared to respondents that do not participate in regional events (*M*= 2.87). Respondents that do not participate in regional events (*M* = 3.29) had a higher mean value for the factor *holiday choice opportunities* than respondents that do take part in regional events (*M* = 3.07). This indicates that respondents that take part in regional events have a higher agreement that their endurance event destinations and travel destinations are kept separate.

7.3.4 Results of the *t*-tests: *t*-test comparison of national event participation with commitment, lifestyle adaption, event attributes and travel behaviour

An independent-samples *t*-test was conducted to compare the commitment, lifestyle adaption, event attributes and travel behaviour scores for national event participation (e.g. 94.7 Cycle Challenge) in contrast to respondents that do not participate in national events.

Table 7-8: *T*-test results for respondents that participated in national events

Factor domains	Yes (n=416)		No (n=82)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.52	0.54	4.45	0.39	0.03	0.227	0.14
Involvement alternatives and social constraints	3.93	0.67	3.83	0.69	0.55	0.218	0.14
Dedication and social support	3.87	0.63	3.73	0.68	1.28	0.061	0.21**
Status, socialisation and travel	1.93	0.62	1.93	0.59	0.53	0.968	0.01
Lifestyle adaption							
Health and fitness	**2.93**	**0.80**	**2.70**	**0.78**	**0.47**	**0.014***	**0.30****
Media consumption	2.95	0.95	2.79	092	0.55	0.171	0.16
Leisure and event participation	**3.14**	**0.93**	**2.72**	**1.06**	**4.58**	**0.001***	**0.40****
Sport development	1.95	0.81	1.76	0.76	0.54	0.053	0.23**
Enhanced performance spending	**2.88**	**0.90**	**2.61**	**0.96**	**0.18**	**0.014***	**0.28****
Event attributes							
Attractiveness and exposure	2.31	0.87	2.29	1.00	1.68	0.893	0.01
Accessibility and affordability	**3.53**	**0.77**	**3.77**	**0.87**	**1.16**	**0.011***	**0.28****

Challenge and reputation	3.70	0.68	3.61	0.70	0.09	0.304	0.12
Location and climate	2.76	0.99	2.82	1.11	1.46	0.668	0.05
Travel behaviour							
Individual travel opportunities	3.05	0.85	2.89	0.88	0.01	0.136	0.17
Group travel opportunities	3.31	0.79	3.16	0.86	1.09	0.125	0.17
Holiday choice opportunities	3.14	1.08	3.26	1.02	0.14	0.356	0.11

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

From Table 7.8 it is clear that there are statistical significant differences between respondents that participate in national events and respondents that do not participate in national events. The effect sizes show small differences relating to the lifestyle factors, *health and fitness (p* = 0.014; *d*= 0.30*), leisure and event participation (p* = 0.001; *d*= 0.40) as well as *enhanced performance spending (p* = 0.014; *d*= 0.28*).* Additionally, the event attribute *accessibility and affordability (p = 0.011)* also showed a statistically significant difference with a small effect size difference (*d*= 0.28). When analysing the differences it is clear that national event respondents adapt their lifestyle to a greater extent in terms of *health and fitness* (M = 2.93 versus M= 2.70), *leisure and event participation* (*M* = 3.14 versus *M* = 2.72) as well as *enhanced performance spending* (*M*= 2.88 versus *M*= 2.61) in contrast with respondents that do not take part in these events. The mean values should however be interpreted with caution. Based on the original 5-point Likert scale of measurement, the mean values indicate that respondents that participate in national events, adapt their lifestyles to a moderate extent. On the other hand a small effect size difference (*d*= 0.28) showed that *accessibility and affordability* is a more important event attribute for respondents that do not take part in national events (*M*= 3.77) when compared to national event participant respondents (*M*= 3.53). Additionally, although *dedication and social support* did not result in a statistically significant difference, the effect size difference (*d*= 0.21) showed that national event participant respondents ranked the factor as more important (*M*= 3.87) than non-participating respondents (*M*= 3.73). A small effect size difference (*d*= 0.23) was also found with the *sport development* factor with national event respondents showing slightly more *sport development* (M= 1.95) involvement than respondents that do not participate in national events (*M*= 1.76).

7.3.5 Results of the *t*-tests: *t*-test comparison of international events participation hosted in South Africa with commitment, lifestyle adaption, event attributes and travel behaviour

To compare the commitment, lifestyle adaption, event attributes and travel behaviour scores for international events hosted in South Africa (e.g. Ironman South Africa) in counter to not participating in these type events an Independent *t*-test was completed.

Table 7-9: *T*-test results for international events hosted in South Africa

Factor domains	Yes (n=238)		No (n=260)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	**4.60**	**0.52**	**4.43**	**0.51**	**0.54**	**0.001***	**0.33****
Involvement alternatives and social constraints	**4.10**	**0.66**	**3.75**	**0.64**	**0.03**	**0.001***	**0.53*****
Dedication and social support	3.89	0.68	3.81	0.60	3.44	0.161	0.12
Status, socialisation and travel	1.90	0.59	1.95	0.64	0.91	0.359	0.08
Lifestyle adaption							
Health and fitness	**3.14**	**0.80**	**2.67**	**0.74**	**2.06**	**0.001***	**0.59*****
Media consumption	**3.02**	**0.96**	**2.83**	**0.94**	**0.19**	**0.031***	**0.19**
Leisure and event participation	**3.36**	**0.87**	**2.81**	**0.99**	**4.11**	**0.001***	**0.55*****
Sport development	**2.08**	**0.87**	**1.78**	**0.70**	**14.62**	**0.001***	**0.35****
Enhanced performance spending	**2.93**	**0.86**	**2.76**	**0.95**	**2.22**	**0.044***	**0.17**
Event attributes							
Attractiveness and exposure	**2.46**	**0.91**	**2.17**	**0.85**	**2.01**	**0.001***	**0.31****
Accessibility and affordability	**3.49**	**0.83**	**3.64**	**0.76**	**1.73**	**0.047***	**0.17**
Challenge and reputation	3.69	0.77	3.68	0.60	6.93	0.782	0.02
Location and climate	2.74	1.07	2.80	0.96	4.01	0.539	0.05
Travel behaviour							
Individual travel opportunities	**3.25**	**0.81**	**2.81**	**0.84**	**0.33**	**0.001***	**0.54*****
Group travel opportunities	**3.45**	**0.74**	**3.14**	**0.84**	**5.75**	**0.001***	**0.36****
Holiday choice opportunities	**3.02**	**1.04**	**3.28**	**1.08**	**3.98**	**0.005***	**0.25****

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

Statistically significant differences were found between respondents that participate in international events that were hosted in South Africa and those respondents that do not participate in these events in terms of commitment, lifestyle, event attributes as well as travel behaviour. Regarding the commitment factors the following differences were found: The first statistically significant difference was with *enjoyment, personal investment and involvement opportunities* (*p*

= 0.001), which had a small effect size difference (*d* = 0.33). Respondents that participate in international events hosted in South Africa ranked *enjoyment, personal investment and involvement opportunities* as more important (*M*= 4.60) than those that do not participate in these type of events (*M*= 4.43). The second statistically significant difference *(p* = 0.001) was found to be based on *involvement alternatives and social constraints,* which had a medium effect size difference (*d*= 0.53). Respondents that participate in international events that were hosted in South Africa rated this factor as more important (*M*= 4.10) compared to respondents that do not take part in this category of events (*M*= 3.75). Concerning *lifestyle adaption,* all factors had statistically significant differences. Both *health and fitness (p*= 0.001; *d*= 0.59) and *leisure and event participation (p*= 0.001; *d*= 0.55) had medium effect size differences, while *sport development (p*= 0.001) had a small effect size difference (*d*= 0.35). *Enhanced performance spending (p*= 0.044) and *media consumption* (*p*= 0.031) had very small effect size differences (outside the recommended guidelines), but both factors were statistically significant. When analysing the mean scores, it is clear that respondents that take part in international events hosted in South Africa adapt their lifestyle more than those respondents that do not participate in this category. Respondents that participate in international events hosted in South Africa had higher mean values for all the lifestyle factors including, *health and fitness* (*M*= 3.14), *media consumption* (*M*= 3.02), *leisure and event participation* (*M*= 3.36), *sport development* (*M*= 2.08) and *enhanced performance spending (M*= 2.93).

Statistically significant differences were also found regarding the *attractiveness and exposure (p*= 0.001*)* and *accessibility and affordability (p*= 0.047) event attributes. A small effect size difference (*d*= 0.31) showed that respondents that participate in international events hosted in South Africa see the *attractiveness and exposure* of the event as more important (*M*= 2.46) compared to respondents that do not participate in these types of events (*M*= 2.17). In contrast, respondents that do not take part in this category of events rated the *accessibility and affordability* event attribute as more important (*M* = 3.64) than respondents that participate in international events hosted in South Africa (*M* = 3.49). Additionally, significant differences were found between these two groups regarding *individual travel opportunities (p*= 0.001), *group travel opportunities (p*= 0.001) and *holiday choice opportunities* (*p*= 0.005). A medium effect size difference (*d*= 0.53) indicated that respondents that participate in international events hosted in South Africa had a stronger agreement (*M* = 3.25) that their event participation influences their *individual travel opportunities (p*= 0.001*)* compared to respondents that do not take part in these types of events (*M* = 2.81)*.* Similarly, a small effect size difference (*d*= 0.36) indicated that respondents that participate in this category of events agreed that their event participation influences *group travel opportunities* more than those that do not participate in International event hosted in South Africa (*M* = 3.45 versus *M*= 3.14)*.* On the other hand, a small effect size difference (*d*= 0.25) indicated that respondents that do not participate in this category had a greater *holiday choice opportunities*

(M = 3.28) than respondents that take part in international events hosted in South Africa (*M*= 3.02).

7.3.6 Results of the *t*-tests: *t*-test comparison of international events participation with commitment, lifestyle adaption, event attributes and travel behaviour

An independent-samples *t*-test was conducted to compare the commitment, lifestyle adaption, event attributes and travel behaviour scores for international events (hosted outside South Africa) in contrast to athletes not participating in international events.

Table 7-10: *T*-test results for International events

Factor domains	Yes (n=65)		No (n=433)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.50	0.72	4.51	0.49	0.96	0.891	0.01
Involvement alternatives and social constraints	4.04	0.77	3.90	0.65	0.27	0.121	0.18
Dedication and social support	3.95	0.77	3.84	0.62	1.85	0.198	0.14
Status, socialisation and travel	2.01	0.62	1.92	0.61	0.01	0.250	0.15
Lifestyle adaption							
Health and fitness	**3.11**	**0.96**	**2.86**	**0.77**	**12.13**	**0.049***	**0.26****
Media consumption	2.98	0.86	2.91	0.96	1.91	0.601	0.07
Leisure and event participation	**3.47**	**0.87**	**3.01**	**0.97**	**2.06**	**0.001***	**0.47****
Sport development	**2.19**	**1.02**	**1.88**	**0.76**	**13.82**	**0.021***	**0.30****
Enhanced performance spending	2.94	0.81	2.82	0.92	1.38	0.326	0.13
Event attributes							
Attractiveness and exposure	**2.52**	**0.93**	**2.27**	**0.88**	**0.42**	**0.042***	**0.26****
Accessibility and affordability	**3.28**	**0.86**	**3.61**	**0.77**	**1.78**	**0.002***	**0.38****
Challenge and reputation	3.54	0.79	3.71	0.67	3.62	0.063	0.21**
Location and climate	2.57	0.98	2.80	1.02	0.01	0.082	0.23**
Travel behaviour							
Individual travel opportunities	**3.43**	**0.94**	**2.96**	**0.82**	**0.57**	**0.001***	**0.50*****
Group travel opportunities	**3.56**	**0.80**	**3.25**	**0.80**	**1.14**	**0.003***	**0.39****
Holiday choice opportunities	2.92	1.14	3.19	1.05	0.09	0.058	0.24**

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

When comparing the respondents that take part in international events with those that do not participate, the following statistically significant differences were found based on *health and fitness (p*= 0.049)*, leisure and event participation (p= 0.001), sport development (p*= 0.021), *accessibility and affordability (p*= 0.002), *attractiveness and exposure* (*p*= 0.042), *individual travel opportunities* (*p*= 0.001) and *group travel opportunities* (*p*= 0.003). For the lifestyle adaption factors, small effect size differences showed that respondents that participate in international events adapt their lifestyle to a greater extent in terms of *health and fitness* (*d*= 0.26; *M* = 3.11 versus *M*= 2.86)*, leisure and event participation* (*d*= 0.38; *M*= 3.47 versus *M*= 3.01) as well as *sport development* (*d*= 0.30; *M*= 2.19 versus *M*= 1.88).The event attribute factors with a small effect size difference (*d*= 0.38) showed that the *accessibility and affordability* was more important to respondents that do not participate in international events (*M*= 3.61) than those that do participate in events outside South Africa (*M* = 3.28). A small effect size difference (*p*= 0.26) revealed that the *attractiveness and exposure* attribute, on the other hand, was slightly more important for international event respondents (*M*= 2.52), than for those that do not participate in international events (*M*= 2.27). When analysing the travel behaviour differences, a medium effect size difference (*d*= 0.50) showed that respondents who participate in international events have a stronger agreement that their endurance event participation influences their *individual travel opportunities* (*M* = 3.43 versus *M*= 2.96). A small effect size difference (*d*= 0.39) showed that international event respondents also had a higher agreement with the fact that the travel behaviour factor, *group travel opportunities* is influenced by their international event participation (*M* = 3.56 versus *M*= 3.25). Although not statistically significant, small effect size differences were also found for the factors *challenge and reputation* (*d*= 0.21), *location and climate* (*d*= 0.23) and *holiday choice opportunities* (*d*= 0.24). The *challenge and reputation* of the event was more important for respondents that do not participate in events outside South Africa (*M*= 3.71), than for respondents that take part in International events (*M*= 3.54). Similarly, the *location and climate* was a more important event attribute for respondents that do not participate in international events (*M*= 2.80), when compared to respondents that participated in this category of events (*M*= 2.57). Lastly, respondents that do not partake in international events had a stronger agreement that their event participation has an influence on their *holiday choice opportunities* (*M*= 3.19), when compared to respondents who answered yes (*M*= 2.92).

7.3.7 Results of the *t*-tests: *t*-test comparison of charity events participation with commitment, lifestyle adaption, event attributes and travel behaviour

A comparison was made between charity event respondents and respondents that did not participate in charity events. The scores of these two groups were compared to the commitment, lifestyle adaption, event attributes and travel behaviour scores.

Table 7-11: *T*-test results for charity events

Factor domains	Yes (n=195)		No (n=303)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	4.52	0.38	4.50	0.59	1.55	0.624	0.04
Involvement alternatives and social constraints	3.93	0.62	3.91	0.70	0.02	0.821	0.02
Dedication and social support	3.90	0.61	3.82	0.66	0.01	0.157	0.13
Status, socialisation and travel	1.97	0.65	1.90	0.59	1.40	0.254	0.10
Lifestyle adaption							
Health and fitness	2.94	0.81	2.87	0.80	0.21	0.343	0.09
Media consumption	2.94	0.94	2.91	0.96	0.01	0.674	0.04
Leisure and event participation	3.10	0.99	3.05	0.95	1.03	0.573	0.05
Sport development	**2.03**	**0.89**	**1.85**	**0.73**	**5.55**	**0.022***	**0.20****
Enhanced performance spending	2.78	0.91	2.88	0.91	0.06	0.262	0.10
Event attributes							
Attractiveness and exposure	2.34	0.86	2.29	0.91	0.49	0.549	0.05
Accessibility and affordability	3.56	0.81	3.57	0.79	0.70	0.834	0.02
Challenge and reputation	3.62	0.70	3.73	0.68	0.71	0.110	0.14
Location and climate	2.81	1.00	2.75	1.02	0.21	0.572	0.05
Travel behaviour							
Individual travel opportunities	3.05	0.83	3.00	0.87	0.39	0.558	0.05
Group travel opportunities	3.31	0.81	3.27	0.80	0.05	0.621	0.05
Holiday choice opportunities	3.22	1.04	3.12	1.08	0.28	0.325	0.09

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

As seen in Table 7.11 there were no statistically significant differences between charity event respondents and those that do not participate in the charity category with regard to the commitment factors, event attributes as well as the travel behaviour factors. Only one statistically significant difference was found in terms of lifestyle adaption, based on the *sport development* factor (p = 0.002). A small effect size difference (d= 0.20) was observed for this factor. Unsurprisingly, respondents who participate in charity events indicated a higher *sport development (M*= 2.03) score than those that do not take part in charity events (*M*= 1.85). When reviewing the Likert scale on which this factor was measured it is clear that respondents that take part in charity events have a little *sport development* involvement*,* while respondents that do not take part in charity event have no or a little *sport development* involvement.

7.3.8 Synthesis of main findings: a comparison with the different event categories and the four factors

- The endurance event category that respondents take part in is not correlated to the commitment factors of endurance participation. The only exception is respondents who take part in international events hosted in South Africa who rate *enjoyment, personal investment and involvement opportunities* as well as *involvement alternatives and social constraints* as more important than the respondents that do not take part in international events hosted in South Africa.
- Lifestyle adaption is directly related to the type of endurance event category. Findings show that the respondents who take part in more competitive events (e.g. international events) adapt their lifestyle to a greater extent with all the lifestyle factors. It is clear that the *health and fitness* and *leisure and event participation* are the factors that had the most statistically significant differences compared to the category of event respondents.
- The event attributes that endurance athletes seek when choosing an event to participate in, are influenced by the endurance event category in which the respondents take part in. It is clear from the results that *accessibility and affordability* and *location and climate* attributes are more important for respondents that take part in less competitive events (e.g. local events), whereas the *attractiveness and exposure* as well as *challenge and reputation* are more important for respondents that take part in higher-ranked events.
- The category of the endurance event is directly related to endurance respondents' travel behaviour. From the results, it is seen that respondents that take part in events that are more competitive had a higher agreement that their participation influences both their *individual travel opportunities* as well as their *group travel opportunities.* On the other hand, respondents that take part in less competitive events agreed to have higher *holiday choice opportunities.*

- The charity aspect of an event has no influence on any of the factors, although, unsurprisingly, respondents that take part in these events adapt their *sport development* to a greater extent, than respondents that do not take part in charity events.

7.3.9 Results of the *t*-tests: *t*-test comparison of future intention to participate with commitment, lifestyle adaption, event attributes and travel behaviour

The commitment, lifestyle adaption, event attributes and travel behaviour scores of respondents who were planning to take part in future endurance events and does that were not tested by making use of an independent *t*-test.

Table 7-12: *T*-test results for participant respondents that made plans to take part in endurance events in future

Factor domains	Yes (n=457)		No (n=41)		F-value	Sig (*P*-value)	Effect size
	Mean	Std. Dev.	Mean	Std. Dev.			
Commitment factors							
Enjoyment, personal investments and involvement opportunities	**4.53**	**0.53**	**4.33**	**0.34**	**0.49**	**0.001***	**0.38****
Involvement alternatives and social constraints	**3.95**	**0.68**	**3.60**	**0.48**	**4.66**	**0.001***	**0.50*****
Dedication and social support	3.86	0.65	3.77	0.53	2.68	0.354	0.13
Status, socialisation and travel	1.93	0.62	1.89	0.61	0.01	0.645	0.07
Lifestyle adaption							
Health and fitness	**2.93**	**0.80**	**2.50**	**0.78**	**0.06**	**0.002***	**0.54*****
Media consumption	2.94	0.96	2.69	0.82	3.77	0.071	0.26**
Leisure and event participation	**3.11**	**0.97**	**2.63**	**0.88**	**0.62**	**0.002***	**0.49****
Sport development	**1.95**	**0.81**	**1.59**	**0.66**	**3.14**	**0.002***	**0.44****
Enhanced performance spending	2.86	0.91	2.59	0.90	0.05	0.074	0.30**
Event attributes							
Attractiveness and exposure	**2.34**	**0.90**	**1.93**	**0.73**	**4.77**	**0.001***	**0.45****
Accessibility and affordability	3.58	0.80	3.41	0.73	0.40	0.171	0.21**
Challenge and reputation	3.69	0.69	3.62	0.64	0.15	0.491	0.10
Location and climate	2.79	1.02	2.60	0.89	0.99	0.199	0.19
Travel behaviour							
Individual travel opportunities	**3.04**	**0.85**	**2.75**	**0.84**	**0.03**	**0.037***	**0.34****

Group travel opportunities	3.30	0.81	3.10	0.74	0.01	0.095	0.26**
Holiday choice opportunities	3.15	1.07	3.22	1.04	0.08	0.680	0.06

*Statistical significant difference: $p \leq 0.05$ (Pallant, 2013:250, 2016:247)

Effect sizes (*d*) are categorised as small (0.2 – 0.4)**; medium (0.5 – 0.8) *** and large (greater as 0.8) **** (Cohen, 1988:79; Pallant, 2013:251, 2016:247)

As shown in Table 7.12 there were statistically significant differences ($p < 0.05$) between respondents that indicated they plan to continue participating in future endurance events and those that have no intention to continue their participation (only a small number of respondents). Regarding the commitment factors, statistically significant differences were found based on the factors *enjoyment, personal investments and involvement opportunities* ($p= 0.001$) as well as *involvement alternatives and social constraints* ($p= 0.001$). A small effect size difference ($d= 0.38$) showed that respondents that have the intention to continue their event participation rated *enjoyment, personal investments and involvement opportunities* as more important ($M= 4.53$) than those who were not planning to continue participating in endurance events ($M= 4.33$). Likewise, a medium effect size difference ($d= 0.50$) indicated that *involvement alternatives and social constraints* were more important for respondents who are planning to take part in future events, than for those that are not ($M= 3.95$ versus $M= 3.60$). Statistically significant differences in the lifestyle adaption of respondents were also found, which include *health and fitness* ($p= 0.002$), *leisure and event participation* ($p= 0.002$) as well as *sport development* ($p= 0.002$). A medium effect size difference ($d= 0.53$) showed that respondents who had the intention to continue their event participation adapt their *health and Fitness* ($M= 2.93$) to a greater extent than those that are not going to take part in future endurance events ($M= 2.50$). A small effect size difference ($d= 0.49$) showed that respondents who plan to take part in future endurance events adapt their lifestyle to a greater extent ($M= 3.11$) in terms of *leisure and event participation,* than those not planning to take part in future events ($M= 2.63$). In addition, respondents who have the intention to continue their participation in endurance events adapt their lifestyle a little more ($M= 1.95$), with regard to *sport development,* than those who do not have the intention to take part in future events ($M= 1.59$).

The event attributes respondents seek, also showed a statistically significant difference in the *attractiveness and exposure* ($p= 0.001$) factor. A small effect size difference ($d= 0.45$) showed that the *attractiveness and exposure* of the event was more important for respondents that are planning to take part in future events ($M = 2.34$) when compared with respondents that are not planning to take part in future endurance events ($M = 1.93$). The *t*-test also revealed a statistically significant difference concerning the *individual travel opportunities* factor ($p= 0.037$). A small effect size difference ($d= 0.34$) revealed that respondents who have the intention to continue their participation in future events indicated that their event participation has more of an influence on their *individual travel opportunities* ($M = 3.04$) than compared to respondents who have no

intention to continue event participation (*M* = 2.75). Small effect size differences were also found with *media consumption* (*d*= 0.26), *enhanced performance spending* (*d*= 0.30)*, accessibility and affordability* (*d*= 0.21) and *group travel opportunities* (*d*= 0.26)*.* Respondents who were planning to take part in future endurance events adapt their lifestyle to a greater extent (*M*= 2.94) in terms of *media consumption* when compared to respondents to are not planning to take part in future endurance events (*M*= 2.64). Likewise, respondents who are going to take part in upcoming endurance events (*M*= 2.86) adapt their lifestyle to a greater extent in terms of *enhanced performance spending*, than the respondents who are not planning to take part in upcoming events (*M*= 2.59). The event attribute *accessibility and affordability* is slightly more important for respondents who are planning to take part in future events (*M*= 3.58), in comparison with the respondents who are not planning to take part in future events (*M*= 3.58). Respondents who have the intent to continue their event participation (*M*= 3.30) have a higher agreement that their event participation influences their *group travel opportunities*, when compared to respondents who does not have the intent to continue their event participation (*M*= 3.10). In the next section the application of the ANOVA analysis compare the mean values of commitment, event attributes, lifestyle and travel behaviour with the variables that have two or more groups.

7.4 Discussion of the ANOVA results

ANOVAs are concerned with the analysis of variance between groups. The purpose of this technique is similar to that of an independent *t-test* in that it tests for significant differences between groups of means from data that has been gathered by an independent group design. It is, however, different from a *t-test* in that instead of being restricted to an examination of the difference between means in two groups, one-way ANOVA can examine the difference between two or more group means (Kerr *et al.,* 2002:79; Coakes, 2005:85). To perform a one-way ANOVA, two variables are required: one categorical independent variable with three or more distinct categories (e.g. age categories) and one continuous dependent variable (identified factors from the factor analyses) (Pallant, 2007:243, 2013:272).

The analysis compares the variance between different groups (due to independent variable) with the variance within each of the groups (due to the chance). An F-ratio is calculated which represents the variance within groups, divided by the variance within the groups. A large F-ratio means there is more variability between the groups (caused by the independent variable) than there is within each group (Coakes, 2005:85). In a one-way ANOVA the null hypothesis that is tested predicts that the means which the dependent variable scores for each of the independent variables will not be significantly different (Kerr *et al.,* 2002:80). A significant F-test indicates that one could reject the null hypothesis. The main point of interest for a researcher is if the *p*- value is less than or equal to 0.05, which indicates that there is a significant difference somewhere among the mean scores of the dependent variable for the groups (Coakes, 2005:88; Pallant,

2007:246; Field, 2013:468). The differences will be marked with asterisks (*) next to the values listed. If there is an asterisk, it means that the two groups that are compared prove to be significantly different from one another at the $p < 0.5$ level (Coakes, 2005:88; Pallant, 2007:247; Field, 2013:471).If the *p*-value was equal or less than 0.05, post-hoc comparisons through the application of the Tukey HSD test will show where the differences among the groups occur. Tukey's differences will be indicated by way of different superscript alphabet letters (a, b, c or d). Therefore, if a group differs from another group, it will have different alphabet letters. The ANOVA results for the remaining socio-demographic and behavioural variables that were not included in the *t*-tests are consequently discussed. Also, only statistically significant differences are discussed. However, in certain cases, the effect size differences were consulted. The same guidelines as used in the *T*-test discussions are used when interpreting the effect size differences. In the discussion, the effect sizes indicate the differences between the various categories and created groups. Depending on the number of categories/groups, the effect size values indicate the differences between them, for example "1 & 2" refers to the difference between the first and the second category/group, while "1 & 3" refers to the difference between the first and third category/group and so forth. If possible and where applicable, results are further explained. The researcher acknowledges that more research is required to validate the assumptions. Yet, once the current results have been interpreted, it already provides a valuable context, especially as foundation for further investigation.

7.4.1 Results of ANOVAs: a comparison between factors and different age categories

For the purpose of the ANOVAs the age categories were divided into three groups. The profile of the respondents as seen in Table 6.3 (c.f. 6.4.1) was used to divide the categories into new groups in order to facilitate the discussion. The age categories < 19 years, 20-24 years and 25-35 years were combined to form the first group **Generation Y** (<19-34). The second category was respondents between 35-49 years of age and was labelled **Generation X**. Lastly was the 35-49 age category, which was combined with the 65+ age category that formed the age group 50-65+, also known as the **Baby Boomers**.

Table 7-13: ANOVA results of factors regarding age categories

Age categories	Generation Y (N= 127)	Generation X (N= 254)	Baby Boomers (N= 117)	F-Ratio	Sig. level	Effect sizes		
						1 & 2	1 & 3	2 & 3
Commitment factors								
Enjoyment, personal investments and involvement opportunities	**4.65[b]**	**4.46[a]**	**4.46[a]**	**6.500**	**0.002***	**0.31 ****	**0.40 ****	**0.01**
Involvement alternatives and social constraints	**4.09[b]**	**3.87[a]**	**3.84[a]**	**5.708**	**0.004***	**0.32 ****	**0.37 ****	**0.05**
Dedication and social support	3.88	3.79	3.94	2.292	0.102	0.12	0.12	0.21

								**
Status, socialisation and travel	2.00	1.92	1.86	1.590	0.205	0.12	0.21 **	0.10
Lifestyle adaption								
Health and fitness	**3.12[b]**	**2.83[a]**	**2.78[a]**	**6.952**	**0.001***	**0.33 ****	**0.39 ****	**0.06**
Media consumption	**3.14[b]**	**2.86[a]**	**2.81[a]**	**4.616**	**0.010***	**0.27 ****	**0.32 ****	**0.05**
Leisure and event participation	**3.42[b]**	**2.93[a]**	**3.00[a]**	**11.705**	**0.001***	**0.50 *****	**0.43 ****	**0.08**
Sport development	1.92	1.90	1.98	0.410	0.664	0.02	0.07	0.10
Enhanced performance spending	2.88	2.82	2.84	0.163	0.849	0.06	0.04	0.02
Event attributes								
Attractiveness and exposure	**2.49[b]**	**2.29[ab]**	**2.14[a]**	**4.769**	**0.009***	**0.21 ****	**0.37 ****	**0.17**
Accessibility and affordability	3.67[b]	3.57[ab]	3.45[a]	2.514	0.082	0.13	0.27 **	0.15
Challenge and reputation	**3.81[b]**	**3.69[ab]**	**3.55[a]**	**4.464**	**0.012***	**0.18**	**0.35 ****	**0.19**
Location and climate	2.80	2.75	2.79	0.093	0.911	0.04	0.01	0.03
Travel behaviour								
Individual travel opportunities	**3.27[b]**	**2.93[a]**	**2.96[a]**	**7.209**	**0.001***	**0.39 ****	**0.35 ****	**0.04**
Group travel opportunities	3.40	3.21	3.34	2.767	0.064	0.23 **	0.08	0.15
Holiday choice opportunities	**2.86[a]**	**3.26[b]**	**3.26[b]**	**6.822**	**0.001***	**0.38 ****	**0.35 ****	**0.01**

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

Commitment factors

As seen in Table 7.13, there were statistically significant differences based on the commitment factors ***enjoyment, personal investments and involvement opportunities*** (p= 0.002) and ***involvement alternatives and social constraints*** (p= 0.004). In both cases, Tukey's post hoc multiple comparisons as well as small effect size differences (between d= 0.31 and d= 0.40) revealed that the respondents in Generation Y rated *enjoyment, personal investments and involvement opportunities* (M= 4.65) and *involvement alternatives and social constraints* (M= 4.09) more important than those respondents in Generation X and the respondents known as Baby Boomers. The results confirm that younger respondents rated *enjoyment, personal investments and involvement opportunities* as well as *involvement alternatives and social constraints* as more influencial factors. Therefore, it can be assumed that the age of respondents is directly linked to the afore-mentioned factors. It is evident from the results that an endurance athlete's *enjoyment, personal investments and involvement opportunities* as well as *involvement alternatives and social constraints* declines with the increase in age. This makes sense as from

the early stages of one's participation one might feel higher levels of excitement, feel that one gain more benefits from participation and might invest more to improve on previous results. In the early stages, respondents might still want to find their primary sport and might experiment with different events and disciplines, and therefore partaking in more alternatives. It is however important to note that the factor *dedication and social support* does not decline with age. Therefore, as an endurance participant gets older they will be more dedicated to the sport and still have support from their peers.

Lifestyle adaption

Regarding the lifestyle adaption factors, there were statistically significant differences between the three age segments based on the factors ***health and fitness*** (p= 0.001), ***media consumption*** (p = 0.010) and ***leisure and event participation*** (p = 0.001). Similar to the commitment factors, Tukey's post hoc multiple comparisons indicated that respondents from Generation Y (<19-34) differed from the other two older age groups. Medium (d= 0.50) and small effect size differences (between d= 0.27 and d= 0.43) were detected. The respondents from Generation Y rated all three factors higher, which indicate that they adapt their lifestyle regarding these factors to a greater extent compared to the older age groups. It is furthermore evident from Table 7.13 that younger respondents adapt their lifestyle to a greater extent in terms of all the lifestyle factors. Since participating is more likely to improve performance, younger respondents (Generation Y) will make greater adjustments to their lifestyle to participate in an endurance sport. Most endurance athletes will peak in performance at the age of 30 years and older. It can thus be assumed that when one is at a peak age, one will adapt one's lifestyle to a greater extent in order to match the peak performance.

Event attributes

There were statistically significant differences based on the event attribute factors ***attractiveness and exposure*** (p= 0.009) and ***challenge and reputation*** (p = 0.012). Although not statistically significant, Tukey's post hoc multiple comparisons also indicated differences based on the factor ***accessibility and affordability***. All three cases had small effect size differences (d= 0.21, d= 0.37 and d= 0.35 respectively). Again, the main differences were between the responses of the Generation Y participants and the Baby Boomers. Younger respondents rated the factors more important compared to the older age group. Younger respondents furthermore ranked all the event attributes higher than the older respondents did. This could be because younger respondents are still undertaking various events to determine in which events to partake in the long term. On the other hand, older respondents have already chosen events in which they show their loyalty and return for participation annually. Therefore, events must have the correct combination of attributes before a younger participant will choose to participate in it. Since younger respondents are at their peak age of performance they will also be more selective when

choosing an event, which may also be the main reason why *challenge and reputation* is such an important event attribute for younger respondents.

Travel behaviour

For the travel behaviour factors, there were statistically significant differences based on the factors ***individual travel opportunities*** (p = 0.001) and ***holiday choice opportunities*** (p = 0.001). Tukey's post hoc multiple comparisons revealed that the significant differences are between the respondents from Generation Y and the respondents from Generation X and Baby Boomers, with small effect size differences (between d= 0.35 and d= 0.39). Respondents in the youngest age group (Generation Y) had a higher level of agreement regarding the factor *individual travel opportunities*. Conversely, the two older age groups rated *holiday choice opportunities* higher. It is clear that younger respondents feel that their event participation has a greater influence on their travel behaviour, when compared to older respondents' feeling in this regard. Older respondents are also more likely to keep their holidays and event participation separate. This could be due the fact that younger respondents are more likely to travel more in order to participate in events, as they have less social obligations and is willing to adapt their lifestyle more for their endurance sport. Another possible explanation could be that it is likely that younger respondents earn less money and therefore it is more affordable to travel in the destination where the event takes place than traveling to a separate holiday destination. Furthermore, an assumption can be made that older respondents most likely choose different holiday destinations seeing that they have participated in the events before and therefore they are familiar with the destination. The respondents' family lifecycle could also be a factor influencing holiday destination choice as older respondents plan their holidays with regard to their children and family.

7.4.2 Results of ANOVAs: a comparison between factors and home language

For home language, the three original categories were used as in the questionnaire namely 'English', 'Afrikaans' and 'Other'. The 'Other' category includes foreign languages such as German, French and Dutch, was changed to foreign languages, as all of the languages in this group are foreign.

Table 7-14: ANOVA results of factors and home language

Home language	English (N= 313)	Afrikaans (N= 172)	Foreign (N= 13)	F-Ratio	Sig. level	Effect sizes		
						1 & 2	1 & 3	2 & 3
Commitment factors								
Enjoyment, personal investments and involvement opportunities	4.50	4.53	4.50	0.225	0.799	0.06	0.01	0.07
Involvement alternatives and social constraints	3.91	3.93	4.06	0.346	0.707	0.03	0.22**	0.23**

Dedication and social support	3.82	3.91	3.71	1.369	0.255	0.13	0.13	0.22**
Status, socialisation and travel	1.93	1.95	1.69	1.029	0.358	0.03	0.39**	0.39**
Lifestyle adaption								
Health and fitness	2.94	2.83	2.72	1.324	0.269	0.13	0.25**	0.13
Media consumption	2.91	2.94	2.87	0.074	0.929	0.03	0.04	0.07
Leisure and event participation	3.07	3.05	3.48	1.205	0.300	0.02	0.43**	0.43**
Sport development	1.94	1.89	1.92	0.196	0.822	0.06	0.02	0.04
Enhanced performance spending	2.84	2.84	2.92	0.055	0.946	0.01	0.10	0.09
Event attributes								
Attractiveness and exposure	2.29	2.30	2.76	1.759	0.173	0.01	0.44**	0.42**
Accessibility and affordability	3.56	3.59	3.51	0.097	0.908	0.03	0.06	0.10
Challenge and reputation	3.69	3.67	3.91	0.758	0.469	0.03	0.31**	0.37**
Location and climate	2.77	2.78	2.65	0.096	0.903	0.01	0.11	0.13
Travel behaviour								
Individual travel opportunities	3.03	2.99	3.13	0.207	0.813	0.04	0.08	0.11
Group travel opportunities	3.26	3.33	3.44	0.668	0.513	0.09	0.21**	0.12
Holiday choice opportunities	**3.21[b]**	**3.10[b]**	**2.46[a]**	**3.450**	**0.033***	**0.10**	**0.69*****	**0.63*****

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

Commitment factors

No statistically significant differences were found based on any of the commitment factors. Tukey's post hoc multiple comparisons also revealed no significant differences. A small effect size difference (d= 0.23) did however reveal that respondents who spoke foreign languages felt that ***involvement alternatives and social constraints*** are more important than English and Afrikaans speaking respondents. A small effect size difference (d= 0.39) also showed that English and Afrikaans speaking respondents see ***status, socialisation and travel*** as a more important commitment factor than respondents who spoke foreign languages. It is clear from the results that respondents' home language does not influence the commitment factors. Unfortunately, due to a small sample of international respondents it was difficult to compare local respondents with international respondents. As seen from the small effect size differences one can assume that respondents from different countries will rate the commitment factors differently. However, more research is required to validate this assumption.

Lifestyle adaption

None of the lifestyle adaption factors revealed statistically significant differences and Tukey's post hoc multiple comparisons also revealed no significant differences. However, a small effect size difference (d= 0.43) showed that respondents who spoke foreign languages adapt their ***leisure and event participation*** lifestyle to a greater extent than English and Afrikaans speaking

respondents. There was no clear link between the respondents' home language and lifestyle adaption. The only clear difference was that respondents who spoke foreign languages, and were most likely international respondents, showed more *leisure and event participation* lifestyle adaption than national respondents do. The assumption can be made that these respondents are therefore more willing to travel and have more opportunities to do so, since it is affordable for international respondents to travel to and participate in South African endurance events.

Event attributes

No statistically significant differences were found. Tukey's post hoc multiple comparisons also did not show significant differences based on the event attribute factors and home language. However small effect size differences (d= 0.44; d= 0.42) revealed that respondents that speak foreign languages see the ***attractiveness and exposure*** of an event as more important than English and Afrikaans speaking respondents. Similarly, small effect size differences (d= 0.31; d= 0.37) showed that respondents that speak foreign languages rated the **c*hallenge and reputation*** of the event more important than English and Afrikaans speaking respondents. Similar to the previous factors, there was no clear association between the language respondents speak and the event attributes they look for when choosing an event. It was however clear that respondents who spoke foreign languages choose an event based on the *attractiveness and exposure* as well as *challenge and reputation,* while respondents who spoke English and Afrikaans are more likely to choose an event based on the *accessibility and affordability* as well as the *location and climate.* This implicates that local respondents choose an event, because of its location and affordability, whereas international respondents choose an event based on the challenge, organisation, media exposure and standing of the event.

Travel behaviour

The only statistically significant difference was based on the factor ***holiday choice opportunities*** (p= 0.033). Tukey's post hoc multiple comparisons revealed that English (M= 3.21) and Afrikaans (M= 3.10) speaking respondents differ from respondents that speak foreign languages (M= 2.46). Medium effect size differences (d= 0.69 and d= 0.63) indicated that English and Afrikaans speaking respondents had a higher agreement that their event participation has an influence on their *holiday choice opportunities* when compared to respondents that spoke foreign languages. From this result it can be reasoned that Afrikaans and English speaking respondents are more likely to keep their holiday and event participation destinations separate, whereas respondents who speak foreign languages most likely travel to South Africa to participate; and more likely make the country their holiday destination as well.

7.4.3 Results of ANOVAs: a comparison between factors and marital status

For the purpose of the ANOVAs, marital status was divided into three groups. The first group is 'married' respondents, followed by the 'single' category and lastly the 'other' group. The 'Other' group formed a combination of those respondents that were not married, divorced, widowed, engaged or living together.

Table 7-15: ANOVA results of factors and marital status

Marital status	Married (N= 330)	Single (N= 39)	Other (N= 128)	F-Ratio	Sig. level	Effect sizes 1 & 2	Effect sizes 1 & 3	Effect sizes 2 & 3
Commitment factors								
Enjoyment, personal investments and involvement opportunities	**4.47**	**4.51**	**4.62**	**3.703**	**0.025***	**0.07**	**0.27****	**0.25****
Involvement alternatives and social constraints	**3.88**	**3.83**	**4.05**	**3.527**	**0.030***	**0.07**	**0.26****	**0.31****
Dedication and social support	**3.85[a]**	**3.62[b]**	**3.93[a]**	**3.520**	**0.030***	**0.31****	**0.12**	**0.41****
Status, socialisation and travel	1.94	1.93	1.90	0.277	0.758	0.02	0.08	0.06
Lifestyle adaption								
Health and fitness	2.84	2.90	3.02	2.372	0.094	0.07	0.22**	0.16
Media consumption	2.95	2.61	2.95	2.289	0.102	0.32**	0.01	0.32**
Leisure and event participation	**2.98**	**3.08**	**3.30**	**5.138**	**0.006***	**0.09**	**0.33****	**0.19**
Sport development	1.94	1.77	1.90	0.879	0.416	0.22**	0.05	0.16
Enhanced performance spending	2.86	2.66	2.85	0.854	0.426	0.21**	0.01	0.21**
Event attributes								
Attractiveness and exposure	2.33	2.14	2.30	0.743	0.476	0.20**	0.03	0.17
Accessibility and affordability	3.53	3.60	3.65	1.105	0.332	0.08	0.15	0.07
Challenge and reputation	3.65	3.74	3.76	1.419	0.243	0.13	0.16	0.03
Location and climate	2.83	2.79	2.62	1.923	0.147	0.03	0.22**	0.16
Travel behaviour								
Individual travel opportunities	2.97	2.97	3.18	2.941	0.054	0.01	0.25**	0.20**
Group travel opportunities	3.32	3.03	3.28	2.222	0.109	0.33**	0.05	0.28**
Holiday choice opportunities	**3.26**	**2.92**	**2.97**	**4.448**	**0.012***	**0.31****	**0.27****	**0.04**

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

Commitment factors

A statistically significant difference was found based on the commitment factor *enjoyment, personal investments and involvement alternatives* (p= 0.025). Although the factors *involvement*

alternatives and social constraints (*p*= 0.030) *and dedication and social support* (*p*= 0.030) were also statistically significant, Tukey's post hoc multiple comparisons revealed no differences between the groups. Tukey's post hoc multiple comparisons and small effect size differences (*d*= 0.31 & *d*= 0.41 respectively) revealed that respondents who were single (*M*= 3.62) regarded *dedication and social support* as less important than respondents who were married (*M*= 3.85) or in the 'other' group (*M*= 3.93). Small effect size differences (between *d*= 0.25 & *d*= 0.31) revealed that respondents that fell in the 'other' group (*M*= 4.62 & *M*= 4.05) regarded *enjoyment, personal investments and involvement alternatives* as well as *involvement alternatives and social constraints* as more important than respondents that are married (*M*= 4.47 & *M*= 3.88) or single (*M*= 4.51 & *M*= 3.83). It is clear that the marital status of respondents has an influence on the commitment factors. Thus, assumption can be made that respondents who form part of the 'other' group and were not married, divorced, widowed, engaged or living together, may have a higher engagement with their endurance sport and therefore may rank the factors as more important. It is also clear that single respondents have less social support and dedication than respondents who are married or in another type of relationship. It seems that having a spouse or being in a relationship will lead to higher social support, which may increase ones dedication towards the sport.

Lifestyle adaption

A statistically significant difference was found for ***leisure and event participation*** (*p*= 0.006). Tukey's post hoc multiple comparisons on the other hand revealed no differences between groups. Small effect size differences (*d*= 0.33) showed that respondents who were married (*M*= 2.98), adapt their lifestyle less in terms of *leisure and event participation* than respondents who were in the 'other' category (*M*= 3.30). A participant's marital status does not seem to have an influence on the extent to which endurance athletes adapt their lifestyle. Respondents in the 'other' relationship status group tend to travel and participate more in endurance events. This could be due to the fact that these respondents are not yet in a committed relationship, have less social obligations and invest more time to participate in endurance events.

Event attributes

The event attribute factors when compared to the marital status groups resulted in no statistically significant differences ($p < 0.05$) and Tukey's post hoc multiple comparisons also revealed no differences between the groups. Small effect size differences (*d*= 0.20 & *d*= 0.22) did however show that respondents who were married regarded ***attractiveness and exposure*** as well as ***location and climate*** as more important event attributes in comparison to respondents that were not married or in the 'other' group.

Travel behaviour

As seen in Table 7.15 ***holiday choice opportunities*** showed a statistically significant difference (p= 0.012), but Tukey's post hoc multiple comparisons revealed no differences between the marital status groups. Small effect size differences (d= 0.31 & d= 0.27) did still revealed that respondents that are married (M= 3.26) have a higher agreement that their event participation influences their *holiday choice opportunities* in comparison with single (M= 2.92) and 'other' group (M= 2.97) respondents. From the results, it can be assumed that respondents who are married are more likely to keep their holiday and event destinations separate. Since these respondents need to keep their families preferences in mind, they will not always be able to travel in and around the destination where the endurance event participation takes place. These respondents also tend to have less time to travel before and after the event.

7.4.4 Results of ANOVAs: a comparison between factors and province of residents

The province of residence categories were divided into four groups for the purpose of the ANOVA analysis. The provinces, which had the highest number of respondents, as seen in Table 6.3 (c.f. 6.4.1), where chosen as three of the four groups. The province groups are respondents from KwaZulu-Natal, Western Cape, and Gauteng. The remaining provinces including Free State, Northern Cape, Eastern Cape, North West, Mpumalanga, Limpopo as well as respondents from outside South Africa, were grouped to form the 'other' category.

Table 7-16: ANOVA results of factors and province of residence

Province of residence	KwaZulu -Natal	Western Cape	Gauteng	Other provinces	F-Ratio	Sig. level	Effect sizes					
	(N= 101)	(N= 112)	(N= 203)	(N= 81)			1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.58	4.49	4.48	4.58	0.810	0.489	0.15	0.15	0.13	0.01	0.07	0.07
Involvement alternatives and social constraints	3.95	3.89	3.90	3.96	0.316	0.814	0.09	0.07	0.02	0.02	0.11	0.09
Dedication and social support	3.87	3.77	3.86	3.92	0.863	0.460	0.13	0.01	0.09	0.12	0.21**	0.08
Status, socialisation and travel	1.99	1.83	1.95	1.93	1.266	0.285	0.23**	0.06	0.08	0.19	0.15	0.02
Lifestyle adaption												
Health and fitness	2.88	2.77	2.97	2.85	1.876	0.133	0.13	0.13	0.03	0.27**	0.11	0.16
Media consumption	3.01	2.92	2.86	2.97	0.670	0.571	0.10	0.16	0.05	0.06	0.05	0.11
Leisure and event participation	3.05	2.88	3.15	3.19	2.398	0.067	0.16	0.11	0.15	0.27**	0.31**	0.04
Sport development	1.89	1.93	1.93	1.93	0.059	0.981	0.04	0.05	0.05	0.01	0.01	0.01
Enhanced performance spending	**2.72**	**2.71**	**3.02**	**2.73**	**4.441**	**0.004***	**0.02**	**0.33****	**0.01**	**0.34****	**0.02**	**0.32****
Event attributes												
Attractiveness and exposure	2.38	2.25	2.24	2.46	1.485	0.218	0.15	0.15	0.08	0.01	0.23**	0.23**
Accessibility and affordability	3.73	3.73	3.53	3.55	1.778	0.150	0.27**	0.25**	0.23**	0.01	0.02	0.03
Challenge and reputation	3.75	3.71	3.63	3.70	0.757	0.519	0.06	0.16	0.06	0.11	0.01	0.09
Location and climate	2.74	2.76	2.74	2.92	0.674	0.569	0.03	0.01	0.18	0.02	0.16	0.17
Travel behaviour												
Individual travel opportunities	2.92	2.96	3.05	3.14	1.258	0.288	0.05	0.15	0.25**	0.10	0.19	0.10
Group travel opportunities	3.29	3.25	3.23	3.47	1.768	0.152	0.05	0.07	0.22**	0.02	0.27**	0.29**
Holiday choice opportunities	3.27	3.24	3.14	2.95	1.627	0.182	0.02	0.12	0.29**	0.10	0.27**	0.18

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

Commitment factors

As evident in Table 7.16, no statistically significant differences or Tukey's post hoc multiple comparisons revealed significant differences when the commitment factors and province of residence were compared. A small effect size difference (*d*= 0.21) showed that respondents from the Western Cape regarded ***dedication and social support*** as less important than respondents from other provinces. A small effect size difference (*d*= 0.23) also indicated that respondents from KwaZulu-Natal regarded ***status, socialisation and travel*** as a more important commitment factor than respondents from the Western Cape. From the results, it is clear that the province of residence had no statistically significant influence on the commitment factors. It is however interesting to note that respondents from other provinces and countries had a higher score for the factor *dedication and social support*. This higher dedication might be directly linked to the distance travelled to participate in endurance sports as there are fewer events in the other provinces. Thus, respondents will travel further in order to participate.

Lifestyle adaption

Enhanced performance spending brought about a statistically significant (*p*= 0.004) result when compared in the province of residence groups. Tukey's post hoc multiple comparisons however did not reveal any significant differences between the groups. Small effect size differences showed that respondents from Gauteng (*M*= 3.02) adapt their lifestyle to a greater extent in terms of enhanced performance spending than respondents from KwaZulu-Natal (*M*= 2.72; *d*= 0.33), Western Cape (*M*= 2.71; *d*= 0.34) as well as respondents from the 'Other' category (*M*= 2.73; *d*= 0.32). Respondents from the Gauteng province also adapt their lifestyle more in terms of *health and fitness, leisure and event participation* (although not statistically significant). As Gauteng is the business hub of South Africa, most Gauteng residents earn higher incomes when compared to residents from other provinces. It can therefore be assumed that the high rating for these factors can be due to the fact that these respondents have more disposable income to spend on the newest gear, accessories, equipment, training, healthy food, nutrition products and travelling to events. Respondents from the Western-Cape had the lowest mean value for the factor *leisure and event participation* which may be due to the fact that most of these respondents do not have to travel far to participate, because many endurance sport events are held in the Western Cape Province.

Event attributes

No statistically significant differences were revealed and Tukey's post hoc multiple comparisons did not reveal significant differences between the groups. A small effect size difference (*d*= 0.23) presented that respondents in the 'Other' category regarded the ***attractiveness and exposure*** attribute as more important to respondents from Western Cape and Gauteng. Small effect size differences also showed that respondents from KwaZulu-Natal and Western Cape regarded

accessibility and affordability as more important than respondents from Gauteng and the 'Other' category. There was no clear relationship between the province of residence categories and the event attribute factors. Interestingly, the *accessibility and affordability* attribute is the least important for respondents from Gauteng. This links with the argument that due to the higher incomes of Gauteng residents, these respondents have specific lifestyle adaption and event attribute expectations and as a result, the cost and proximity of the event play less of a role in the choice of event or place of event for participation.

Travel behaviour

There were also no statistically significant differences based on the travel behaviour factors. A small effect size difference (*d*= 0.25) however revealed that there were more respondents that fell in the category: 'Other', with a higher agreement that their event participation influences their ***individual travel opportunities*** compared to respondents from KwaZulu-Natal. Small effect size differences (*d*= 0.22, *d*= 0.27 & *d*= 0.29) also showed that respondents from other provinces had a higher score with ***group travel opportunities***, when compared to the other three provinces. When looking at the factor ***holiday choice opportunities,*** small effect size differences (*d*= 0.29 & *d*= 0.27) disclosed that respondents from KwaZulu-Natal and Western Cape all had a higher agreement that their event participation influences their *holiday choice opportunities*, when compared to respondents in the category: 'Other'. It is evident that with regard to travel behaviour, respondents from other provinces or other countries do feel their event participation is directly associated with their travel behaviour. They therefore see their event participation has a direct influence on their travel opportunities. These respondents are also less likely to keep their event and holiday destinations separate. This could also be for the reason that fewer events are held in the other provinces. Thus, these respondents also tend to travel more in order to participate, and in some cases extend their participation into a holiday.

7.4.5 Results of ANOVAs: a comparison between factors and gross annual income

For the purpose of the ANOVA analysis, four groups for the gross annual income question were created. The R < 20 000 category was combined with R20 0001 to R140 000 in order to create the first group, namely 'lower class'. The R140 001 to R221 000 category was combined with the scale set R221 001 to R305 000 to form the second group named, 'middle class'. The third group formed from the combination of the R305 001toR 431 000 category and the R431 001 to R522 000 group and is identified as the 'affluent middle class'. The last group was labelled 'upper class' and consist out of the income group R552 001 and higher.

Commitment factors

As seen in Table 7.17 no statistical significant differences were found based on the commitment factors. Although a small effect size difference (*d*= 0.32) revealed that respondents in the lower

class group ranked the commitment factor ***involvement alternatives and social constraints*** higher (*M*= 4.06) than both the middle class (*M*= 3.91) and upper class groups (*M*= 3.86). A small effect size difference also showed that respondents in the lower class group ranked ***dedication and social support*** (*M*= 3.93) as more important than the middle class (*M*= 3.77) income group. The lower class group also rated ***status, socialisation and travel*** (*M*= 2.00) as a more important commitment factor than the upper class group (*M*= 1.88). The latter was supported by a small effect size difference (*d*= 0.20). The income that respondents receive per year does not appear to have an influence on the commitment factors of endurance athletes. It is however important to note that respondents that are in the lowest income group (lower class), did ranked all the commitment factors higher when compared to the higher income groups. These lower income groups are possibly younger respondents that are just starting out with their event participation. Therefore, their commitment is still being formed by different factors, and hence they rank all factors as important.

Lifestyle adaption

There were statistically significant differences based on the factors ***leisure and event participation*** (*p*= 0.018), ***enhanced performance spending*** (*p*= 0.018); although Tukey's post hoc multiple comparisons did not indicate any statistically significant differences and ***health and fitness*** (*p*= 0.086) were Tukey's post hoc multiple comparisons indicated statistically significant differences. A small effect size difference (*d*= 0.44) revealed that the respondents in the lower class group (*M*= 3.35) adapt their *leisure and event participation* to a greater extent than respondents in the upper class group (*M*= 2.94). Unsurprisingly, small effect size differences (*d*= 0.30 & *d*= 0.33) revealed that the lower class group (< R 20 000- R 140 000) (*M*= 2.69) had less *enhanced performance spending* than the affluent middle class (*M*= 2.80) and upper class (*M*= 2.98) groups. The lower class group (*M*= 3.12) group also adapt their lifestyle more in terms of ***health and fitness*** than the middle class (*M*= 2.82) income group. A small effect size difference (*d*= 0.36) supported this result. From the results, it appears that the lower income groups tend to travel more and participate in more events, as seen from the higher *leisure and event participation* score. A possible explanation is that higher income groups may be older respondents that have more responsibilities and less time to participate in the same number of events as lower income groups. Lower income groups also tend to have a higher lifestyle adaption in terms of *health and fitness*. This may be because these respondents are not yet in a time consuming job position and have more time to spend on their health and fitness than higher income groups. Unsurprisingly, higher income groups have more *enhanced performance spending,* as these respondents earn more money, and thus have more money to spend on the latest gear, accessories and equipment.

Event attributes

The event attributes ***attractiveness and exposure*** (*p* = 0.013) *and* ***accessibility and affordability*** (*p*= 0.005) resulted in statistically significant differences. Tukey's post hoc multiple comparisons also indicated statistically significant differences which are supported by the small effect size differences (respectively *d*= 0.40 and *d*= 0.37). Respondents in the middle class income group ranked the *attractiveness and exposure* (*M*= 2.50) and *accessibility and affordability* (*M*= 3.72) attributes higher than respondents in the upper class group (respectively *M*= 2.18 and *M*= 3.42). It seems that higher income groups are less concerned with the *attractiveness and exposure* as well as the *accessibility and affordability* of events. The *challenge and reputation* of an event is the most important attribute for high income groups. This could be due to the fact that these respondents have access to more events due to their higher discretionary income, so they seek the more challenging events that are well-organised.

Travel behaviour

The factors ***individual travel opportunities*** (*p*= 0.009) and ***group travel opportunities*** (*p*= 0.020) revealed statistically significant differences; although Tukey's post hoc multiple comparisons indicated no statistically significant differences for group destination travel opportunities. Respondents in the middle class group felt that their event participation has more influence on their *individual travel opportunities* (*M*= 3.21) and *group travel opportunities* (*M*= 3.44) when compared to the upper class group (*M*= 2.88 *&* *M*= 3.16) who thought their participation has less of an influence as also confirmed with the small effect size differences (*d*= 0.40 *&* *d*= 0.34). It appears that lower income groups indicated that their event participation has a direct influence on their travel behaviour and that they are more likely to travel at the event destination. These respondents most probably travel in the event destinations because they have less money to have a separate holiday destination and their event participation is thus the ideal opportunity to travel.

Table 7-17: ANOVA results of factors and annual income

Annual income	Lower class	Middle class	Affluent middle class	Upper class	F-Ratio	Sig. level	Effect sizes					
	(N= 68)	(N= 91)	(N= 121)	(N= 212)			1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.56	4.46	4.50	4.52	0.555	0.645	0.14	0.10	0.11	0.06	0.08	0.03
Involvement alternatives and social constraints	4.06	3.91	3.92	3.86	1.523	0.208	0.21**	0.19	0.32**	0.01	0.07	0.08
Dedication and social support	3.93	3.77	3.81	3.88	1.100	0.349	0.21**	0.16	0.08	0.06	0.15	0.09
Status, socialisation and travel	2.00	1.97	1.97	1.88	1.086	0.354	0.05	0.05	0.20**	0.01	0.14	0.15
Lifestyle adaption												
Health and fitness	**3.12[b]**	**2.82[a]**	**2.89[ab]**	**2.86[ab]**	**2.213**	**0.086**	**0.36****	**0.26****	**0.31****	**0.08**	**0.05**	**0.03**
Media consumption	3.01	2.93	2.97	2.87	0.497	0.685	0.07	0.03	0.13	0.04	0.06	0.10
Leisure and event participation	**3.35[b]**	**3.13[ab]**	**3.10[ab]**	**2.94[a]**	**3.369**	**0.018***	**0.21****	**0.25****	**0.44****	**0.03**	**0.18**	**0.16**
Sport development	2.00	1.80	1.86	1.99	1.578	0.194	0.24**	0.16	0.01	0.08	0.23**	0.15
Enhanced performance spending	**2.69**	**2.68**	**2.80**	**2.98**	**3.376**	**0.018***	**0.01**	**0.12**	**0.30****	**0.13**	**0.33****	**0.20****
Event attributes												
Attractiveness and exposure	**2.45[ab]**	**2.50[b]**	**2.29[ab]**	**2.18[a]**	**3.639**	**0.013***	**0.06**	**0.15**	**0.30****	**0.21**	**0.40****	**0.12**
Accessibility and affordability	**3.67[ab]**	**3.72[b]**	**3.64[ab]**	**3.42[a]**	**4.403**	**0.005***	**0.06**	**0.02**	**0.28**	**0.09**	**0.37****	**0.28****
Challenge and reputation	3.64	3.64	3.69	3.72	0.371	0.774	0.01	0.07	0.10	0.06	0.10	0.04
Location and climate	2.90	2.84	2.69	2.73	0.881	0.451	0.07	0.20**	0.18	0.14	0.11	0.03
Travel behaviour												
Individual travel opportunities	**3.21[b]**	**3.17[ab]**	**3.02[ab]**	**2.88[a]**	**3.865**	**0.009***	**0.05**	**0.21****	**0.40****	**0.16**	**0.33****	**0.15**
Group travel opportunities	**3.41**	**3.44**	**3.31**	**3.16**	**3.320**	**0.020***	**0.04**	**0.12**	**0.30****	**0.16**	**0.34****	**0.17**
Holiday choice opportunities	3.00	2.99	3.17	3.30	2.494	0.059	0.01	0.16	0.28**	0.16	0.28**	0.12

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8 [a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.6 Results of ANOVAs: a comparison between factors and highest level of education

In Table 7.18 four categories were created for level of education. Grammar school and high school or equivalent was combined to form the first category, which is labelled **Secondary education**. The second category stems from the combination of vocational/technical school and some colleges and is identified as **Vocational & certified education**. The third category is respondents with a bachelor's degree and is labelled **Undergraduate tertiary education.** The last category is the grouping of master's degree, doctoral degree and a professional degree, labelled **Postgraduate tertiary education.**

Commitment factors

The commitment factor ***involvement alternatives and social constraints*** was statistically significant (p= 0.004). Tukey's post hoc multiple comparisons as well as small effect size differences indicated that the secondary education group (M= 4.13) ranked *involvement alternatives and social constraints* higher than respondents with a undergraduate tertiary education (M= 3.82; d= 0.43) or postgraduate tertiary education (M= 3.88; d= 0.36). This result may be since the respondents are still in the process of studying and may still be living with their parents. Therefore, they will less time to spend on endurance sport participation, because of more alternatives such as studying, university team sport and social activities associated with studying at a university or college. These may also feel pressured by their significant others such as coaches, parents and training partners. This shows the importance of exposure to endurance sport at an early age, but also how important having social support is for an endurance athlete.

Lifestyle adaption

From Table 7.18 no statistically significant differences were found based on any of the lifestyle adaption factors. Small effect size differences (d= 0.22, d= 0.24, d= 0.23) did however reveal that respondents with secondary education (M= 3.06) adapt their ***health and fitness*** more than respondents with vocational or certified education (M= 2.87), undergraduate (M= 2.85) or a postgraduate tertiary education (M= 2.86). A small effect size difference (d= 0.20) also showed that respondents with vocational and certified education (M= 3.00) had higher ***media consumption*** than respondents with postgraduate tertiary education (M= 2.81). A small effect size difference (d= 0.21) furthermore revealed that respondents with secondary education (M= 3.20) adapt their *leisure and event participation* to a greater extent when compared to respondents with postgraduate tertiary education (M= 2.99). The level of education does seem to have an influence on the extent to which respondents adapt their lifestyle. Interestingly, the secondary education and vocational and certified education groups adapt their lifestyle more in all the lifestyle factors than respondents with undergraduate or postgraduate education. The latter two groups may have less time to adapt their lifestyle as they may have more priorities such as higher demanding jobs and studies that may be central to their lifestyle.

Event attributes

Attractiveness and exposure (p= 0.003) and ***challenge and reputation*** (p= 0.036) were statistically significant and Tukey's post hoc multiple comparisons revealed differences between the groups, while ***accessibility and affordability*** (p= 0.012) was statistically significant. However, Tukey's post hoc multiple comparisons revealed no differences between groups. A small effect size difference (d= 0.44) showed that the *attractiveness and exposure* of an event is more important for respondents with secondary education (M= 2.57) than it is for respondents with a postgraduate tertiary education (M= 2.11). Small effect size differences (d= 0.26; d= 0.25) furthermore showed that respondents with vocational and certified education (M= 3.68) regarded *accessibility and affordability* as more important compared to respondents with secondary education (M= 3.43) as well as respondents with postgraduate education (M= 3.44). Small effect size differences (d= 0.25) also presented that respondents with undergraduate tertiary education (M= 3.67) ranked the *accessibility and affordability* as more important than respondents with secondary education (M= 3.43) as well as respondents with postgraduate tertiary education (M= 3.44). A small effect size difference (d= 0.26) furthermore revealed that respondents with secondary education (M= 3.49) regarded the attribute *challenge and reputation* as more important than respondents with undergraduate tertiary education (M= 3.04). The event attribute *attractiveness and exposure* is the most important for respondents that have a secondary education. It may be that younger respondents participate for the media exposure, price money and international standing of the event.

Travel behaviour

A statistically significant result (p= 0.004) was found for the factor ***group travel opportunities***. Tukey's post hoc multiple comparisons as well as a medium effect size difference (d= 0.52) demonstrated that respondents with a secondary education had a higher agreement that their event participation has an influence on their *group travel opportunities* (M= 3.49) compared to respondents with a postgraduate tertiary education (M= 3.09). It appears that respondents that have secondary education as their highest qualification may see their event participation as the ideal opportunity to travel and explore the event destination, as these are most likely younger respondents that are just starting out in a career or who are still busy studying.

Table 7-18: ANOVA results of factors and level of education

Level of education	Secondary education	Vocational and certified education	Undergraduate tertiary education	Post graduate tertiary education	F-Ratio	Sig. level	Effect sizes					
	(N= 87)	(N= 99)	(N= 191)	(N= 87)			1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.52	4.56	4.49	4.49	0.473	0.701	0.07	0.04	0.04	0.14	0.12	0.01
Involvement alternatives and social constraints	**4.13[a]**	**3.97[ab]**	**3.82[b]**	**3.88[b]**	**4.525**	**0.004***	**0.22****	**0.43****	**0.36****	**0.21****	**0.15**	**0.08**
Dedication and social support	3.93	3.92	3.76	3.87	2.046	0.107	0.01	0.22**	0.08	0.25**	0.09	0.16
Status, socialisation and travel	2.01	1.93	1.96	1.82	1.861	0.135	0.12	0.07	0.28**	0.05	0.17	0.22**
Lifestyle adaption												
Health and fitness	3.06	2.87	2.85	2.86	1.590	0.191	0.22**	0.24**	0.23**	0.02	0.01	0.01
Media consumption	3.00	3.00	2.91	2.81	0.932	0.425	0.00	0.09	0.19	0.09	0.20**	0.10
Leisure and event participation	3.20	3.08	3.08	2.99	0.795	0.497	0.11	0.12	0.21**	0.01	0.10	0.09
Sport development	1.88	2.03	1.92	1.86	0.968	0.408	0.18	0.05	0.02	0.14	0.21	0.07
Enhanced performance spending	2.86	2.84	2.84	2.82	0.030	0.993	0.02	0.02	0.04	0.01	0.02	0.02
Event attributes												
Attractiveness and exposure	**2.57[a]**	**2.39[ab]**	**2.27[ab]**	**2.11[b]**	**4.818**	**0.003***	**0.17**	**0.29****	**0.44****	**0.13**	**0.33****	**0.18**
Accessibility and affordability	**3.43**	**3.68**	**3.67**	**3.44**	**3.670**	**0.012***	**0.26****	**0.25****	**0.01**	**0.01**	**0.28****	**0.32****
Challenge and reputation	**3.53[a]**	**3.63[ab]**	**3.77[b]**	**3.72[ab]**	**2.866**	**0.036***	**0.11**	**0.26****	**0.20**	**0.21****	**0.13**	**0.09**
Location and climate	2.83	2.76	2.82	2.68	0.604	0.613	0.06	0.01	0.14	0.05	0.08	0.15
Travel behaviour												
Individual Travel opportunities	3.14	3.08	3.04	2.86	2.160	0.092	0.07	0.12	0.32**	0.04	0.25**	0.20**
Group travel opportunities	**3.49[a]**	**3.29[ab]**	**3.33[ab]**	**3.09[b]**	**4.514**	**0.004***	**0.24****	**0.19**	**0.52*****	**0.05**	**0.23****	**0.30****
Holiday choice opportunities	3.15	3.12	3.14	3.20	0.121	0.948	0.03	0.01	0.05	0.02	0.07	0.06

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0; [a] Group varies significantly from the variable (in row) where [b] is indicated; [c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.7 Results of ANOVAs: a comparison between factors and primary endurance sport

For the purpose of the ANOVAs, the primary endurance sport that respondents participate in was divided into four groups. The first group is cycling as primary sport where participants combine road cycling and mountain biking. The second group is running and consists out of both marathon and trail running. The third group is water-based sports and include canoeing, open-water swimming as well as paddling. The last group is multi-disciplinary sports such as triathlons, adventure racing, orienteering as well as decathlons (Table 7.19).

Commitment factors

Involvement alternatives and social constraints had the only statistically significant difference (p= 0.001). Tukey's post hoc multiple comparisons as well as small effect size differences revealed that respondents that take part in multi-disciplinary sports (M= 4.16) had higher *involvement alternatives and social constraints* than respondents that indicated that cycling (M= 3.83; d= 0.44), running (M= 3.91; d= 0.33) and water-based sports (M= 3.81; d= 0.47) were their primary sports. Respondents who take part in multi-disciplinary sports may have higher *involvement alternatives and social constraints* seeing that these types of sports like triathlons, combine different disciplines. Therefore, these athletes have more events to choose from and respondents may feel added pressure to perform and succeed in all the different disciplines which the sport combines (e.g. swimming, cycling and running) and therefore participate in more events.

Lifestyle adaption

The lifestyle factors ***health and fitness*** (p= 0.001), ***leisure and event participation*** (p= 0.001); ***sport development*** (p= 0.030) as well as ***enhanced performance spending*** (p= 0.023) were all statistically significant. Tukey's post hoc multiple comparisons also revealed significant differences for all factors except with the *sport development* factor. Medium and small effect size differences (between d= 0.39 & d= 0.73) indicated that respondents who see multi-disciplinary sports (M= 3.39) as their primary sport, adapt their lifestyle more in terms of *health and fitness* as well as *leisure and event participation* than respondents that indicated cycling (M= 2.75 & M= 2.85 respectively), running (M= 2.78 & M= 3.13) and water-based sports (M= 2.71; d= 2.99) as their primary sport. Small effect size differences (d= 0.22, d= 0.31 & d= 0.25 respectively) did reveal that respondents that chose multi-disciplinary sports (M= 2.10) as their primary sport adapt their lifestyle more in terms of *sport development* than respondents that chose cycling (M= 1.84), running (M= 1.88) and water-based sport (M= 1.99) as primary sport. The factor *enhanced performance spending* revealed that respondents that take part in water-based sports (M= 2.54) have less *enhanced performance spending* than cycling (M= 2.90) and multi-disciplinary sport (M= 2.95) respondents. The small effect size differences (d= 0.41 & d= 0.46) supported these differences. From the results, it appears that respondents, who indicated that their primary sport is a multi-disciplinary sport, adapt their lifestyle to a greater extent in terms of all the lifestyle

factors. This could be because multi-disciplinary sports are more demanding, which requires more training, more spending, more equipment and larger number of events to master different disciplines. Therefore, these athletes must adapt their lifestyle more in order to be able to take part in such a challenging endurance sport. Furthermore, running respondents adapt their lifestyle more than cycling and water-based respondents, with exception to the *enhanced performance spending* factor. This might be for the reason that, with running one needs less equipment than, for example with cycling.

Event attributes

Two event attribute factors showed statistically significant differences, ***attractiveness and exposure*** (p= 0.007) as well as ***Location and climate*** (p= 0.002). Tukey's post hoc multiple comparisons also revealed statistically significant differences within these factors. A small effect size difference (d= 0.44) revealed that respondents that indicated their primary sport to be multi-disciplinary sports (M= 2.54) regarded the *attractiveness and exposure* of the event as more important when compared to water-based endurance sport respondents (M= 2.10). Medium and small effect size differences (between d= 0.23 & d= 0.54) revealed that water-based sport respondents (M= 2.39) regarded the *location and climate* of an event less important than respondents who chose running (M= 2.92), cycling (M= 2.76) and multi-disciplinary sports (M= 2.67) as their primary sport to participate in. The event attribute ***accessibility and affordability*** was not statistically significant, although Tukey's post hoc multiple comparisons as well as a small effect size difference (d= 0.44) revealed that the *accessibility and affordability* of an event is more important for running respondents (M= 3.68) than it is for water-based endurance sport respondents (M= 3.38). It is evident from the results that the importance of event attributes differs between different primary sport types. It is clear that respondents that take part in different primary sports all consider different attributes during and for their participation. *Attractiveness and exposure* as an event attribute is the most important for multi-disciplinary sport respondents. The reason for this might be for the reason that multi-disciplinary events are so demanding and thus respondents seek out those events that get the most exposure, helps them qualify for other similar events and gives price money as a reward. For both running and cycling, respondents consider the *accessibility and affordability* of an event as important attributes. Seeing that there is a large number of cycling and running events, respondents would rather participate in events that are affordable and in close proximity to their homes. The attribute, *location and climate,* is also more important for running and cycling respondents. There is a larger number of running and cycling events available to choose from, therefore respondents find the *location and climate* important as they search for locations that they have not yet participated in or climates that suit their training environment and in turn are easier for them to adapt to.

Travel behaviour

All three travel behaviour factors showed statistically significant differences ($p < 0.05$). Tukey's post hoc multiple comparisons as well as medium and small effect size differences revealed that multi-disciplinary sport respondents ($M = 3.31$) agreed that their event participation has a greater influence on their ***individual travel opportunities*** when compared to cycling ($M = 2.87$; $d = 0.55$) as well as water-based sport ($M = 2.86$; $d = 0.49$) respondents. A small effect size difference ($d = 0.41$) further indicated that respondents that see multi-disciplinary sports ($M = 3.50$) as their primary sport have a higher agreement that their event participation influences their *group destination travel* than respondents who indicated cycling ($M = 3.16$) as their primary sport. For the factor ***destination choice opportunities***, a medium effect size difference ($d = 0.53$) indicated that cycling respondents ($M = 3.38$) had a higher agreement than running respondents ($M = 2.81$) that their event participation influences their *destination choice opportunities.* A small effect size difference ($d = 0.39$) also showed that cycling respondents ($M = 3.38$) had a higher agreement that their *holiday choice opportunities* is influenced by their event participation when compared to multi-disciplinary sport respondents ($M = 2.97$). A small effect size difference ($d = 0.42$) also indicated that water-based sport respondents ($M = 3.27$) had a higher agreement that their *holiday choice opportunities* is influenced by their event participation when compared to running respondents ($M = 2.81$). Respondents who indicated that multi-disciplinary sports and running are their primary sports agreed that their event participation has more of an influence on their travel behaviour compared to cyclists and water-based sport respondents. Multi-disciplinary sports and running respondents are also less likely to have a separate holiday destination. Since these sports are more competitive, respondents would seek more events to participate in, therefore spending more time to travel to events and utilising event participation to travel.

Table 7-19: ANOVA results of factors and primary endurance sport which respondents take part in

Primary endurance sport	Cycling (N= 229)	Running (N= 99)	Water-based (N= 59)	Multi-disciplinary (N= 108)	F-Ratio	Sig. level	Effect sizes 1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.48	4.58	4.42	4.56	1.865	0.135	0.23**	0.11	0.12	0.01	0.04	0.20**
Involvement alternatives and social constraints	**3.83[a]**	**3.91[a]**	**3.81[a]**	**4.16[b]**	**6.811**	**0.001***	**0.11**	**0.04**	**0.44****	**0.15**	**0.33****	**0.47****
Dedication and social support	3.87	3.79	3.86	3.87	0.384	0.764	0.12	0.01	0.01	0.11	0.11	0.01
Status, socialisation and travel	1.95	1.88	1.93	1.90	0.419	0.739	0.11	0.04	0.09	0.07	0.03	0.05
Lifestyle adaption												
Health and fitness	**2.75[a]**	**2.78[a]**	**2.71[a]**	**3.39[b]**	**20.227**	**0.001***	**0.04**	**0.06**	**0.70*****	**0.10**	**0.67*****	**0.74*****
Media consumption	2.84	2.97	2.88	3.06	1.456	0.226	0.12	0.04	0.23	0.08	0.09	0.19
Leisure and event participation	**2.85[a]**	**3.13[a]**	**2.99[a]**	**3.53[b]**	**12.987**	**0.001***	**0.28****	**0.15**	**0.73*****	**0.15**	**0.39****	**0.58*****
Sport development	**1.84**	**1.88**	**1.99**	**2.10**	**2.996**	**0.030***	**0.04**	**0.22****	**0.31****	**0.13**	**0.25****	**0.12**
Enhanced performance spending	**2.90[b]**	**2.77[ab]**	**2.54[a]**	**2.95[b]**	**3.212**	**0.023***	**0.12**	**0.41****	**0.05**	**0.23****	**0.17**	**0.46****
Event attributes												
Attractiveness and exposure	**2.24[ab]**	**2.30[ab]**	**2.10[a]**	**2.54[b]**	**4.133**	**0.007***	**0.07**	**0.18**	**0.30****	**0.22****	**0.24****	**0.44****
Accessibility and affordability	**3.60[ab]**	**3.68[a]**	**3.38[b]**	**3.52[ab]**	2.022	0.110	0.10	0.29**	0.09	0.38**	0.18	0.17
Challenge and reputation	3.66	3.80	3.63	3.67	1.268	0.285	0.21**	0.04	0.02	0.25**	0.19	0.06
Location and climate	**2.92[b]**	**2.76[b]**	**2.39[a]**	**2.67[ab]**	**5.011**	**0.002***	**0.17**	**0.54*****	**0.23****	**0.38****	**0.08**	**0.25****
Travel behaviour												
Individual Travel opportunities	**2.87[a]**	**3.16[ab]**	**2.86[a]**	**3.31[b]**	**8.494**	**0.001***	**0.32****	**0.01**	**0.55*****	**0.33****	**0.16**	**0.49****
Group travel opportunities	**3.16[a]**	**3.36[ab]**	**3.25[ab]**	**3.50[b]**	**4.792**	**0.003***	**0.24****	**0.10**	**0.41****	**0.13**	**0.18**	**0.29****
Holiday choice opportunities	**3.38[c]**	**2.81[a]**	**3.27[bc]**	**2.97[ab]**	**8.446**	**0.001***	**0.53*****	**0.10**	**0.39****	**0.42****	**0.15**	**0.27****

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8; [a] Group varies significantly from the variable (in row) where [b] is indicated; [c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.8 Results of ANOVAs: a comparison between factors and endurance events which respondents take part in

For the events, that respondents take part in, five groups of events were created by combining similar events to ease interpretation. The **first group is cycling events** and consist out of the Cape Town Cycle Tour, Sani2C, 94.7 Cycle Challenge and the Tsogo Sun Amashova Durban classic. The **second group was running events** and included the Comrades Marathon and Ultra-trail Cape Town. The **third group was water-based events** and included the Dusi Canoe Marathon. The forth group was **multi-disciplinary events** and includes The Standard Bank Ironman African championships, adventure racing and massive adventures. The **last group consist of different sport clubs** that also participated in the survey. This group include clubs such as canoeing South Africa, triathlon South Africa, Potchefstroom cycling club, Sun City cycling club and the Vortex cycling club as categorised in Table 7.20.

Commitment factors

Involvement alternatives and social constraints had the only statistically significant result (p= 0.035), although Tukey's post hoc multiple comparisons revealed no differences between the groups. Small effect size differences (d= 0.30 & d= 0.33) showed that respondents taking part in cycling events (M= 3.81) have less *involvement alternatives and social constraints* compared to respondents participating in running (M= 4.02) and multi-disciplinary events (M= 4.06). Running and multi-disciplinary respondents may have more alternatives, because multi-disciplinary athletes have to train for different disciplines, which leads to more events to choose from. With running events, respondents also have different distances they can compete in and they are able to changeover from a marathon to for example trail running. This gives them more alternative events to choose from. These athletes may also feel more pressure from significant others as the training and participation in these sports can be time consuming.

Lifestyle adaption

For the lifestyle adaption factors, ***health and fitness*** (p= 0.010; no differences indicated by Tukey's post hoc multiple comparisons) and ***leisure and event participation*** (p= 0.001) had statistically significant differences. ***Sport development*** did not result in a statistically significant difference (p > 0.050), however Tukey's post hoc multiple comparisons indicated differences. Small effect size differences showed that cycling event respondents (M= 2.74) adapt their lifestyle less in terms of *health and fitness* when compared to running event respondents (M= 2.94; d= 0.23), water-based event respondents (M= 2.97; d= 0.29), multi-disciplinary event respondents (M= 3.05; d= 0.35) and endurance sport club members (M= 3.02; d= 0.30). Medium (d= 0.54) and small effect size differences (d= 0.45) revealed that respondents that take part in cycling events (M= 2.85) adapt their lifestyle less with regard to *leisure and event participation* than respondents that take part in running (M= 3.37) and multi-disciplinary events (M= 3.33). A small effect size

difference (*d*= 0.48) indicated that respondents that take part in water-based events (*M*= 2.25) adapt their lifestyle to a greater extent in terms of *sport development* when compared to cycling event respondents (*M*= 1.84). It seems that multi-disciplinary sport respondents adapt their lifestyle more in terms of *health and fitness* as well as *leisure and event participation.* This result is not surprising since this type of endurance sport has different variations, distances, and combinations of disciplines. Therefore, it will likely require more training in order to master the different disciplines. These athletes are also more likely to participate in more events as preparation or they have to participate in qualifying events which require that they complete different sport disciplines.

Event attributes

The combination of endurance event scores and event attribute factors did not have any statistically significant differences or differences through Tukey's post hoc multiple comparisons. Small effect size differences did however show that respondents that take part in water-based events (*M*= 2.48) see the ***attractiveness and exposure*** of an event as more important than respondents who take part in cycling events (*M*= 2.27; *d*= 0.24) and endurance sport club members (*M*= 2.25; *d*= 2.25). Small effect size differences displayed that the ***accessibility and affordability*** attribute is less important for endurance club members (*M*= 3.45), than it is for cycling (*M*= 3.61; *d*= 0.20) and multi-disciplinary event respondents (*M*= 3.65; *d*= 0.24). Small effect size differences also demonstrated that the ***challenge and reputation*** of an event was ranked the highest by running event respondents (*M*= 3.84) when compared to cycling event respondents (*M*= 3.69; *d*= 0.21); water-based event respondents (*M*= 3.69; *d*= 0.20) and endurance sport club members (*M*= 3.61; *d*= 0.31). Small effect size differences showed that the ***location and climate*** of an event is more important when choosing a running event (*M*= 2.92), than it is when choosing a water-based event (*M*= 2.46; *d*= 0.47) or when endurance club members choose an event (*M*= 2.65; *d*= 0.28). Also a small effect size difference shows that (*d*= 0.27) the *location and climate* event attribute is more important for multi-disciplinary event respondents (*M*= 2.76), than it is for water-based event respondents (*M*= 2.46). There are no clear differences between the primary sport respondents participating and the event attributes they seek. Interestingly, running and multi-disciplinary athletes seek the same type of attributes, whereas cycling respondents find the *location and climate* as a very important attribute. This may be due to the fact that the location and climate is directly connected to the cycling route respondents would follow during a race.

Travel behaviour

All three travel behaviour factors showed statistically significant differences ($p < 0.50$). Tukey's post hoc multiple comparisons as well as medium effect size differences revealed that cycling event respondents (*M*= 2.84) indicated that their event participation has less of an influence on

their ***individual travel opportunities*** than compared to running event (*M*= 3.30; *d*= 0.54) and multi-disciplinary event respondents (*M*= 3.26; *d*= 0.52). Small effect size differences indicated that respondents that take part in cycling events (*M*= 3.11) was in lesser agreement that their event participation influences their ***group travel opportunities*** in comparison with running event respondents (*M*= 3.45; *d*= 0.41), water-based event respondents (*M*= 3.42; *d*= 0.36), multi-disciplinary event respondents (*M*= 3.48; *d*= 0.44) as well as different club members (*M*= 3.39; *d*= 0.34). Tukey's post hoc multiple comparisons and a medium effect size difference (*d*= 0.53) also showed that respondents taking part in cycling events (*M*= 3.40) agreed that their event participation has more influence on their ***holiday choice opportunities*** than that of running event respondents (*M*= 2.86). From the results, it appears that running and multi-disciplinary respondents have a higher agreement that their event participation influences their travel behaviour, whereas cycling respondents feel that it has less of an influence on their travel behaviour.

Table 7-20: ANOVA results of factors and endurance events in which respondents participate in

Endurance events	Cycling events (N= 193)	Running events (N= 64)	Water-based events (N= 28)	Multi-disciplinary events (N= 98)	Clubs (N= 100)	F-Ratio	Sig. level	Effect sizes									
								1 & 2	1 & 3	1 & 4	1 & 5	2 & 3	2 & 4	2 & 5	3 & 4	3 & 5	4 & 5
Commitment factors																	
Enjoyment, personal investments and involvement opportunities	4.46	4.58	4.46	4.54	4.56	1.063	0.374	0.23 **	0.01	0.13	0.18	0.27 **	0.06	0.04	0.012	0.18	0.03
Involvement alternatives and social constraints	**3.81**	**4.02**	**3.91**	**4.06**	**3.95**	**2.617**	**0.035***	**0.30 ****	**0.17**	**0.33 ****	**0.18**	**0.15**	**0.05**	**0.09**	**0.19**	**0.04**	**0.15**
Dedication and social support	3.87	3.75	3.85	3.83	3.94	0.941	0.440	0.19	0.03	0.05	0.11	0.14	0.11	0.30 **	0.03	0.12	0.15
Status, socialisation and travel	1.95	1.92	2.00	1.93	1.85	0.555	0.695	0.05	0.07	0.04	0.16	0.12	0.01	0.10	0.12	0.24 **	0.12
Lifestyle adaption																	
Health and fitness	**2.74**	**2.94**	**2.97**	**3.05**	**3.02**	**3.362**	**0.010***	**0.23 ****	**0.29 ****	**0.35 ****	**0.30 ****	**0.04**	**0.13**	**0.09**	**0.09**	**0.08**	**0.03**
Media consumption	2.85	3.13	3.16	2.96	2.88	1.553	0.186	0.26 **	0.30	0.11	0.03	0.03	0.16	0.23 **	0.20 **	0.27 **	0.08
Leisure and event participation	**2.85[a]**	**3.37[b]**	**3.26[ab]**	**3.33[b]**	**3.10[ab]**	**6.434**	**0.001***	**0.54 *****	**0.45 ****	**0.45 ****	**0.26 ****	**0.12**	**0.04**	**0.28 ****	**0.07**	**0.16**	**0.23 ****
Sport development	**1.84[a]**	**1.94[ab]**	**2.25[b]**	**1.97[ab]**	**1.95[ab]**	**1.765**	**0.135**	**0.10**	**0.48 ****	**0.16**	**0.12**	**0.34 ****	**0.04**	**0.01**	**0.33 ****	**0.34 ****	**0.03**
Enhanced performance spending	2.93	2.99	2.85	2.84	2.64	2.123	0.077	0.07	0.09	0.10	0.32 **	0.15	0.16	0.35 **	0.01	0.24 **	0.22 **
Event attributes																	

Attractiveness and exposure	2.27	2.41	2.48	2.40	2.25	0.893	0.468	0.14	0.24 **	0.14	0.02	0.07	0.01	0.16	0.07	0.25 **	0.16
Accessibility and affordability	3.61	3.55	3.58	3.65	3.45	0.938	0.442	0.08	0.03	0.05	0.20 **	0.04	0.12	0.12	0.08	0.16	0.24 **
Challenge and reputation	3.69	3.84	3.69	3.70	3.61	1.153	0.331	0.21 **	0.01	0.02	0.11	0.20 **	0.19	0.31 **	0.01	0.12	0.13
Location and climate	2.92	2.79	2.46	2.76	2.65	2.089	0.081	0.13	0.47 **	0.14	0.28 **	0.33	0.03	0.15	0.27 **	0.18	0.10
Travel behaviour																	
Individual Travel opportunities	**2.84[a]**	**3.30[b]**	**3.04[ab]**	**3.26[b]**	**3.06[ab]**	**6.161**	**0.001***	**0.54 *****	**0.23 ****	**0.52 *****	**0.25 ****	**0.31**	**0.05**	**0.28 ****	**0.27 ****	**0.02**	**0.24 ****
Group travel opportunities	**3.11**	**3.45**	**3.42**	**3.48**	**3.39**	**5.154**	**0.001***	**0.41 ****	**0.36 ****	**0.44 ****	**0.34 ****	**0.04**	**0.04**	**0.08**	**0.07**	**0.04**	**0.11**
Holiday choice opportunities	**3.40[b]**	**2.86[a]**	**3.32[ab]**	**2.95[ab]**	**2.98[ab]**	**5.903**	**0.001***	**0.53 *****	**0.07**	**0.43 ****	**0.40 ****	**0.40 ****	**0.08**	**0.11**	**0.33 ****	**0.30 ****	**0.03**

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.9 Results of ANOVAs: a comparison between factors and endurance type classification of respondents by respondents

The type of endurance athlete that respondents classified themselves as was divided into five groups for the ANOVA analysis. The groups is set out in Table 7.21 and as follows: ***Average athlete*** (less serious athletes, but strive to reach higher levels of fitness, and athletes that occasionally take part in competitive events); ***Intermediate athlete*** (these respondents have been taking part in competitive events for a few years, but now wants to progress to more challenging events and disciplines, they work to achieve certain goals that they have set for themselves); ***Hard-core athlete*** (these athletes see themselves as serious/professional athletes, they have high levels of training and aim to set their personal best or to win the event); ***Veteran*** (older athletes, that have been participating in endurance events their whole life, who keep on participating because it is part of their lifestyle and gives them self-fulfilment); and ***Recreational athlete***. The "recreational" athlete group is a combination of *the beginner* (have recently started participating in competitive endurance events, they plan to progress in the endurance ladder and participate in a variety of endurance events), *obstacle challenger* (they only participate in extreme events such as obstacle courses or events where they can push their limits), *fitness participant* (they participate to achieve weight loss goals or to get in and stay in shape) and *social participant* (participate in events for fun, for charity or to spend time with friends, family, colleagues and other respondents).

Commitment factors

The commitment factors ***enjoyment, personal investments and involvement opportunities*** (p= 0.001), ***involvement alternatives and social constraints*** (p= 0.001) as well as the factor ***dedication and social support*** resulted in statistically significant differences (p= 0.004). Tukey's post hoc multiple comparisons also revealed differences with each of the three factors. A medium effect size difference (d= 0.73) and a small effect size difference (d= 0.46) revealed that hard-core athletes (M= 4.65) have higher *enjoyment, personal investments and involvement opportunities* compared to recreational athlete (M= 4.36) and average athletes (M= 4.42). As seen in Table 7.21 large, medium and small effect size differences also revealed that hard-core athletes (M= 4.30) ranked the factor *involvement alternatives and social constraints* higher than average (M= 3.76; d= 0.88), intermediate (M= 3.99; d= 0.46), veteran (M= 3.89; d= 0.56) as well as recreational athletes (M= 3.69; d= 0.99). Furthermore a small effect size difference (d= 0.43) showed that intermediate athletes (M= 3.99) ranked *involvement alternatives and social constraints* as more important than recreational athletes (M= 3.69). Medium and small effect size differences revealed that hard-core athletes (M= 4.02) have a higher *dedication and social support* score when compared to average (M= 3.68; d= 0.51), intermediate (M= 3.80; d= 0.31) as well as recreational athletes (M= 3.85; d= 0.30). Likewise small effect size differences also indicated that veteran athletes (M= 4.00) have a higher *dedication and social support* score than

average athletes (*M*= 3.68; *d*= 0.48), intermediate athletes (*M*= 3.80; *d*= 0.28) as well as recreational athletes (*M*= 3.85; *d*= 0.24). In the analysis of the way in which respondents classify themselves, i.e. the type of athlete, it is clear that there is a direct link with the type of athlete and commitment factors. The results disclosed that hard-core athletes ranked all the commitment factors higher compared to the other groups of athletes. This is not surprising, as these respondents see themselves as serious athletes and professionals and therefore endurance participation is a central part of their lifestyle. It is also important to note that veteran athletes have the highest dedication and social support. This shows that the older respondents turn, the more they participate in events, the more valued the sport become to them and the more dedicated they are to the sport. These athletes are also more likely to have a large support system because the endurance sport has been part of their lifestyle for a while. Furthermore, it is interesting to note that the average and recreational athletes rank the commitment scores the same, while veteran and inter-mediate athletes have similar commitment factor scores.

Lifestyle adaption

All five lifestyle adaption factors yielded statistically significant differences ($p < 0.05$). Tukey's post hoc multiple comparisons also demonstrated statistically significant differences with all the factors. Large and medium effect size differences found that hard-core athletes (*M*= 3.43) adapt their lifestyle more in terms of ***health and fitness*** compared to recreational athletes (*M*= 2.58; *d*= 1.02), average athletes (*M*= 2.69; *d*= 0.89) intermediate athletes (*M*= 2.97; *d*= 0.55) as well as veteran athletes (*M*= 2.89; *d*= 0.64). A medium effect size difference (*d*= 0.53) showed that intermediate athletes (*M*= 2.97) adapt their *health and fitness* more than the recreational athletes (*M*= 2.85) Likewise, a small effect size difference (*d*= 0.42) showed veteran athletes (*M*= 2.89) adapt their *health and fitness* to a greater extent than recreational athletes (*M*= 2.58). With the ***media consumption*** factor, a small effect size differences revealed that hard-core athletes (*M*= 3.15) have higher *media consumption* when compared to average athletes (*M*= 2.74; *d*= 0.40) and veteran athletes (*M*= 2.74; *d*= 0.43). The factor ***leisure and event participation*** had large and medium effect size differences which showed that hard-core athletes (*M*= 3.55) adapt their *leisure and event participation* to a greater extent than average athletes (*M*= 2.83; *d*= 0.69), veteran athletes (*M*= 3.07; *d*= 0.53) as well as recreational athletes (*M*= 2.70; *d*= 0.87). Furthermore a medium effect size difference (*d*= 0.53) indicated that intermediate athletes (*M*= 3.22) adapt their lifestyle more in terms of *leisure and event participation* when compared to recreational athletes (*M*= 2.70). Medium as well as small effect size differences revealed that hard-core athletes (*M*= 2.16) have a higher ***sport development*** *score* than average athletes (*M*= 1.72; *d*= 0.53) and recreational athletes (*M*= 1.80; *d*= 0.45). Additionally, medium and small effect size differences revealed that hard-core athletes (*M*= 3.09) have more ***enhanced performance spending*** than average athletes (*M*= 2.67; *d*= 0.44) as well as recreational athletes (*M*= 2.60; *d*= 0.52). Furthermore a small effect size difference (*d*= 0.40) revealed *intermediate athletes* (*M*=

2.97) adapt their lifestyle more in terms of *enhanced performance spending* when compared to recreational athletes (*M*= 2.60). The type of athlete respondents classify themselves as has a direct influence on the extent that athletes adapt their lifestyle to. Hard-core athletes adapt their lifestyle to a greater extent in terms of all the lifestyle factors, since they participate to win and see themselves as professional athletes. Thus, endurance sport is a bigger part of the hard-core athlete's lifestyle compared to the remaining groups of athletes. Intermediate athletes rank all the lifestyle factors the second highest, seeing that they are still seeking to progress in their participation and want to improve on their former results. Veteran athletes also have a relatively high lifestyle adaption, although less than hard-core and intermediate athletes. Veteran athletes have been participating in endurance events their whole life, therefore endurance participation is not necessarily the centre of their lifestyle anymore. Consequently, veterans adapt their lifestyle less than they did when they started in their participation in endurance events. The average and recreational athletes have most likely just started their participation or participate for the fun, thrill or social experience and therefore adapt their lifestyles to a lesser extent.

Event attributes

The event attribute factors ***attractiveness and exposure*** (*p*= 0.001) and ***challenge and reputation*** (*p*= 0.017) showed statistically significant differences. Tukey's post hoc multiple comparisons presented both medium and small effect size differences for hard-core athletes (*M*= 2.70) that regarded the *attractiveness and exposure* of an event as more important than the average (*M*= 2.15; *d*= 0.56), veteran (*M*= 2.13; *d*= 0.61) and recreational athletes (*M*= 2.27; *d*= 0.46). A small effect size difference (*d*= 0.37) indicated that intermediate athletes (*M*= 3.80) regarded the *challenge and reputation* as a more important attribute when choosing an event compared to recreational athletes (*M*= 3.50). The results prove that different types of athletes seek different attributes when choosing an event to participate in. Intermediate athletes prefer *challenge and reputation* as the most important since they have been participating in endurance events for a few years, and now these athletes seek events that are more challenging. Still, the events which the intermediate athletes will choose, need to be accessible and affordable. Hard-core athletes on the other hand see the *attractiveness and exposure* of the event as very important, therefore they seek events with international standing, media coverage, price money and events that help them qualify for other events.

Travel behaviour

Individual travel opportunities*,* although not statistically significant, had statistically significant differences as found by Tukey's post hoc multiple comparisons. A small effect size difference (*d*= 0.41) shows that hard-core athletes (*M*= 3.27) had a higher agreement that their event participation influences their *individual travel opportunities* compared to the average athletes (*M*=

2.88). This implies that the more dedicated a person is to an endurance sport, the more travel opportunities they will engage in.

Table 7-21: ANOVA results of factors and type of athlete that respondents classify themselves as

Type of endurance athlete	Average (N= 81)	Intermediate (N= 176)	Hard-core (N= 60)	Veteran (N= 90)	Recreational (N=91)	F-Ratio	Sig. level	Effect sizes									
								1 & 2	1 & 3	1 & 4	1 & 5	2 & 3	2 & 4	2 & 5	3 & 4	3 & 5	4 & 5
Commitment factors																	
Enjoyment, personal investments and involvement opportunities	**4.42[ab]**	**4.57[bc]**	**4.65[c]**	**4.54[abc]**	**4.36[a]**	**4.491**	**0.001***	**0.25 ****	**0.46 ****	**0.12**	**0.12**	**0.12**	**0.06**	**0.35 ****	**0.22 ****	**0.73 *****	**0.37 ****
Involvement alternatives and social constraints	**3.76[ab]**	**3.99[b]**	**4.30[c]**	**3.89[ab]**	**3.69[a]**	**9.584**	**0.001***	**0.33 ****	**0.88 ******	**0.18**	**0.11**	**0.46 ****	**0.13**	**0.43 ****	**0.56 *****	**0.99 ******	**0.27 ****
Dedication and social support	**3.68[a]**	**3.80[ab]**	**4.02[c]**	**4.00[c]**	**3.85[ab]**	**3.963**	**0.004***	**0.16**	**0.51 ****	**0.48 ****	**0.25 ****	**0.31 ****	**0.28 ****	**0.07**	**0.03**	**0.30 ****	**0.24 ****
Status, socialisation and travel	1.95	1.91	1.99	1.93	1.91	0.239	0.916	0.06	0.06	0.02	0.06	0.11	0.04	0.01	0.08	0.11	0.04
Lifestyle adaption																	
Health and fitness	**2.69[ab]**	**2.97[b]**	**3.43[c]**	**2.89[b]**	**2.58[a]**	**13.318**	**0.001***	**0.36 ****	**0.89 ******	**0.26 ****	**0.14**	**0.55 *****	**0.10**	**0.53 *****	**0.64 *****	**1.02 ******	**0.42 ****
Media consumption	**2.74[a]**	**3.00[ab]**	**3.15[b]**	**2.74[a]**	**2.94[ab]**	**2.800**	**0.026***	**0.26 ****	**0.40 ****	**0.01**	**0.20 ****	**0.16**	**0.28 ****	**0.06**	**0.43 ****	**0.22 ****	**0.21 ****
Leisure and event participation	**2.83[a]**	**3.22[bc]**	**3.55[c]**	**3.07[ab]**	**2.70[a]**	**9.857**	**0.001***	**0.37 ****	**0.69 *****	**0.23 ****	**0.13**	**0.37 *****	**0.16**	**0.53 *****	**0.52 *****	**0.87 ******	**0.38 ****
Sport development	**1.72[a]**	**1.97[ab]**	**2.16[b]**	**1.97[ab]**	**1.80[a]**	**3.390**	**0.009***	**0.29 ****	**0.53 *****	**0.28 ****	**0.09**	**0.24 ****	**0.01**	**0.22 ****	**0.22 ****	**0.45 ****	**0.19**
Enhanced performance spending	**2.67[ab]**	**2.97[bc]**	**3.09[c]**	**2.82[abc]**	**2.60[a]**	**4.504**	**0.001***	**0.31**	**0.44 ****	**0.16**	**0.07**	**0.14**	**0.16**	**0.40 ****	**0.29 ****	**0.52 *****	**0.24 ****
Event attributes																	

Attractiveness and exposure	**2.15[a]**	**2.35[ab]**	**2.70[b]**	**2.13[a]**	**2.27[a]**	**4.602**	**0.001***	**0.21 ****	**0.56 *****	**0.01**	**0.13**	**0.37**	**0.25 ****	**0.09**	**0.61 *****	**0.46 ****	**0.16**
Accessibility and affordability	3.63	3.64	3.47	3.52	3.48	1.167	0.324	0.01	0.19	0.13	0.18	0.20 **	0.16	0.20 **	0.06	0.01	0.06
Challenge and reputation	**3.66[ab]**	**3.80[b]**	**3.69[ab]**	**3.65[ab]**	**3.50[a]**	**3.047**	**0.017***	**0.18**	**0.04**	**0.01**	**0.20 ****	**0.17**	**0.24 ****	**0.37 ****	**0.06**	**0.23 ****	**0.18**
Location and climate	2.75	2.80	2.69	2.74	2.84	0.235	0.918	0.04	0.05	0.01	0.07	0.09	0.05	0.04	0.04	0.13	0.09
Travel behaviour																	
Individual Travel opportunities	**2.88[a]**	**3.02[ab]**	**3.27[b]**	**3.02[ab]**	**2.98[ab]**	**1.875**	**0.114**	**0.16**	**0.41 ****	**0.16**	**0.11**	**0.26 ****	**0.01**	**0.05**	**0.26 ****	**0.31 ****	**0.06**
Group travel opportunities	3.22	3.29	3.40	3.31	3.25	0.512	0.727	0.07	0.20 **	0.11	0.03	0.13	0.04	0.05	0.10	0.18	0.08
Holiday choice opportunities	3.19	3.14	3.07	3.29	3.09	0.567	0.686	0.04	0.11	0.09	0.09	0.07	0.14	0.05	0.21 **	0.02	0.19

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

[c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.10 Results of ANOVAs: a comparison between factors and best age to start participating in endurance events

The best age to start participating in endurance events was divided into four groups for the ANOVA analysis. The first group was the under-20 years, which was termed **adolescent**, followed by the age group 21 to 30 years classified as **young adults**, 31 to 40 years namely **adults** and lastly the age group 41 to 50+ labelled as **senior**. The differentiation of the age groups is evident in Table 7.22.

Commitment factors

A statistically significant difference (p= 0.050) concerning ***involvement alternatives and social constraints*** was found. Tukey's post hoc multiple comparisons and a medium effect size difference (d= 0.52) showed that respondents who indicated the best age to start participating in endurance sport prove to be during the adolescent age. Higher agreement with this factor (M= 3.99) was evident compared to respondents who indicated that the best age to start participating in endurance events to be during the senior years (40> years) (M= 3.65). This finding can be due to the fact that when an athlete is younger they are still seeking a niche sport. Therefore, they have different alternatives and not just one primary sport. Also, younger respondents tend to feel more pressure from their peers, while older athletes tend to be more self-assured and so social pressures tend to be less.

Lifestyle adaption

A statistically significant difference (p= 0.037) regarding ***leisure and event participation*** was revealed. Tukey's post hoc multiple comparisons also indicated statistically significant differences. Medium and small effect size differences revealed that respondents who indicated that they started participating in endurance events during their senior years, adapt their lifestyle less in terms of *leisure and event participation* when compared to respondents who started participating as young adults (M= 3.16; d= 0.60) and adults (M= 3.05; d= 0.49). It is clear that the later a respondent starts with their competitive event participation, the less they adapt their lifestyle in terms of all the lifestyle factors. On the other hand, if respondents start at an adolescent age they do not necessarily have higher lifestyle adaption. Respondents who start participating as young adults are most likely going to adapt their lifestyle to a greater extent compared to respondents who start participating in endurance events as adolescents or seniors. This finding shows that respondents between the ages of 19 to 34 years (adolescents and young adults) adapt their lifestyle more compared to the older age categories. Most athletes will have their peak performance during the years in these age groups and therefore must adapt their lifestyle more to ensure improved performance.

Event attributes

Although statistically not significant ($p > 0.05$), Tukey's post hoc multiple comparisons indicated statistically significant differences with regard to ***accessibility and affordability*** (Table 7.22). This difference was supported by a small effect size difference ($d = 0.46$) which showed that this event attribute is more important for respondents who started participating as adults ($M = 3.77$) than it is for respondents that started participating in endurance events as young adults ($M = 3.59$). No obvious and statistically significant link was established between the attributes respondents seek and the best age to start participating in competitive endurance events. Still, it seems that the *accessibility and affordability* of an event is more important for respondents who started their participation at an older age. The older respondents are before they participate, the less important attributes such as attractiveness and challenge become. These respondents will rather choose an event that is close to home and affordable.

Travel behaviour

Although statistically not significant ($p > 0.05$), Tukey's post hoc multiple comparisons indicated statistically significant differences with regard to ***individual travel opportunities***. A medium effect size difference ($d = 0.52$) showed that respondents who indicated the best age to start is as a senior ($M = 2.68$), agreed that their event participation has less of an influence on their *individual travel opportunities* when compared to respondents who start as young adults ($M = 3.09$). It appears that the younger an athlete begins with competitive participation in endurance sport, the more influence it will have on his/her travel behaviour. Younger respondents have fewer constraints and priorities. Therefore travelling for event participation is more likely to occur compared to respondents who start participating in events when they are older than 40 years of age (seniors).

Table 7-22: ANOVA results of factors and best age to start participating in endurance sport

Best age to start participating in Endurance sport	Adolescent (N= 74)	Young adult (N= 236)	Adult (N= 166)	Senior (N= 22)	F-Ratio	Sig. level	Effect sizes 1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.49	4.55	4.88	4.34	1.602	0.188	0.10	0.03	0.19	0.14	0.27**	0.17
Involvement alternatives and social constraints	**3.83[ab]**	**3.99[b]**	**3.89[ab]**	**3.65[a]**	**2.616**	**0.050***	**0.21****	**0.09**	**0.24****	**0.13**	**0.52*****	**0.35****
Dedication and social support	3.83	3.89	3.82	3.74	0.649	0.584	0.09	0.01	0.12	0.10	0.20**	0.11
Status, socialisation and travel	1.92	1.95	1.90	1.97	0.298	0.827	0.05	0.03	0.07	0.09	0.03	0.12
Lifestyle adaption												
Health and fitness	2.80	2.92	2.93	2.61	1.505	0.212	0.15	0.16	0.24**	0.01	0.39**	0.40**
Media consumption	3.08	2.94	2.85	2.68	1.471	0.221	0.14	0.23**	0.44**	0.09	0.27**	0.18
Leisure and event participation	**3.01[ab]**	**3.16[b]**	**3.05[b]**	**2.56[a]**	**2.859**	**0.037***	**0.16**	**0.05**	**0.45****	**0.11**	**0.60******	**0.49****
Sport development	1.95	1.91	1.94	1.76	0.387	0.763	0.05	0.01	0.24**	0.04	0.19	0.22**
Enhanced performance spending	2.68	2.83	2.92	2.86	1.207	0.306	0.16	0.25**	0.20**	0.10	0.04	0.06
Event attributes												
Attractiveness and exposure	2.25	2.31	2.34	2.22	0.225	0.879	0.07	0.09	0.03	0.03	0.10	0.12
Accessibility and affordability	**3.38[a]**	**3.59[ab]**	**3.59[ab]**	**3.77[b]**	**1.957**	**0.120**	**0.25****	**0.24****	**0.46****	**0.01**	**0.22****	**0.25****
Challenge and reputation	3.63	3.64	3.77	3.81	1.628	0.182	0.01	0.19	0.24**	0.18	0.24**	0.07
Location and climate	2.60	2.77	2.85	2.80	1.052	0.369	0.16	0.24**	0.18	0.08	0.03	0.06
Travel behaviour												
Individual travel opportunities	**2.96[ab]**	**3.09[b]**	**2.99[ab]**	**2.68[a]**	**1.898**	**0.129**	**0.15**	**0.03**	**0.32****	**0.11**	**0.52*****	**0.33****
Group travel opportunities	3.31	3.32	3.26	3.08	0.734	0.529	0.01	0.06	0.29	0.07	0.31**	0.21**
Holiday choice opportunities	3.19	3.06	3.24	3.41	1.381	0.248	0.11	0.04	0.19	0.16	0.34**	0.15

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.11 Results of ANOVAs: a comparison between factors and best age to stop participating in endurance events

For the purpose of the ANOVA analysis, the best age to stop participating in endurance events categories were combined into three groups as seen in Table 7.23. The first group is the never group (never stop participating in endurance events), followed by respondents who indicated to stop between the ages of 40 to 70 years, while the last group include respondents who indicated to stop when one is older than 70 years.

Table 7-23: ANOVA results of factors and best age to stop participating in endurance sports

Best age to stop participating in endurance events	Never (N= 166)	40-70 years (N= 143)	Over 70 years (N= 184)	F-Ratio	Sig. level	Effect sizes		
						1 & 2	1 & 3	2 & 3
Commitment factors								
Enjoyment, personal investments and involvement opportunities	4.54	4.44	4.54	1.860	0.157	0.17	0.01	0.18
Involvement alternatives and social constraints	3.97	3.89	3.90	0.720	0.487	0.11	0.10	0.01
Dedication and social support	3.83	3.81	3.90	0.977	0.377	0.03	0.10	0.15
Status, socialisation and travel	**1.83[a]**	**2.02[b]**	**1.96[ab]**	**3.964**	**0.020***	**0.28****	**0.22****	**0.08**
Lifestyle adaption								
Health and fitness	2.93	2.89	2.89	0.136	0.873	0.05	0.05	0.01
Media consumption	2.97	3.03	2.81	2.435	0.089	0.06	0.17	0.23**
Leisure and event participation	3.10	3.11	3.04	0.255	0.799	0.01	0.06	0.06
Sport development	2.01	1.89	1.87	1.530	0.218	0.14	0.16	0.02
Enhanced performance spending	2.84	2.92	2.79	0.816	0.443	0.09	0.05	0.14
Event attributes								
Attractiveness and exposure	**2.14[a]**	**2.48[b]**	**2.33[ab]**	**5.529**	**0.004***	**0.38****	**0.20****	**0.17**
Accessibility and affordability	3.62	3.57	3.51	0.864	0.422	0.07	0.14	0.07
Challenge and reputation	3.64	3.73	3.70	0.594	0.552	0.13	0.07	0.04
Location and climate	**2.60[a]**	**2.93[b]**	**2.81[ab]**	**4.310**	**0.014***	**0.31****	**0.20****	**0.11**
Travel behaviour								
Individual travel opportunities	2.97	3.04	3.07	0.640	0.528	0.09	0.11	0.03
Group travel opportunities	3.36	3.25	3.24	1.201	0.302	0.14	0.15	0.01

Holiday choice opportunities	3.22	3.18	3.09	0.743	0.476	0.04	0.12	0.09

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

Commitment factors

As seen from Table 7.23, the commitment factor ***status, socialisation and travel*** was statistically significant (p= 0.020). Tukey's post hoc multiple comparisons also revealed statistically significant differences between groups. A small effect size difference (d= 0.28) showed that respondents that indicated that one should never (M= 1.83) stop participating in endurance events found the *status, socialisation and travel* factor less important than respondents who indicated one should stop between the ages of 40 to 70 years (M= 2.02). There was however, no clear connection between when respondents should stop participating and the commitment factors, as all three groups rated the factors similarly.

Lifestyle adaption

The lifestyle adaption factors had no statistically significant differences and Tukey's post hoc multiple comparisons also found no differences between groups. A small effect size difference (d= 0.23) however displayed that respondents who indicated that the best time to stop participation to be between the ages of 40 to 70 years (M= 3.03) also showed to adapt their lifestyle to a greater extent in terms of ***media consumption*** compared to respondents who stop participation in the age group older than 70-years (M= 2.81). It seems that respondents who indicated that one should stop participating over the age of 70-years have less of a lifestyle adaption. These respondents may be less serious about the endurance participation because they have already had a long participation career. Also, now they regard it as a hobby compared to the respondents who stated one should never stop participating in endurance sport.

Event attributes

Statistically significant differences were found for ***attractiveness and exposure*** (p= 0.004) and ***location and climate*** (p= 0.014) which was supported by Tukey's post hoc multiple comparisons which also revealed differences between the groups. Small effect size differences (between d= 0.20 & d= 0.38) showed that respondents who indicated one should never (M= 2.14 & M= 2.60) stop participating in endurance events regarded the *attractiveness and exposure* and the *location and climate* of an event as less important than the age group 40 to 70-years (M= 2.48 & M= 2.93 respectively). Respondents who stated that one should never stop participating in endurance events see the *attractiveness and exposure* of an event as less important. These respondents most likely have a love for the sport and do not participate for the exposure or rewards that the event offers. Respondents that want to stop participating between the ages of 40 and 70 years of

age might be wary of injuries, therefore the location and climate is an important factor they consider. They might also choose locations they have not yet participated in, as their event lifespan is shorter than the other groups who stop participating who are older than 70-years or those that never stop participating in endurance events.

Travel behaviour

No statistically significant differences ($p > 0.050$) were found between the best age to stop categories and the travel behaviour factors. Tukey's post hoc multiple comparisons as well as effect size differences also did not reveal differences between the groups and travel behaviour factors. All three groups rated the factors similarly.

7.4.12 Results of ANOVAs: a comparison between factors and number of hours per week training

By making use of the results in Table 6.5 (c.f. 6.4.1.10) the number of hours per week for training remained in the four categories. These four groups were; less than 4 hours, 4 to 8 hours, 8 to 12 hours, and more than 12 hours a week.

Commitment factors

As perceived from Table 7.24 the commitment factors ***enjoyment, personal investments and involvement opportunities*** (p= 0.014) and ***involvement alternatives and social constraints*** (p= 0.001) resulted in statistically significant differences. Tukey's post hoc multiple comparisons also revealed differences. This is supported by large and medium effect size differences (between d= 0.53 & d= 0.93), which indicated that respondents that train less than 4 hours a week (M= 4.42 & M= 3.51 respectively) ranked both factors lower than respondents who train between 8 to 12 hours (M= 4.53 & M= 3.97) and more than 12 hours a week (M= 4.63 & M= 4.23). Furthermore a medium effect size difference (d= 0.56) showed that respondents who train between 4 to 8 hours (M= 3.79) a week ranked *involvement alternatives and social constraints* as less important compared to respondents who train more than 12 hours a week (M= 4.23). The number of hours an endurance athlete trains has a direct link to the importance of the commitment factors. The more hours per week a respondent trains, the higher the scores for all the commitment factors. With exception of *status, socialisation and travel* which is less important for respondents who train for longer hours. Consequently, the number of hours that an athlete trains per week gives an indication of how serious and committed a respondent is about their sport and event participation.

Lifestyle adaption

All five lifestyle adaption factors yielded statistically significant differences ($p < 0.05$). Tukey's post hoc multiple comparisons as well as large and medium effect size differences (between d= 0.59

& *d*= 1.63) showed that respondents that train more than 12 hours (*M*= 3.63) adapt their ***health and fitness*** and ***leisure and event participation*** substantially more than respondents who train less than 4 hours a week (*M*= 2.25 & *M*= 2.74), between 4 to 8 hours (*M*= 2.57 & *M*= 2.86) as well as 8 to 12 hours a week (*M*= 3.01 & *M*= 3.10). Additionally large and medium effect size differences showed that respondents who train between 8 to 12 hours a week adapt *health and fitness* to a greater extent than respondents who train less than 4 hours a week (*M*= 2.25; *d*= 1.03) or between 4 to 8 hours a week (*M*= 2.57; *d*= 0.59). Although, Tukey's post hoc multiple comparisons did not reveal differences between the groups based on ***media consumption***, small effect size differences showed that respondents who train more than 12 hours (*M*= 3.11) adapt their lifestyle more in terms of *media consumption* than respondents who train less than 4 hours (*M*= 2.65; *d*= 0.49) as well as respondents who train between 4 to 8 hours a week (*M*= 2.81; *d*= 0.31). Also a small effect size difference (*d*= 0.34) showed that respondents who train between 8 to12 hours a week (*M*= 2.98) have a higher *media consumption* than respondents who train less than 4 hours a week (M= 2.65). This finding shows the important role that media can play in endurance athlete's commitment and participation. The conclusion can be made that athletes seek training advice, health and fitness tips as well as the latest gear and equipment and media can therefore play a significant role in providing information. Medium and small effect size differences showed that respondents who train more than 12 hours a week (*M*= 3.66) adapt their lifestyle in terms of ***sport development*** to a greater extent than respondents who train less than 4 hours (*M*= 2.74; *d*= 0.64) and between 4 to 8 hours a week (*M*= 2.86; *d*= 0.41). Finally large effect size differences showed that respondents who train less than 4 hours a week (*M*= 1.92) have less ***enhanced performance spending*** than respondents who train between 4 to 8 hours (*M*= 2.70; *d*= 0.88), 8 to 12 hours (*M*= 2.95; *d*= 1.14) and more than 12 hours a week (*M*= 3.14; *d*= 1.42). Unsurprisingly, the frequency of training is directly related to the lifestyle adaption factors. As the number of hours increases so does the extent to which respondents adapt their lifestyle with regard to all the lifestyle factors. The longer an athlete trains, the more serious they are about their participation. This again, leads to them adapting other parts of their lifestyle such as health, media consumption, spending and travelling so it will lead to improved endurance performance.

Event attributes

The ***attractiveness and exposure*** (*p*= 0.001) and ***challenge and reputation*** (*p*= 0.001) event attributes both resulted in statistically significant differences and was supported by Tukey's post hoc multiple comparisons. Large, small and medium effect size differences (between *d*= 0.49 & *d*= 0.88) showed that respondents who indicated they train less than 4 hours a week (*M*= 1.72; *M*= 3.12) regarded *attractiveness and exposure* as well as *challenge and reputation* as less important attributes when choosing an event, compared to respondents who train between 4 to 8 hours (*M*= 2.24 & *M*= 3.60), those training 8 to12 hours (*M*= 2.32 & *M*= 3.79) and respondents

training more than 12 hours a week (*M*= 2.60 & *M*= 3.77). It appears that athletes who train for shorter periods ranked all the event attributes as less important compared to respondents who train for longer hours. Therefore, one can assume that athletes who train less do not seek specific event attributes as they may spontaneously choose an event for participation. Athletes who train for five hours and longer regard *attractiveness and exposure* as well as *challenge and reputation* of the event as more important event attributes. The reason for this might be that, for all the training an athlete puts in, they would want to be challenged and want to participate in events that are well-organised and rewards them for their participation.

Travel behaviour

When analysing the ***individual travel opportunities*** factor, a statistically significant difference (*p*= 0.001) was found. Tukey's post hoc multiple comparisons also revealed differences. Medium effect size differences showed that respondents who train more than 12 hours a week (*M*= 3.42) have a stronger agreement that their event participation influences their *individual travel opportunities* when compared to respondents who train less than 4 hours (*M*= 2.74; *d*= 0.76), between 4 to 8 hours (*M*= 2.94; *d*= 0.56) and 8 to 12 hours a week (*M*= 2.98; *d*= 0.51). Based on the results, it seems that the more hours an athlete trains during a week, the more they feel that their event participation influences their travel opportunities. It seems that respondents who train for longer hours are most likely participating in more events, thus having more opportunities to travel within event destinations.

Table 7-24: ANOVA results of factors and hours per week training

Hours per week	Less than 4 hours (N= 17)	4-8 hours (N= 209)	8-12 hours (N= 197)	More than 12 hours (N= 75)	F-Ratio	Sig. Level	Effect sizes					
							1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	**4.24[a]**	**4.47[ab]**	**4.53[b]**	**4.63[b]**	**3.581**	**0.014***	**0.54*****	**0.53*****	**0.58*****	**0.12**	**0.25****	**0.15**
Involvement alternatives and social constraints	**3.51[a]**	**3.79[ab]**	**3.97[bc]**	**4.23[c]**	**11.105**	**0.001***	**0.38****	**0.63*****	**0.93******	**0.28****	**0.56*****	**0.33****
Dedication and social support	3.94	3.83	3.80	4.00	1.972	0.117	0.16	0.21**	0.08	0.05	0.23**	0.27**
Status, socialisation and travel	1.75	1.96	1.94	1.87	0.943	0.424	0.35**	0.31**	0.20**	0.04	0.15	0.11
Lifestyle adaption												
Health and fitness	**2.25[a]**	**2.57[a]**	**3.01[b]**	**3.63[c]**	**47.390**	**0.001***	**0.50*****	**1.03******	**1.63******	**0.59*****	**1.28******	**0.74*****
Media consumption	**2.65**	**2.81**	**2.98**	**3.11**	**2.673**	**0.047***	**0.18**	**0.34****	**0.49****	**0.17**	**0.31****	**0.13**
Leisure and event participation	**2.74[a]**	**2.86[a]**	**3.10[a]**	**3.66[b]**	**14.343**	**0.001***	**0.11**	**0.32****	**0.81******	**0.25****	**0.87******	**0.59*****
Sport development	**1.57[a]**	**1.80[a]**	**1.97[ab]**	**2.22[b]**	**6.569**	**0.001***	**0.31****	**0.54*****	**0.64*****	**0.22****	**0.41****	**0.25****
Enhanced performance spending	**1.92[a]**	**2.70[b]**	**2.95[b]**	**3.14[b]**	**11.914**	**0.001***	**0.88******	**1.14******	**1.42******	**0.28****	**0.50*****	**0.21****
Event attributes												
Attractiveness and exposure	**1.72[a]**	**2.24[b]**	**2.32[b]**	**2.60[b]**	**5.736**	**0.001***	**0.60*****	**0.69*****	**0.88******	**0.10**	**0.36****	**0.28****
Accessibility and affordability	3.22	3.60	3.61	3.47	1.735	0.159	0.34**	0.35**	0.23**	0.01	0.14	0.15
Challenge and reputation	**3.12[a]**	**3.60[b]**	**3.79[b]**	**3.77[b]**	**7.077**	**0.001***	**0.49****	**0.68*****	**0.66*****	**0.27****	**0.23****	**0.03**
Location and climate	2.32	2.78	2.82	2.73	1.314	0.266	0.49**	0.51***	0.33**	0.04	0.05	0.08
Travel behaviour												
Individual travel opportunities	**2.74[a]**	**2.94[a]**	**2.98[a]**	**3.42[b]**	**7.105**	**0.001***	**0.23****	**0.27****	**0.76*****	**0.04**	**0.58*****	**0.51*****
Group travel opportunities	3.31	3.24	3.29	3.40	0.765	0.514	0.08	0.02	0.10	0.07	0.19	0.12
Holiday choice opportunities	3.06	3.28	3.12	2.93	2.121	0.097	0.18	0.05	0.10	0.14	0.32**	0.17

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8; [a] Group varies significantly from the variable (in row) where [b] is indicated; [c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.13 Results of ANOVAs: a comparison between factors and how often respondents take part in non-competitive events

Respondents were asked to give an indication how often they take part in non-competitive events. Respondents could choose from five different categories. For the purpose of the ANOVA analysis, these categories were divided into four groups as displayed in Table 7.25. The four groups are: Group 1: I do not take part at all which was termed **never**; Group 2: once a month was shortened to **rarely**; Group 3: two to three times a month was **occasionally;** and Group 4: more than three times a week was labelled **frequently.**

Commitment factors

Considering the commitment factor ***enjoyment, personal investments and involvement opportunities,*** a statistically significant difference (p= 0.036) was found. Tukey's post hoc multiple comparisons as well as a small effect size difference (d= 0.34) revealed that respondents never take part in non-competitive events (M= 4.38) ranked the factor as less important when compared to respondents who frequently (M= 4.58) take part in non-competitive events. Taking part in non-competitive events can be associated with how important respondents rate the commitment factors. Results show that respondents who never take part in non-competitive events have less *enjoyment, personal investments, and involvement opportunities, involvement alternatives and social constraints* as well as *dedication and social support*. One can thus assume that there is a direct link between these factors and taking part in non-competitive events. It is however important to note that it does not matter how often one takes part in non-competitive events, but if one takes part in non-competitive events that it increases commitment and commitment factor scores.

Lifestyle adaption

From Table 7.25 it is clear that ***sport development*** had a statistically significant difference (p= 0.037) when compared to the scores of non-competitive events groups. It is however important to note that Tukey's post hoc multiple comparisons revealed no differences between groups. Small effect size differences did reveal that respondents that never take part in non-competitive events (M= 1.75) adapt their lifestyle less in terms of *sport development* when compared to respondents that occasionally (M= 2.04; d= 0.34) or frequently (M= 1.98; d= 0.27) participate. Similar as with the commitment factors, respondents who never take part in non-competitive events, have less lifestyle adaption than respondents who do, irrespective of how regularly they participate in non-competitive events.

Event attributes

The ***accessibility and affordability*** (p= 0.004) and ***location and climate*** (p= 0.034) resulted in statistically significant differences. Tukey's post hoc multiple comparisons and small effect size

differences indicated that respondents that never take part in non-competitive events (*M*= 3.35) perceive the *accessibility and affordability* of an event as a less important attribute than respondents who take part in non-competitive events rarely (*M*= 3.65; *d*= 0.36) or frequently (*M*= 3.76; *d*= 0.45). Although, Tukey's post hoc multiple comparisons revealed no differences between the groups, small effect size differences showed that respondents that never take part in non-competitive events (*M*= 2.63) understand *location and climate* as a less important event attribute than respondents who take part in non-competitive events rarely (*M*= 2.84; *d*= 0.20) or frequently (*M*= 2.85; *d*= 0.20). Respondents who choose never to participate in non-competitive events ranked all of the event attributes as less important. For respondents who take part in non-competitive events frequently, *accessibility and affordability* and *location and climate* are the most important. One can assume that when athletes participate in non-competitive events, they develop a certain criteria of event attributes on which they base their decision to participate in competitive events.

Travel behaviour

Regarding the travel behaviour factors, no statistically significant differences ($p < 0.50$) were found. When analysing the effect sizes a small effect size difference (*d*= 0.29) showed that respondents who take part in non-competitive events occasionally (*M*= 3.11) had a higher agreement that their event participation has an influence on their ***individual travel opportunities*** when compared to the groups who indicated they participate in non-competitive events frequently (*M*= 2.86). Furthermore, small effect size differences revealed that respondents who take part in non-competitive events occasionally (*M*= 3.40) have a higher agreement that their event participation has an influence on their ***group travel opportunities*** compared to respondents that never (*M*= 3.24; *d*= 0.20) or rarely take part (*M*= 3.21; *d*= 0.23).

Table 7-25: ANOVA results of factors and how often respondents take part in non-competitive endurance events

How often respondents take part in non-competitive endurance events	Never (N= 104)	Rarely (N= 176)	Occasionally (N= 158)	Frequently (N= 58)	F-Ratio	Sig. level	Effect sizes					
							1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	**4.38[a]**	**4.54[ab]**	**4.53[ab]**	**4.58[b]**	**2.878**	**0.036***	**0.26****	**0.25****	**0.34****	**0.01**	**0.08**	**0.09**
Involvement alternatives and social constraints	3.82	3.91	3.97	3.95	1.179	0.317	0.13	0.21**	0.18	0.09	0.05	0.03
Dedication and social support	3.72	3.84	3.91	3.93	2.172	0.090	0.19	0.30**	0.30**	0.11	0.12	0.02
Status, socialisation and travel	1.89	2.00	1.89	1.87	1.293	0.276	0.15	0.01	0.04	0.16	0.19	0.04
Lifestyle adaption												
Health and fitness	2.75	2.87	2.98	3.01	2.236	0.083	0.15	0.26**	0.30**	0.13	0.18	0.05
Media consumption	2.84	2.94	2.91	3.01	0.427	0.734	0.10	0.07	0.17	0.03	0.07	0.10
Leisure and event participation	2.92	3.03	3.22	3.07	2.164	0.091	0.09	0.26**	0.13	0.19	0.04	0.17
Sport development	**1.75**	**1.89**	**2.04**	**1.98**	**2.848**	**0.037***	**0.17**	**0.34****	**0.27****	**0.18**	**0.11**	**0.07**
Enhanced performance spending	2.78	2.82	2.90	2.86	0.456	0.713	0.05	0.13	0.09	0.09	0.04	0.04
Event attributes												
Attractiveness and exposure	2.11	2.39	2.35	2.30	2.368	0.070	0.32**	0.26**	0.22**	0.03	0.09	0.05
Accessibility and affordability	**3.35[a]**	**3.65[b]**	**3.54[ab]**	**3.76[b]**	**4.431**	**0.004***	**0.36****	**0.24****	**0.45****	**0.13**	**0.13**	**0.24**
Challenge and reputation	3.56	3.77	3.69	3.65	2.232	0.084	0.26**	0.16	0.11	0.13	0.19	0.06
Location and climate	**2.63**	**2.84**	**2.76**	**2.85**	**1.110**	**0.034***	**0.20****	**0.12**	**0.21****	**0.08**	**0.01**	**0.09**
Travel behaviour												
Individual travel opportunities	3.00	3.00	3.11	2.86	1.344	0.259	0.01	0.14	0.16	0.13	0.16	0.29**
Group travel opportunities	3.24	3.21	3.40	3.28	1.658	0.175	0.03	0.20**	0.06	0.23**	0.08	0.15
Holiday choice opportunities	3.09	3.23	3.14	3.14	0.467	0.705	0.14	0.05	0.05	0.09	0.09	0.01

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0; [a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.14 Results of ANOVAs: a comparison between factors and number of years respondents have been competitively participating in endurance events

The number of years respondents have been competitively participating in endurance events was divided into four groups for the purpose of the ANOVA analysis. The first and second groups were 0 to 5 years, followed by 6 to10 years of competitive participation. The third group was a combination of 11 to 15 years and 16 to 20 years of competitive participation, which led to the group 11to20 years of competitive participation. The last group was 21 years or more years of competitive participation as depicted in Table 7.26.

Commitment factors

No statistically significant differences ($p < 0.050$) were found and Tukey's post hoc multiple comparisons did not reveal any differences. Small effect size differences ($d = 0.22$ & $d = 0.25$) did however reveal that respondents who have been participating between 6 to10 years ($M = 3.99$) ranked their ***involvement alternatives and social constraints*** higher compared to respondents who have been participating 11 to 20 years ($M = 2.82$) and 21 years and more ($M = 3.82$). A small effect size difference ($d = 0.27$) also showed that respondents who have been participating for less than 5 years (0-5 years) ($M = 3.81$) ranked their ***dedication and social support*** less than respondents who have been participating competitively for more than 21 years ($M = 3.97$) in events. Although there are only small effect size differences, it is clear that *dedication and social support* increases the longer an athlete has competitively been participating. This might be that endurance sport becomes a more important part of athletes' life and therefore, although the number of years increase it becomes difficult to abandon participation. Social support also tends to increase seeing that the longer one participates in endurance events the stronger ones support base gets. On the other hand, when an athlete starts with their participation (0-5 years) they tend to have more *involvement alternatives and social constraints*. This is usually because when starting out, athletes experiment with different events and disciplines and thus is more likely to feel pressure to perform and to prove themselves to others (e.g. peers, spouses, family and friends).

Lifestyle adaption

As seen from Table 7.26 the lifestyle adaption factor ***media consumption*** had a statistically significant difference ($p = 0.005$) and Tukey's post hoc multiple comparisons revealed differences. Small effect size differences displayed that respondents that have been participating between 6 to10 years ($M = 3.10$) have a higher *media consumption* lifestyle adaption when compared to respondents who have been participating between 11 to 20 years ($M = 2.68$; $d = 0.44$) or 21 years and more ($M = 2.75$; $d = 0.37$). The factor ***enhanced performance spending*** was not statistically significant ($p < 0.050$). However Tukey's post hoc multiple comparisons and small effect size differences ($d = 0.38$) showed that respondents that have participated competitively between 6 to

10 years (*M*= 3.00) have more *enhanced performance spending* than respondents that have participated competitively for 21 years and more (*M*= 2.65). It appears that an athlete's lifestyle adaption decreases as the number of years participating in events increases, with the exception of the *sport development* factor. The reason for this might be that the longer one takes part in events, the older one gets which most likely results in less participation, fatigue and higher risk of injuries. Furthermore, respondents who have been participating for a long period of time could be less likely to spend money on equipment and other performance enhancing goods. This could be for the reason that they already own the necessary paraphernalia. Respondents who have been participating between 6 to10 years are at their peak performance ages and therefore adapt their lifestyle more in terms of all the lifestyle factors. Normally these intermediate athletes want to improve their previous results and progress in their participation.

Event attributes

The event attribute ***attractiveness and exposure*** was the only attribute with a statistically significant difference (*p*= 0.026). Tukey's post hoc multiple comparisons as well as small effect size differences revealed respondents that have participated competitively for 21 years and more (*M*= 2.02) regarded the factor a less important attribute when choosing an event compared to respondents that have participated between 0 to 5 years (*M*= 2.34; *d*= 0.36), 6 to 10 years (*M*= 2.38; *d*= 0.42) or between 11 and 20 years (*M*= 2.37; *d*= 0.36). All of the event attributes become less important as the number of years of participation increases, except the *challenge and reputation* attribute. A reason for this might be that endurance respondents will always seek a challenging and well-organised event, irrespective of how long they have been participating in endurance events. Respondents who have participated a fewer number of years, ranked all the event attributes higher compared to respondents that have participated for more years. This might confirm that respondents who have participated for fewer years are still searching for the ideal event to participate in and participate in various events, therefore ranking all event attributes as important.

Travel behaviour

Holiday choice opportunities had a statistically significant difference (*p*= 0.008) and Tukey's post hoc multiple comparisons revealed statistically significant differences between the groups. These differences were supported by small effect size differences (*d*= 0.42 & *d*= 0.39 respectively) which showed that respondents that have been participating competitively between 11 to 20 years (*M*= 3.49) had a higher agreement that their event participation has an influence on their *Holiday choice opportunities* when compared to respondents who have participated between 0 to 5 years (*M*= 3.08) and 6 to10 years (*M*= 3.03). Respondents who have been participating in endurance events for fewer years most likely have the same holiday and event destination. Therefore the

assumption can be made that the fewer years the athlete has participated in endurance events, the more likely he/she will travel at the destination where the event is hosted.

Table 7-26: ANOVA results of factors and number of years respondents have been participating in endurance events

Number of years participating	0-5 years (N= 239)	6-10 years (N= 96)	11-20 years (N= 89)	21 years and more (N= 74)	F-Ratio	Sig. level	Effect sizes 1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.52	4.53	4.45	4.52	0.537	0.657	0.02	0.11	0.01	0.12	0.03	0.10
Involvement alternatives and social constraints	3.95	3.99	3.82	3.82	1.699	0.166	0.05	0.17	0.21	0.22**	0.25**	0.01
Dedication and social support	3.81	3.85	3.87	3.97	1.293	0.276	0.06	0.09	0.27**	0.03	0.18	0.15
Status, socialisation and travel	1.92	1.93	1.94	1.94	0.035	0.991	0.01	0.03	0.03	0.02	0.02	0.01
Lifestyle adaption												
Health and fitness	2.95	2.95	2.83	2.72	1.894	0.130	0.01	0.15	0.29**	0.14	0.26**	0.12
Media consumption	**2.99[ab]**	**3.10[b]**	**2.68[a]**	**2.75[a]**	**4.321**	**0.005***	**0.10**	**0.32****	**0.25****	**0.44****	**0.37****	**0.07**
Leisure and event participation	3.10	3.21	3.01	2.91	1.541	0.203	0.11	0.09	0.20**	0.20**	0.30**	0.11
Sport development	1.87	2.05	1.85	2.01	1.637	0.180	0.21**	0.02	0.16	0.22	0.04	0.17
Enhanced performance spending	**2.86[ab]**	**3.00[b]**	**2.76[ab]**	**2.65[a]**	**2.321**	**0.074**	**0.14**	**0.11**	**0.23****	**0.26****	**0.38****	**0.13**
Event attributes												
Attractiveness and exposure	**2.34[b]**	**2.38[b]**	**2.37[b]**	**2.02[a]**	**3.117**	**0.026***	**0.04**	**0.02**	**0.36****	**0.02**	**0.42****	**0.36****
Accessibility and affordability	3.62	3.64	3.50	3.40	1.870	0.134	0.03	0.14	0.26**	0.18	0.30**	0.13
Challenge and reputation	3.70	3.67	3.69	3.65	0.145	0.933	0.04	0.01	0.08	0.03	0.04	0.07
Location and climate	2.86	2.72	2.69	2.68	1.098	0.350	0.13	0.17	0.17	0.03	0.04	0.01
Travel behaviour												
Individual travel opportunities	3.08	2.96	2.97	2.98	0.644	0.587	0.12	0.12	0.12	0.01	0.02	0.01
Group travel opportunities	3.26	3.35	3.30	3.27	0.338	0.798	0.11	0.05	0.01	0.06	0.10	0.04
Holiday choice opportunities	**3.08[a]**	**3.03[a]**	**3.49[b]**	**3.18[ab]**	**3.955**	**0.008***	**0.04**	**0.42****	**0.09**	**0.39****	**0.12**	**0.27****

*Statistical significant difference: $p \leq 0.05$ Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.15 Results of ANOVAs: a comparison between factors and number of competitive endurance events per year

For the purpose of the ANOVA analysis, the number of competitive endurance events per year that respondents take part in was divided into five groups as seen in Table 7.27. Group 1 represents 1 to 2 events, Group 2 is for respondents that took part in 3 to 4 events, Group 3: represents 5 to 6 events, Group 4is for 6 to 7 events and Group 5 represents 8 and more events.

Commitment factors

The commitment factors ***enjoyment, personal investments and involvement opportunities*** (p= 0.011), ***involvement alternatives and social constraints*** (p= 0.001), ***dedication and social support*** all resulted in statistically significant differences (p= 0.001). These differences were also confirmed by Tukey's post hoc multiple comparisons, which showed statistically significant, differences with all factors. A medium effect size difference (d= 0.70) revealed that respondents that take part in 1 to 2 events a year (M= 4.38) ranked *enjoyment, personal investments and involvement opportunities* as less important compared to respondents who take part in 7 to 8 events (M= 4.69) a year. Medium and small effect size differences (between d= 0.45 to d= 0.63) indicated that respondents that participate between 1 to 2 events (M= 3.65) have less *involvement alternatives and social constraints* compared to respondents who take part in 5 to 6 events (M= 3.99), 7 to 8 events (M= 4.01) and more than 8 events (M= 4.13) a year. Lastly, small effect size differences (d= 0.43 & d= 0.42 respectively) showed that respondents that participate in 1 to 2 events (M= 3.70) a year ranked the *dedication and social support* as a less important factor than respondents that participate between 5 to 6 events (M= 4.00) and 8 or more events (M= 3.99) a year. The commitment and commitment factors are directly linked to the number of competitive events that athletes take part in annually. The more events respondents participate in per year, the more important the commitment factors are ranked.

Lifestyle adaption

All the lifestyle adaption factors reached statistically significant results: ***health and fitness*** (p= 0.006), ***media consumption*** (p= 0.030), ***leisure and event participation*** (p= 0.001), ***sport development*** (p= 0.019) and ***enhanced performance spending*** (p= 0.009). Tukey's post hoc multiple comparisons also revealed statistically significant differences with all factors except for the factor, *media consumption.* The analysis of the differences, showed small effect size differences (d= 0.44 & d= 0.46 respectively) and revealed that respondents who take part in 1 to 2 events (M= 2.67) adapt their lifestyle less in terms of *health and fitness* than the respondents who take part in 7 to 8 events (M= 3.02) and more than 8 events (M= 3.07) per year. Small effect size differences (between d= 0.21 & d= 0.34) revealed that respondents that participate between 5 to 6 events (M= 3.09) and in more than 8 event (M= 3.09) a year have higher *media consumption* compared to respondents who participate in 1 to 2 events (M= 2.85), 3 to 4 events (M= 2.78) and

7 to 8 events (*M*= 2.89) annually. Large, medium and small effect size differences (between *d*= 0.31 to *d*= 0.96) showed that respondents that participate in 1 to 2 events (*M*= 2.47) per year, have noticeably less *leisure and event participation* than respondents who participate in 3 to 4 events (*M*= 2.99), 5 to 6 events (*M*= 3.29), 7 to 8 events (*M*= 3.16) and more than 8 events (*M*= 3.45) a year. Also a medium effect size difference (*d*= 0.50) showed that respondents that take part in more than 8 events (*M*= 3.45) adapt their lifestyle to a greater extent in terms of this factor compared to respondents that competitively participate in 3 to 4 events (*M*= 2.99) per year. With *sport development* a medium effect size difference (*d*= 0.53) showed that respondents that participate in 1 to 2 events (*M*= 1.65) have less of a *sport development* lifestyle adaption than respondents that participate between 5 to 6 events (*M*= 2.07) a year. A small effect size difference (*d*= 0.45) indicated that respondents that participate in 1 to 2 events (*M*= 2.56) have less *enhanced performance spending* than respondents who participate in more than 8 competitive events (*M*= 3.05) a year. From the results, it can be assumed that as the numbers of competitive events respondents participate in increases, it has a direct reflection on the extent to which respondents adapt their lifestyle. Respondents, who participate in at least 5 events per year, adapt their lifestyle more in order to match their endurance participation. Consequently, the more events an athlete participates in results in the more training, travelling, media consumption and higher spending.

Event attributes

The four event attribute factors were not statistically significant ($p > 0.050$). Tukey's post hoc multiple comparisons also did not reveal any differences within the groups. Small effect size differences (*d*= 0.20 & *d*= 0.22) showed that the ***attractiveness and exposure*** of an event is less important for respondents that participate in 1 to 2 events (*M*= 2.21) per year than it is for respondents who participate between 5 to 6 events (*M*= 2.39) and more than 8 events (*M*= 2.42) per year. A small effect size difference (*d*= 0.20) also showed that respondents that participate between 3 to 4 events (*M*= 2.22) see the *attractiveness and exposure* as less important than respondents who participate in more than 8 events (*M*= 2.42) annually. Furthermore a small effect size difference (between *d*= 0.23 & *d*= 0.34) revealed that the ***accessibility and affordability*** attribute is less important for respondents that participate in more than 8 events per year (*M*= 3.39) than it is for respondents who take part in 1 to 2 events (*M*= 3.62), 3 to 4 events (*M*= 3.58), 5 to 6 events (*M*= 3.64) and 7 to 8 events (*M*= 3.68) per year. The ***challenge and reputation*** event attribute (small effect size differences between *d*= 0.20 & *d*= 0.40) was less important for respondents that take part in 1 to 2 events (*M*= 3.55), than it is for respondents who take part in 5 to 6 events (*M*= 3.80), 6 to 7 events (*M*= 3.73) and more than 8 events (*M*= 3.69) per year.

Travel behaviour

It is evident from Table 7.27 that ***Individual travel opportunities*** had a statistically significant difference (p= 0.022). Tukey's post hoc multiple comparisons as well as a medium effect size difference (d= 0.50) indicated that respondents who take part in more than 8 events (M= 3.22) per year, felt that their event participation had more of an influence on their *individual travel opportunities* compared to respondents who participate in 1 to 2 events (M= 2.79).

Table 7-27: ANOVA results of factors and number of competitive events per year

Number of competitive events per year	1-2 events	3-4 events	5-6 events	7-8 events	More than 8 events	F-Ratio	Sig. level	Effect sizes									
	(N= 72)	(N= 184)	(N= 94)	(N= 47)	(N=99)			1 & 2	1 & 3	1 & 4	1 & 5	2 & 3	2 & 4	2 & 5	3 & 4	3 & 5	4 & 5
Commitment factors																	
Enjoyment, personal investments and involvement opportunities	**4.38[a]**	**4.47[ab]**	**4.57[ab]**	**4.69[b]**	**4.54[ab]**	**3.298**	**0.011***	**0.17**	**0.40 ****	**0.70 *****	**0.27 ****	**0.19**	**0.39 ****	**0.12**	**0.23** ***	**0.08**	**0.25 ****
Involvement alternatives and social constraints	**3.65[a]**	**3.86[ab]**	**3.99[b]**	**4.01[b]**	**4.13[b]**	**6.413**	**0.001***	**0.28 ****	**0.45 ****	**0.48 ****	**0.63 *****	**0.19**	**0.22 ****	**0.39 ****	**0.03**	**0.21 ****	**0.17**
Dedication and social support	**3.70[a]**	**3.74[ab]**	**4.00[b]**	**3.90[ab]**	**3.99[b]**	**5.081**	**0.001***	**0.05**	**0.43** ***	**0.28 ****	**0.42** ***	**0.39 ****	**0.24 ****	**0.38 ****	**0.18**	**0.01**	**0.17**
Status, socialisation and travel	1.93	1.91	2.02	1.87	1.91	0.686	0.602	0.04	0.12	0.10	0.03	0.15	0.06	0.01	0.21 **	0.15	0.07
Lifestyle adaption																	
Health and fitness	**2.67[a]**	**2.82[ab]**	**2.99[ab]**	**3.02[b]**	**3.07[b]**	**3.702**	**0.006***	**0.19**	**0.42 ****	**0.46 ****	**0.44 ****	**0.22 ****	**0.26 ****	**0.28 ****	**0.03**	**0.08**	**0.05**
Media consumption	**2.85**	**2.78**	**3.09**	**2.89**	**3.09**	**2.711**	**0.030***	**0.07**	**0.23 ****	**0.03**	**0.23 ****	**0.34 ****	**0.11**	**0.33 ****	**0.21 ****	**0.01**	**0.21 ****
Leisure and event participation	**2.47[a]**	**2.99[b]**	**3.29[bc]**	**3.16[bc]**	**3.45[c]**	**13.656**	**0.001***	**0.51 *****	**0.81 ******	**0.68 *****	**0.96 ******	**0.33 ****	**0.18**	**0.50 *****	**0.14**	**0.18**	**0.31 ****
Sport development	**1.65[a]**	**1.93[ab]**	**2.07[b]**	**1.91[ab]**	**1.98[ab]**	**2.991**	**0.019***	**0.32 ****	**0.53 *****	**0.32 ****	**0.45 ****	**0.16**	**0.02**	**0.06**	**0.20 ****	**0.11**	**0.09**
Enhanced performance spending	**2.56[a]**	**2.79[ab]**	**2.93[ab]**	**2.88[ab]**	**3.05[b]**	**3.399**	**0.009***	**0.21 ****	**0.34 ****	**0.29 ****	**0.45 ****	**0.15**	**0.10**	**0.30 ****	**0.05**	**0.14**	**0.19**
Event attributes																	
Attractiveness and exposure	2.21	2.22	2.39	2.36	2.42	1.282	0.276	0.02	0.20 **	0.19	0.22 **	0.18	0.16	0.20 **	0.03	0.03	0.06
Accessibility and affordability	3.62	3.58	3.64	3.68	3.39	1.814	0.125	0.04	0.03	0.09	0.27 **	0.07	0.12	0.23 **	0.05	0.30 **	0.34 **
Challenge and reputation	3.55	3.67	3.80	3.73	3.69	1.424	0.255	0.16	0.40 **	0.28 **	0.20 **	0.17	0.07	0.03	0.12	0.16	0.05
Location and climate	2.77	2.74	2.78	2.90	2.75	0.246	0.912	0.03	0.01	0.14	0.02	0.03	0.15	0.01	0.13	0.03	0.14

Travel behaviour																	
Individual travel opportunities	**2.79[a]**	**2.98[ab]**	**3.05[ab]**	**3.04[ab]**	**3.22[b]**	**2.892**	**0.022***	**0.22 ****	**0.30 ****	**0.29 ****	**0.50 *****	**0.08**	**0.06**	**0.28 ****	**0.02**	**0.20 ****	**0.22 ****
Group travel opportunities	3.07	3.28	3.30	3.37	3.41	1.992	0.095	0.23 **	0.26 **	0.34 **	0.39 **	0.03	0.12	0.16	0.08	0.13	0.05
Holiday choice opportunities	3.24	3.25	3.04	2.89	3.16	1.435	0.221	0.11	0.16	0.28 **	0.06	0.19	0.33 **	0.08	0.15	0.11	0.26 **

*Statistical significant difference: $p \leq 0.05$

Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8

[a] Group varies significantly from the variable (in row) where [b] is indicated

[c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.16 Results of ANOVAs: a comparison between factors and when respondents plan to register to participate in competitive endurance events

With the question where respondents indicated when they typically register for an event, the options were divided into four groups for ANOVA analysis purposes. The first group is termed **the impulsive** and combined: 'I decide spontaneously' and 'a week before'. The second group is made up from respondents that register 'a month before' and the respondent-group was termed **the last-minute partakers.** The third group was respondents who register as soon as the registration opens. This group was called **the early birds**. The fourth group was labelled **the contemplators** and included options such as 'I am financially equipped'; 'a year before'; and 'depends on the popularity of the event'. These groupings are depicted in Table 7.28.

Commitment factors

The commitment factor ***enjoyment, personal investments and involvement opportunities*** (p= 0.002) as well as ***involvement alternatives and social constraints*** (p= 0.001) resulted in statistically significant differences. Tukey's post hoc multiple comparisons also showed statistically significant differences for both factors. Medium and small effect size differences (d= 0.39 & d= 0.53) revealed that the impulsive group (M= 4.35 & M= 3.66 respectively) ranked both commitment factors as less important compared to the early birds (M= 4.58 & M= 4.04 respectively). The early birds also ranked all the commitment factors as more important. It can be assumed that these respondents have been participating in endurance events for a number of years and are therefore committed to the events they participate in.

Lifestyle adaption

The lifestyle adaption factors ***health and fitness*** (p= 0.001), ***leisure and event participation*** (p= 0.004) as well as ***enhanced performance spending*** (p= 0.001) had statistically significant differences. Tukey's post hoc multiple comparisons also revealed significant differences for the above-mentioned factors. ***Media consumption*** was statistically significant (p= 0.033), but Tukey's post hoc multiple comparisons revealed no differences between the groups. A medium effect size difference (d= 0.55) revealed that the impulsive respondents (M= 2.58) adapt their *health and fitness* less than the early birds (M= 3.00). Small effect size differences (d= 0.22 & d= 0.33) revealed that the impulsive group (M= 2.68) has less *media consumption* than the last minute partakers (M= 2.83) and early birds (M= 3.01). A small effect size difference (d= 0.29) furthermore revealed that the contemplators (M= 2.74) adapt their lifestyle less in terms of *media consumption* than the early birds (M= 3.01). Small effect size differences (d= 0.39 & d= 0.46 respectively) showed the impulsive group (M= 2.70) adapt their *leisure and event participation* lifestyle less when compared to the last-minute partakers (M= 3.09) and early birds (M= 3.17). The impulsive respondents (M= 2.49) have less *enhanced performance spending* than the contemplators (M= 2.56). The medium effect size difference (d= 0.55 & d= 0.49 respectively)

supported this finding. The respondents that register when the registration opens (early birds) adapt their lifestyle to a greater extent in terms of all the lifestyle factors. This shows that when competitive endurance participation is part of one's lifestyle; one gathers information about the event arranges around this information and adapts one's lifestyle to take part in an event. Respondents who register impulsively have the lowest lifestyle adaption scores. This might be because these respondents do not have a pre-determined plan to participate in an endurance event.

Event attributes

The event attribute ***attractiveness and exposure*** had a statistically significant difference (p= 0.015). Tukey's post hoc multiple comparisons however did not reveal differences between the groups based on this factor. Small effect size differences (d= 0.25 & d= 0.38 respectively) showed that the impulsive respondents (M= 2.06) see the *attractiveness and exposure* attribute as less important than the last-minute partakers (M= 2.27) and early birds (M= 2.40). A small effect size difference (d= 0.29) also revealed that the contemplators (M= 2.14) perceive the *attractiveness and exposure* of the event as less important than the early birds (M= 2.40). ***Location and climate,*** although not statistically significant (p > 0.05), did reveal statistically significant differences with Tukey's post hoc multiple comparisons. Small effect size differences (d= 0.42 & d= 0.41 respectively) revealed that the contemplators (M= 2.40) regarded the *location and climate* of the event as less important than the last-minute partakers (M= 2.82) and early birds (M= 2.82). *Attractiveness and exposure* as well as the *reputation and challenge* are more important for the early birds. In contrast, the *accessibility and affordability* is more important if a respondent registration is impulsive or last minute. This shows that if the decision is spontaneous the events proximity and price is more important than the specific characteristics of the event.

Travel behaviour

Table 7.28 show that the ANOVA analysis did not reveal statistically significant differences (p > 0.050) based on the travel behaviour factors. Tukey's post hoc multiple comparisons also did not reveal differences between the groups. A small effect size difference (d= 0.21) did however show that early birds (M= 3.05) agreed to have more ***individual travel opportunities*** when compared to the contemplators (M= 2.87). Furthermore, small effect size differences (d= 0.21 & d= 0.27 respectively) showed that the contemplators category (M= 2.93) had less of an agreement that their event participation influences their ***group travel opportunities*** than respondents in the impulsive (M= 3.16) and early bird (M= 3.23) groups. The last-minute partakers and early birds agree they have more *individual travel* and *group travel opportunities*. The reason for this may be that if registration is pre-determined, respondents are more likely to plan any travelling that may occur during their stay at the destination, and have time to take advantage of discounts and

hospitality packages offered by the destination. Therefore, they have more opportunities than respondents who decide impulsively to register as participant of the endurance event.

Table 7-28: ANOVA results of factors and when respondents register to participate in competitive endurance events

Register to participate	The impulsive	The last-minute partakers	The early birds	The contemplators	F-Ratio	Sig. level	Effect sizes					
	(N= 69)	(N= 96)	(N= 287)	(N= 46)			1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	**4.35[a]**	**4.42[ab]**	**4.58[b]**	**4.51[ab]**	**4.932**	**0.002***	**0.11**	**0.39****	**0.27****	**0.23****	**0.13**	**0.11**
Involvement alternatives and social constraints	**3.66[a]**	**3.77[ab]**	**4.04[b]**	**3.87[ab]**	**8.524**	**0.001***	**0.16**	**0.53*****	**0.27****	**0.38****	**0.12**	**0.22****
Dedication and social support	3.72	3.86	3.90	3.70	2.471	0.061	0.20**	0.26**	0.02	0.06	0.21**	0.26**
Status, socialisation and travel	1.91	2.01	1.92	1.86	0.805	0.491	0.16	0.01	0.08	0.15	0.25**	0.08
Lifestyle adaption												
Health and fitness	**2.58[a]**	**2.83[ab]**	**3.00[b]**	**2.83[ab]**	**5.793**	**0.001***	**0.32****	**0.55*****	**0.27****	**0.22****	**0.01**	**0.18**
Media consumption	**2.68**	**2.90**	**3.01**	**2.74**	**2.936**	**0.033***	**0.22****	**0.33****	**0.06**	**0.11**	**0.17**	**0.29****
Leisure and event participation	**2.70[a]**	**3.09[b]**	**3.17[b]**	**3.02[ab]**	**4.526**	**0.004***	**0.39****	**0.46****	**0.32****	**0.08**	**0.07**	**0.15**
Sport development	1.82	1.79	2.00	1.82	2.554	0.055	0.04	0.22**	0.01	0.26**	0.04	0.23**
Enhanced performance spending	**2.49[a]**	**2.76[ab]**	**3.00[b]**	**2.56[a]**	**8.275**	**0.001***	**0.30****	**0.55*****	**0.08**	**0.26****	**0.23****	**0.49****
Event attributes												
Attractiveness and exposure	**2.06**	**2.27**	**2.40**	**2.14**	**3.544**	**0.015***	**0.25****	**0.38****	**0.09**	**0.15**	**0.15**	**0.29****
Accessibility and affordability	3.58	3.63	3.55	3.52	0.277	0.842	0.06	0.03	0.06	0.09	0.11	0.03
Challenge and reputation	3.60	3.70	3.72	3.61	0.743	0.527	0.15	0.17	0.02	0.03	0.11	0.14
Location and climate	2.74[ab]	2.82[b]	2.82[b]	2.40[a]	2.418	0.066	0.08	0.08	0.32**	0.01	0.42**	0.41**
Travel behaviour												
Individual travel opportunities	2.99	3.02	3.05	2.87	0.629	0.597	0.03	0.07	0.14	0.04	0.17	0.21**
Group travel opportunities	3.24	3.30	3.31	3.20	0.376	0.770	0.07	0.09	0.05	0.02	0.14	0.14
Holiday choice opportunities	3.16	3.05	3.23	2.93	1.384	0.247	0.10	0.06	0.21**	0.16	0.11	0.27**

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8; [a] Group varies significantly from the variable (in row) where [b] is indicated

7.4.17 Results of ANOVAs: a comparison between factors and number of days respondents arrive in advance at the event

As seen in Table 7.29, four groups of the number of days respondents arrive in advance at the destination before the event takes place, was established for the purpose of the ANOVA analysis. The four groups are 0 days, 1 day, 2 days, and 3 or more days (which is a combination of the categories 3 days and more than 4 days).

Commitment factors

The commitment factor ***involvement alternatives and social constraints*** resulted in a statistically significant difference (p= 0.001). Tukey's post hoc multiple comparisons and medium effect size differences revealed that respondents who do not arrive any days in advance of the event (0 days) (M= 3.62) have less *involvement alternatives and social constraints* than respondents who arrive 2 days (M= 4.02; d= 0.54) or more than 3 days (M= 4.18; d= 0.75) before the event. Furthermore, a medium effect size difference (d= 0.59) demonstrated that respondents who arrive 2 days in advance (M= 3.79) ranked the factor higher than respondents who arrive a day (1 day) (M= 4.02) before the event. ***Dedication and social support,*** although not statistically significant (p > 0.050), did reveal a statistically significant difference through Tukey's post hoc multiple comparisons. A small effect size difference (d= 0.44) revealed that respondents who do not arrive in advance (0 days) (M= 3.67) ranked *dedication and social support* as less important than respondents who arrive more than 3 days (M= 3.96) before the event. The number of days respondents arrive in advance is directly correlated to the importance of the commitment factors. Therefore, the more days a respondent arrives before the event, the higher they rank all the commitment factors. One can assume that respondents that arrive prior to the event make certain sacrifices (e.g. leave at work) in order to participate in endurance events. Also the respondents that arrive beforehand might be there to settle in and get use to and adapt to the surroundings. This shows that the event is important and thus they invest extra time to participate in the event. The only exception is with the factor *status, socialisation and travel* which does not increase when respondents arrive in advance.

Lifestyle adaption

All five lifestyle adaption factors had statistically significant differences (p= 0.001 respectively) which was also confirmed by Tukey's post hoc multiple comparisons. Medium effect size differences (d= 0.69 & d= 0.51 respectively) revealed that respondents who arrive 2 days (M= 3.07) prior to the event adapt their lifestyle more in terms of ***health and fitness*** compared to respondents who do not arrive in advance (0 days) (M= 2.49) and 1 day (M= 2.64) before the event. Similarly large effect size differences (d= 1.04 & d= 0.86 respectively) showed that respondents who arrive 3 or more days (M= 3.33) in advance adapt their *health and fitness* to a greater extent than respondents who do not arrive in advance (0 days) (M= 2.49) or only 1 day

(*M*= 2.64) before an event. Large and medium effect size differences (between *d*= 0.50 & *d*= 1.15) showed that respondents who do not arrive any days before the event (0 days) adapt their lifestyle less in terms of ***media consumption, leisure and event participatio****n* as well as ***sport development*** (*M*= 2.60, *M*= 2.52 & *M*= 1.56 respectively) than respondents who arrive 2 days (*M*= 3.11, *M*= 3.23 & *M*= 2.01) and more than 3 days (*M*= 3.29; *M*= 3.55 & *M*= 2.36) before the event. Also respondents who arrive more than 3 days in advance to the event, have a higher *media consumption*, *leisure and event participation* and *sport development* lifestyle adaption (*M*= 3.29, *M*= 3.55 & *M*= 2.36) than respondents who arrive 1 day (*M*= 2.68; *M*= 2.84 & *M*= 1.74 respectively) prior to the event. This result is revealed by medium effect size differences (*d*= 0.57, *d*= 0.77 & *d*= 0.59 respectively). Lastly medium effect size differences (d= 0.76 & d= 0.59) revealed that respondents who arrive 3 or more days before the event start, have adapted their lifestyle more in terms of ***enhanced performance spending*** (*M*= 3.22) than respondents who do not arrive before the event (0 days) (*M*= 2.51) and 1 day (*M*= 2.67) prior to the event. It is clear from the results that the number of days respondents arrive before the event takes place correlates with the extent to which respondents adapt their lifestyle. As the number of days increase, the extent to which respondents adapt their lifestyle also increases. Similar to the commitment factors, it is clear that respondents who give up the time to arrive before the event, takes their event participation more seriously and therefore adapt their lifestyle more in order to improve their performance.

Event attributes

The event attribute ***attractiveness and exposure*** had the only statistically significant difference (*p*= 0.001) with Tukey's post hoc multiple comparisons confirming this difference. Respondents that arrive more than 3 days before the event starts regarded *attractiveness and exposure* (*M*= 2.80) more important than respondents who do not arrive in advance (0 days) (*M*= 1.98) and respondents that arrive a day before the event (1 day) (*M*= 2.08). Both large and medium effect size differences (*d*= 0.85 & *d*= 0.74 respectively) supported this finding. Furthermore a medium effect size difference (*d*= 0.74) showed that respondents who arrive 1 day (*M*= 2.08) prior to the event find the event attribute as a less important attribute than respondents who arrive 3 days or more (*M*= 2.80) prior to the event. *Attractiveness and exposure* as well as *challenge and reputation* are the most important factors for respondents who arrive 3 days or more days in advance. Although not statistically significant the attribute, *location and climate,* is also an important for respondents who arrive in advance at the event destination. This might be because the destinations environment and climate are most probably the aspects that athletes come and examine before the event takes place.

Travel behaviour

All the travel behaviour factors had statistically significant differences (p= 0.001 respectively). Tukey's post hoc multiple comparisons also found differences between all of the groups and the travel behaviour factors. Large and medium effect size differences (between d= 0.59 & d= 1.70) showed that respondents who arrive 3 days or more prior to the event (M= 3.63), indicated that their event participation has more of an influence on their ***individual travel opportunities*** than respondents who do not arrive prior to the event (0 days) (M= 2.31), 1 day (M= 2.80; d= 1.01) and also 2 days (M= 3.15) before the event. Furthermore, respondents that do not arrive in advance at the event destination (0 days) (M= 2.31) indicated that their event participation has less of an influence on their *individual travel opportunities* when compared to respondents that arrive 1 day (M= 2.80) and 2 days (M= 3.15) before the event. These differences are shown by large and medium effect size differences (d= 0.61 & d= 1.06 respectively). Large effect size differences (d= 1.32 & d= 0.81 respectively) also showed that respondents who arrive 3 or more days (M= 3.70) before the event have a higher agreement that their event participation has a direct influence on their ***group travel opportunities***, in comparison with respondents who do not arrive in advance (0 days) (M= 2.67) or only 1 day (M= 3.05) prior to the event. Respondents who arrive 2 days (M= 3.49) before the event also agreed that their event participation has more of an influence on their *group travel opportunities* than respondents who do not arrive at the event destination before the event (M= 2.67) or only 1 day (M= 3.05) preceding the event. Medium effect size differences (d= 1.05 & d= 0.55 respectively) supported these results.

Medium and small effect size differences (d= 0.71 & d= 0.44 respectively) indicated that respondents that arrive 3 or more days (M= 2.81) before the event agreed less that their event participation has an influence on their ***holiday choice opportunities*** compared to respondents who arrive 0 days (M= 3.63) or 1 day (M= 3.32) before the beginning of the event. Also a medium effect size difference (d= 0.56) showed that respondents that arrive 2 days (M= 3.02) before the beginning of the event, also agreed less that their event participation influences their *holiday choice opportunities* compared to respondents who arrive 0 days (M= 3.63) before the event. There is thus a clear link between the number of days that respondents arrive in advance at the destination and the influence of event participation on their travel behaviour. The more days in advance an athlete arrives at the event destination, the more *individual travel opportunities* and *group travel opportunities* respondents feel they have. One can also assume that respondents who arrive in advance are also more likely to have the same event and holiday destinations. The reason for this may be that respondents who arrive in advance spend more time at the destination. Therefore, they have more time for exploring and travelling in and around the destination.

Table 7-29: ANOVA results of factors and days respondents arrive in advance at the destination before the event takes place

Number of days before the event	0 days	1 day	2 days	More than 3 days	F-Ratio	Sig. level	Effect sizes					
	(N= 24)	(N= 223)	(N= 162)	(N= 79)			1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.47	4.48	4.53	4.62	1.655	0.176	0.03	0.10	0.30**	0.08	0.28**	0.16
Involvement alternatives and social constraints	**3.62[a]**	**3.79[ab]**	**4.02[bc]**	**4.18[c]**	**10.421**	**0.001***	**0.23****	**0.54*****	**0.75*****	**0.33****	**0.59*****	**0.23****
Dedication and social support	3.67[a]	3.82[ab]	3.88[ab]	3.96[b]	1.794	0.147	0.24**	0.33**	0.44**	0.10	0.21**	0.12
Status, socialisation and travel	2.04	1.92	1.89	1.96	0.561	0.641	0.21**	0.24**	0.14	0.04	0.07	0.11
Lifestyle adaption												
Health and fitness	**2.49[a]**	**2.64[a]**	**3.07[b]**	**3.33[b]**	**22.710**	**0.001***	**0.21****	**0.69*****	**1.04******	**0.51*****	**0.86******	**0.31****
Media consumption	**2.60[a]**	**2.68[ab]**	**3.11[bc]**	**3.29[c]**	**12.652**	**0.001***	**0.09**	**0.50*****	**0.65*****	**0.47****	**0.57*****	**0.17**
Leisure and event participation	**2.52[a]**	**2.84[ab]**	**3.23[bc]**	**3.55[c]**	**16.411**	**0.001***	**0.34****	**0.74*****	**1.15******	**0.41****	**0.77*****	**0.33****
Sport development	**1.56[a]**	**1.74[ab]**	**2.01[bc]**	**2.36[c]**	**14.870**	**0.001***	**0.30****	**0.56*****	**0.77*****	**0.33****	**0.59*****	**0.33****
Enhanced performance spending	**2.51[a]**	**2.67[a]**	**2.91[ab]**	**3.22[b]**	**8.808**	**0.001***	**0.17**	**0.43****	**0.76*****	**0.27****	**0.59*****	**0.33****
Event attributes												
Attractiveness and exposure	**1.98[a]**	**2.08[ab]**	**2.44[bc]**	**2.80[c]**	**16.324**	**0.001***	**0.13**	**0.51*****	**0.85******	**0.40****	**0.74*****	**0.37*****
Accessibility and affordability	3.57	3.60	3.53	3.59	0.263	0.852	0.03	0.05	0.02	0.09	0.01	0.07
Challenge and reputation	3.58	3.66	3.68	3.85	1.853	0.137	0.10	0.14	0.35**	0.04	0.26**	0.22**
Location and climate	2.67	2.67	2.84	2.97	2.119	0.097	0.01	0.16	0.28**	0.17	0.28**	0.12
Travel behaviour												
Individual travel opportunities	**2.31[a]**	**2.80[b]**	**3.15[b]**	**3.63[c]**	**29.149**	**0.001***	**0.61*****	**1.06******	**1.70******	**0.43****	**1.01******	**0.59*****
Group travel opportunities	**2.67[a]**	**3.05[b]**	**3.49[c]**	**3.70[c]**	**24.989**	**0.001***	**0.48****	**1.05******	**1.32******	**0.55*****	**0.81******	**0.29****
Holiday choice opportunities	**3.63[c]**	**3.32[bc]**	**3.02[ab]**	**2.81[a]**	**7.340**	**0.001***	**0.30****	**0.56*****	**0.71*****	**0.28****	**0.44****	**0.18**

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8; [a] Group varies significantly from the variable (in row) where [b] is indicated; [c] Group varies significantly from the variable (in row) where [a] and [b] is indicated

7.4.18 Results of ANOVAs: a comparison between factors and number of days respondents stay in the event destination after the event

When respondents had to indicate how many days respondents stay in the event destination after the event, respondents' answers were divided into four groups for the purpose of the analysis. The four groups were 0 days, 1 day, 2 days, and more than 3 days (this is a combination between the 3 days and more than 4 days categories and seen in Table 7.30).

Commitment factors

As seen in Table 7.30 the commitment factor ***involvement alternatives and social constraints*** did not result in a statistically significant difference ($p > 0.050$), but Tukey's post hoc multiple comparisons revealed statistically significant differences. A small effect size difference ($d= 0.38$) showed that respondents who do not stay in the destination (0 days) ($M= 3.82$) after the event ranked the *involvement alternatives and social constraints* factor as less important in comparison to respondents who stay 3 or more days ($M= 4.09$) after the event took place.

Lifestyle adaption

The lifestyle factors ***health and fitness*** ($p= 0.008$), ***media consumption*** ($p= 0.005$), ***leisure and event participation*** ($p= 0.001$), ***sport development*** ($p= 0.001$) and ***enhanced performance spending*** ($p= 0.043$) were statistically significant. Tukey's post hoc multiple comparisons also revealed differences with all five lifestyle adaption factors. Small effect size difference ($d= 0.43$ & $d= 0.40$) revealed that respondents who stay 3 or more days ($M= 3.11$; $M= 3.06$ respectively) after the event, adapt their ***health and fitness*** as well as their ***enhanced performance spending*** more than respondents who stay 0 days ($M= 2.76$; $M= 2.71$) after the event. Small effect size differences ($d= 0.39$ & $d= 0.44$ respectively) confirmed that respondents that do not stay after the event (0 days) ($M= 2.72$) have less ***media consumption*** adaption than respondents who stay 2 days ($M= 3.09$) or 3 or more days ($M= 3.16$) at the destination after the event. Medium and small effects size differences ($d= 0.66$ & $d= 0.72$) also confirmed that respondents who stay 0 days ($M= 2.71$) after the event, adapt their lifestyle less in terms of ***leisure and event participation*** when compared to respondents who stay 2 days ($M= 3.00$) and 3 or more days ($M= 3.43$). Similarly small effect size differences ($d= 0.40$ & $d= 0.46$ respectively) showed that respondents who stay 1 day ($M= 3.00$) after the conclusion of the event adapt their lifestyle to a lesser extent regarding *leisure and event participation* when compared to respondents who stay at the event destination for 2 days ($M= 3.00$) and 3 or more days ($M= 3.43$) after the event took place. Medium effect size differences showed that respondents who stay 0 days ($M= 1.70$) adapt their lifestyle to a lesser extent in terms of ***sport development*** when compared to respondents who stay at the event destination for 2 days ($M= 2.07$; $d= 0.49$) or 3 days or more ($M= 2.40$; $d= 0.69$) after the event took place. Additionally a small effect size difference ($d= 0.33$) demonstrated that respondents who stay for 2 days ($M= 2.07$) after the event, adapt their *sport development* lifestyle less than

respondents who stay 3 days or more (*M*= 2.40) after the conclusion of the event. A medium effect size difference (*d*= 0.54) also revealed a difference that respondents who stay 3 days or more (*M*= 2.40) adapt their lifestyle more in terms of *sport development*, than respondents who stay 1 day (*M*= 1.85) after the event. The above results show that the more days respondents stay after the event has taken place, the more respondents adapt their lifestyle in order to participate in endurance events. There are clear differences between respondents who do not stay after the event has taken place and respondents who stay at least one night after the event took place. This might be because if respondents stay after the event has taken place it requires extra planning and sacrifice which show that endurance participation is central to the athlete's lifestyle. Furthermore, one can assume that respondents who stay after the event has taken place give themselves time to recover and recuperate after the event, thus showing how important the endurance sport is.

Event attributes

The ***attractiveness and exposure*** (*p*= 0.001) and the ***location and climate*** (*p*= 0.001) event attributes had statistically significant differences. These statistically significant differences were confirmed by Tukey's post hoc multiple comparisons. Medium effect size differences (*d*= 0.62 & *d*= 0.50 respectively) showed that respondents who stay more than 3 days (*M*= 2.71) after the event has taken place regarded the *attractiveness and exposure* of an event more important than respondents who stay 0 days (*M*= 2.09) or 1 day (*M*= 2.21) after the event. Furthermore, a small effect size difference (*d*= 0.48) indicated that respondents who stay for 2 days (*M*= 2.21) ranked the factor as more important than respondents who do not stay over at the destination after the event (0 days) (*M*= 2.09). Medium and small effect size differences (between *d*= 033 & *d*= 0.61) revealed that respondents who stay for 3 or more days (*M*= 3.23) at the event destination consider the *location and climate* as a more important attribute when choosing an event when compared to respondents who stay 0 days (*M*= 2.58), 1 day (*M*= 2.68) and 2 days (*M*= 2.93) after the event has taken place. *Attractiveness and exposure* as well as *challenge and reputation* are the most important for respondents who stay a number of days at the destination after the event has taken place. *Location and climate* is also an important event attribute for respondents who stay more than 3 days after the event has taken place. This might be due to the fact that if respondents stay after the event has taken place, they might want to travel in and around the event destination and therefore an interesting location and pleasing climate becomes important. These aspects could also directly influence their performance as well as their recuperation after an event.

Travel behaviour

Individual travel opportunities (*p*= 0.001), ***group travel opportunities*** (*p*= 0.001) as well as ***holiday choice opportunities*** (*p*= 0.001) had significant differences. Tukey's post hoc multiple comparisons revealed that respondents who stay 0 days (*M*= 2.51) at the event destination,

agreed that their event participation has less of an influence on their *individual travel opportunities* than respondents who stay one day (*M*= 3.01), 2 days (*M*= 3.23) and 3 days or more (*M*= 3.69). Large and medium effect size differences (between *d*= 0.60 & *d*= 1.48) confirmed this result. Moreover medium effect size differences (*d*= 0.82 & *d*= 0.58) showed that respondents who stay 3 days or more (*M*= 3.69) at the event destination had a higher agreement that their event participation has an influence on their *individual travel opportunities* in comparison with respondents who stay one day (*M*= 3.01) and 2 days (*M*= 3.23) after the conclusion of the event. Tukey's post hoc multiple comparisons found that all four groups differed from one another compared to the *group travel opportunities* factor. Respondents who stay 3 days or more (*M*= 3.86) at the destination had the highest agreement that their event participation has a direct influence on their *group travel opportunities*, followed by, in descending order of agreement, respondents who stay 2 days (M= 3.58), 1 day (*M*= 3.26) and no days (*M*= 2.51). Large and medium effect size differences (between *d*= 0.76 & *d*= 1.53) supported these differences.

Tukey's post hoc multiple comparisons as well as medium and small effect size differences (between *d*= 0.40 & *d*= 0.66) also revealed that respondents that do not stay (0 days) (*M*= 3.57) after the event differ from respondents who stay one day (M= 3.57), 2 days (M= 3.17) and 3 or more days (M= 2.79) regarding the factor *destination choice opportunities*. Therefore, respondents who do not stay after the event at the destination, have a higher agreement that their event participation has a direct influence on their *destination choice opportunities.* In contrast, the other three groups agree less with the influence of event participation on their destination choice opportunities. The above-mentioned results clearly shows that the longer a participant stays at the event destination after the event has taken place, has a direct link with the travel behaviour of endurance athletes. It is also evident that respondents who stay some days after the event have more opportunities to travel and explore the event destination. One can assume that athletes, who stay after an event has taken place, thus have a positive influence on tourism in a destination, since these athletes are more likely to explore the destination and visit tourist attractions with family and friends. In the next section a discussion follows regarding the results obtained from the Structural Equation Modelling (hereafter referred to as SEM).

Table 7-30: ANOVA results of factors and number of days respondents stay in the event destination after the event

Number of days remaining in the destination after the event	0 days (N= 103)	1 day (N= 212)	2 days (N= 109)	3 days and more (N= 56)	F-Ratio	Sig. level	Effect sizes					
							1 & 2	1 & 3	1 & 4	2 & 3	2 & 4	3 & 4
Commitment factors												
Enjoyment, personal investments and involvement opportunities	4.48	4.53	4.50	4.58	0.506	0.678	0.09	0.02	0.20**	0.04	0.12	0.13
Involvement alternatives and social constraints	3.82[a]	3.92[ab]	3.97[ab]	4.09[b]	2.297	0.077	0.17	0.23**	0.38**	0.06	0.23**	0.17
Dedication and social support	3.78	3.84	3.92	3.93	1.146	0.330	0.09	0.20**	0.22**	0.11	0.15	0.02
Status, socialisation and travel	1.92	1.89	1.96	2.01	0.705	0.550	0.05	0.06	0.14	0.10	0.19	0.09
Lifestyle adaption												
Health and fitness	**2.76[a]**	**2.83[ab]**	**3.04[ab]**	**3.11[b]**	**4.014**	**0.008***	**0.09**	**0.32****	**0.43****	**0.24****	**0.34****	**0.09**
Media consumption	**2.72[a]**	**2.86[ab]**	**3.09[b]**	**3.16[b]**	**4.349**	**0.005***	**0.14**	**0.38****	**0.44****	**0.26**	**0.30****	**0.07**
Leisure and event participation	**2.71[a]**	**3.00[a]**	**3.38[b]**	**3.43[b]**	**12.189**	**0.001***	**0.28****	**0.66*****	**0.72*****	**0.40****	**0.46****	**0.07**
Sport development	**1.70[a]**	**1.85[ab]**	**2.07[b]**	**2.40[c]**	**11.873**	**0.001***	**0.21****	**0.49****	**0.69*****	**0.29****	**0.54*****	**0.33****
Enhanced performance spending	**2.71[a]**	**2.80[ab]**	**2.97[ab]**	**3.06[b]**	**2.738**	**0.043***	**0.10**	**0.31****	**0.40****	**0.18**	**0.27****	**0.10**
Event attributes												
Attractiveness and exposure	**2.09[a]**	**2.21[ab]**	**2.50[bc]**	**2.71[c]**	**8.702**	**0.001***	**0.14**	**0.48****	**0.62*****	**0.34****	**0.50*****	**0.20****
Accessibility and affordability	3.57	3.56	3.60	3.56	0.078	0.972	0.02	0.03	0.02	0.05	0.01	0.05
Challenge and reputation	3.65	3.64	3.79	3.81	1.927	0.124	0.02	0.22**	0.21**	0.21**	0.23**	0.03
Location and climate	**2.58[a]**	**2.68[a]**	**2.93[a]**	**3.23[b]**	**6.761**	**0.001***	**0.09**	**0.33****	**0.61*****	**0.24****	**0.54*****	**0.33****
Travel behaviour												
Individual travel opportunities	**2.51[a]**	**3.01[b]**	**3.23[b]**	**3.69[c]**	**30.072**	**0.001***	**0.60*****	**0.91******	**1.48******	**0.27****	**0.82******	**0.58*****
Group travel opportunities	**2.67[a]**	**3.26[b]**	**3.58[c]**	**3.86[d]**	**43.567**	**0.001***	**0.76*****	**1.18******	**1.53******	**0.43****	**0.79*****	**0.43****
Holiday choice opportunities	**3.57[b]**	**3.17[a]**	**2.94[a]**	**2.79[a]**	**9.480**	**0.001***	**0.40****	**0.62*****	**0.66*****	**0.21****	**0.32****	**0.13**

*Statistical significant difference: $p \leq 0.05$; Effect sizes: ** small effect: d=0.2; ***medium effect: d=0.5 and ****large effect: d=0.8; [a] Group varies significantly from the variable (in row) where [b] is indicated; [c] Group varies significantly from the variable (in row) where [a] and [b] is indicated; [d] Group varies significantly from the variable (in row) where [a, b] and [c] is indicated

7.5 Preparing for the Structural Equation Modelling

In preparation for the SEMs, two steps were followed. Firstly, the reliability (Cronbach alpha's) of the combined factors was calculated to assess the reliability, or internal consistency, of the set of scale or test items. For the purpose of the SEMs, the reliability had to be calculated to see whether the factors could be included in the final models. Secondly, given that the focal point of the structural model is based on the magnitude of and relationships between latent constructs, Spearman's Rank Order Correlations were calculated to describe the strength and direction of the linear relationship between continuous variables (Pallant, 2010:128) before the structural models were developed. The results from the two steps are consequently discussed.

7.5.1 Step 1: Results from the reliability analysis

The first step involved calculating the Cronbach alpha's for the combined factors. The reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency. For the four commitment factors, *status, socialisation and travel* (factor 4) had a small negative corrected item-total correlation of -0.125. As this factor had no significant contribution towards commitment, this factor was excluded from further analysis. This resulted in commitment (consisting of the remaining three factors) having a Cronbach alpha coefficient of 0.810. In the SEM models, commitment therefore, consists of *enjoyment, personal investments and involvement opportunities*, *involvement alternatives and social constraints* and *dedication and social support*. The Cronbach alpha coefficients for respectively the five lifestyle factors (0.790) and the four event attribute factors (0.730) were also acceptable. For the three travel behaviour factors, the value was -0.070, indicating that the factors cannot be grouped together. The travel behaviour factor, *destination choice opportunities* (factor 3), had a negative corrected item-total correlation of -0.281. This negative relationship between the factor and others was confirmed by Spearman's rho (Table 7.31). To include this factor in the further analysis, this factor was reverse coded. In the case of the present study, it was necessary to reverse code this factor since it was negatively worded. By reverse coding the item, the values could indicate the same type of response on every item measured in the travel behaviour section. With the reversed coded travel behaviour factor, travel behaviour had a Cronbach alpha coefficient of 0.590.

7.5.2 Step 2: Results from Spearman's Rank Order Correlations

Spearman's Rank Order correlations were calculated to describe the strength and direction of the linear relationship between continuous variables (Pallant, 2010:128) before the structural models are developed. The Spearman rank order correlation test (also known as Spearman's rho) is a nonparametric symmetric procedure that determines the monotonic strength and direction of the relationship between two ranked variables (Coakes, 2005:218; Rovai, Baker & Ponton, 2013:375). This non-parametric statistic is based on ranked data and can be useful to minimise

the effects of extreme scores or the effects of violations of assumptions. Spearman's test first ranks the data and then applies Pearson's equation to those ranks (Coakes, 2005:220; Field, 2013:276). For a Spearman's correlation coefficient, an ordinal variable (categories that have a meaningful order) is required. The symbol for the correlation coefficient is shown with either the Greek letter p (rho) or rs. It has a value in the range of $-1 \leq r_s \leq 1$. If there are no repeated data values, a perfect Spearman correlation of +1 or -1 occurs when each of the variables is a perfect monotone function of the other (Rovai *et al.,* 2013:373). Cohen (1988:79) suggests the following guidelines to interpret the values between 0 and 1: small effect: r_s = 0.10-0.29 medium effect: r_s = 0.30-0.49 and a large effect: r_s =0.50-1.00.

Table 7.31 shows the factors that had a significant relationship with one another. Since it is important to recognise the strength of the relationships between all the factors, the next section discusses the results in detail and also includes the fourth commitment factor (*status, socialisation and travel*). However, only the statistically significant results are discussed. As evident from Table 7.31 that the various factors do indeed correlate with each other and vice versa, the significant relationships are discussed in the order that the factors appear in the Table. The first time a relationship between two factors is shown the opposite relationship is also specified, but not mentioned again in order to reduce repetition.

Table 7-31: Results from Spearman's rho

FACTORS		Commit 1	Commit 2	Commit 3	Commit 4	Life 1	Life 2	Life 3	Life 4	Life 5	Event 1	Event 2	Event 3	Event 4	Travelb 1	Travelb 2	Travelb 3
Enjoyment, personal investments and involvement opportunities *(Commit 1)*	r_s		.681***	.585***	-.126*	.207*	.200*	.237*	.113*	.191*	.169*	.114*	.229*	.065	.183*	.039	-.076
	Sig. (2-tailed)		0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.001	0.001	0.011	0.001	0.148	0.001	0.385	0.089
Involvement alternatives and social constraints *(Commit 2)*	r_s	.681***		.517***	-.028	.389**	.295*	.517***	.264*	.356**	.332**	.093*	.208*	.113*	.382**	.235*	-.133*
	Sig. (2-tailed)	0.001		0.001	0.533	0.001	0.001	0.001	0.001	0.001	0.001	0.037	0.001	0.011	0.001	0.001	0.003
Dedication and social support *(Commit 3)*	r_s	.585***	.517***		.070	.181*	.274*	.288*	.204*	.203*	.273*	.012	.193*	.203*	.378**	.176*	-,066
	Sig. (2-tailed)	0.001	0.001		0.118	0.001	0.001	0.001	0.001	0.001	0.001	0.798	0.001	0.001	0.001	0.001	0.144
Status, socialisation and travel *(Commit 4)*	r_s	-.126*	-.028	.070		.060	-.012	.026	.100*	.051	.207*	.076	.080	.240*	.064	.050	.101*
	Sig. (2-tailed)	0.005	0.533	0.118		0.182	0.797	0.567	0.025	0.259	0.001	0.089	0.076	0.001	0.157	0.267	0.024
Health and fitness *(Life 1)*	r_s	.207*	.389**	.181*	.060		.374**	.537***	.381**	.502***	.404**	.061	.198*	.141*	.261*	.151*	.003
	Sig. (2-tailed)	0.001	0.001	0.001	0.182		0.001	0.001	0.001	0.001	0.001	0.176	0.001	0.002	0.001	0.001	0.941
Media consumption *(Life 2)*	r_s	.200*	.295*	.274*	-.012	.374**		.347**	.397**	.486**	.379**	.081	.215*	.182*	.328**	.296*	.014
	Sig. (2-tailed)	0.001	0.001	0.001	0.797	0.001		0.001	0.001	0.001	0.001	0.070	0.001	0.001	0.001	0.001	0.760
Leisure and event participation *(Life 3)*	r_s	.237*	.517***	.288*	.026	.537***	.347**		.370**	.442**	.350**	.063	.246*	.150*	.490**	.391**	-.266*
	Sig. (2-tailed)	0.001	0.001	0.001	0.567	0.001	0.001		0.001	0.001	0.001	0.157	0.001	0.001	0.001	0.001	0.001

Sport development *(Life 4)*	r_s	.113*	.264*	.204*	.100*	.381**	.397**	.370**		.453**	.419**	.054	.219*	.269*	.303**	.288*	.018
	Sig. (2-tailed)	0.011	0.001	0.001	0.025	0.001	0.001	0.001		0.001	0.001	0.228	0.001	0.001	0.001	0.001	0.692
Enhanced performance spending *(Life 5)*	r_s	.191*	.356**	.203*	.051	.502***	.486**	.442**	.453**		.383**	.043	.245*	.223*	.278*	.153*	.022
	Sig. (2-tailed)	0.001	0.001	0.001	0.259	0.001	0.001	0.001	0.001		0.001	0.333	0.001	0.001	0.001	0.001	0.618
Attractiveness and exposure *(Event 1)*	r_s	.169*	.332**	.273*	.207*	.404**	.379**	.350**	.419**	.383**		.283*	.445**	.491**	.418**	.358**	.018
	Sig. (2-tailed)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001	0.688
Accessibility and affordability *(Event 2)*	r_s	.114*	.093*	0.012	.076	.061	.081	.063	.054	.043	.283*		.453**	.345**	.087	.136*	-.017
	Sig. (2-tailed)	0.011	0.037	0.798	0.089	0.176	0.070	0.157	0.228	0.333	0.001		0.001	0.001	0.052	0.002	0.698
Challenge and reputation *(Event 3)*	r_s	.229*	.208*	.193*	.080	.198*	.215*	.246*	.219*	.245*	.445**	.453**		.461**	.258*	.157*	.016
	Sig. (2-tailed)	0.001	0.001	0.001	0.076	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.718
Location and climate *(Event 4)*	r_s	.065	.113*	.203*	.240*	.141*	.182*	.150*	.269*	.223*	.491**	.345**	.461**		.393**	.343**	.002
	Sig. (2-tailed)	0.148	0.011	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.960
Individual travel opportunities *(TravelB 1)*	r_s	.183*	.382**	.378**	.064	.261*	.328**	.490**	.303**	.278*	.418**	.087	.258*	.393**		.555***	-.294*
	Sig. (2-tailed)	0.001	0.001	0.001	0.157	0.001	0.001	0.001	0.001	0.001	0.001	0.052	0.001	0.001		0.001	0.001
Group destination opportunities *(TravelB 2)*	r_s	.039	.235*	.176*	.050	.151*	.296*	.391**	.288*	.153*	.358**	.136*	.157*	.343**	.555***		-.198*
	Sig. (2-tailed)	0.385	0.001	0.001	0.267	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001		0.001
	r_s	-.076	-.133*	-.066	.101*	.003	.014	-.266*	.018	.022	.018	-.017	.016	.002	-.294*	-.198*	

Destination choice opportunities *(TravelB 3)*	Sig. (2-tailed)	0.089	0.003	0.144	0.024	0.941	0.760	0.001	0.692	0.618	0.688	0.698	0.718	0.960	0.001	0.001	

* Significant 5% = $p < 0.05$; ** Significant 10%; r_s: Cohen (1988:79-81) indicated that values can be interpreted at three levels in the correlation matrix r_s=0.10 – 0.29=small*; r_s= 0.30 - 0.49=medium**; r_s= 0.50 – 1.0=large***

7.5.2.1 Spearman's rho results for the commitment factors

The following section discusses the results obtained for each of the four commitment factors.

Factor 1 (commit1): *Enjoyment, personal investments and involvement opportunities*

As shown in Table 7.31, the following variables had a significant relationship with *enjoyment, personal investments and involvement opportunities*:

- The commitment factors**, *involvement alternatives and social constraints*** (r_s = 0.681; *p* = 0.001) and ***dedication and social support*** (r_s = 0.585; *p* = 0.001) both had large, positive correlation coefficients indicating that respondents that agreed more with these factors, will have higher *enjoyment, personal investments and involvement opportunities*. The opposite is also true, meaning that respondents with a higher enjoyment, personal and involvement opportunities will have higher *involvement alternatives and social constraints* as well as *dedication and social support*. ***Status, socialisation and travel*** had a small negative correlation coefficient (r_s = -0.126; *p* = 0.005) indicating that respondents who had a higher rating for the factor, will have less *enjoyment, personal investments and involvement opportunities*. On the other hand, higher *enjoyment, personal investments and involvement opportunities* will lead to less *status, socialisation and travel*.
- The lifestyle factors**, *health and fitness*** (r_s = 0.207; *p* = 0.001), ***media consumption*** (r_s = 0.200; *p* = 0.001), ***leisure and event participation*** (r_s = 0.237; *p* = 0.001), ***sport development*** (r_s = 0.113; *p* = 0.001) and ***enhanced performance spending*** (r_s = 0.191; *p* = 0.001) all had small positive correlation coefficients with *enjoyment, personal investments and involvement opportunities*. This shows that respondents, who adapt their lifestyles more in terms of these factors, will have more *enjoyment, personal investments and involvement opportunities*. Oppositely, it also shows that respondents who have higher *enjoyment, personal investments and involvement opportunities* will adapt their lifestyle more in terms of all the lifestyle factors.
- The event attribute factors, ***attractiveness and exposure*** (r_s = 0.169; *p* = 0.001), ***accessibility and affordability*** (r_s = 0.114 *p* = 0.011) and ***challenge and reputation*** (r_s = 0.229; *p* = 0.001) all had small, positive correlation coefficients, showing that respondents who indicated that these event attributes are important will have higher *enjoyment, personal investments and involvement opportunities*. Conversely, respondents with high *enjoyment, personal investments and involvement opportunities* will rank the above-mentioned event attributes as more important when choosing an event.
- The travel behaviour factor ***individual travel opportunities*** (r_s = 0.183; *p*= 0.001) had a small, positive relationship showing that respondents who indicated they have more *individual travel opportunities* as a result of their sport participation will have more *enjoyment, personal investments and involvement opportunities.* Inversely, respondents

who have higher *enjoyment, personal investments and involvement opportunities* will have more individual travel opportunities.

Factor 2 (commit2): *Involvement alternatives and social support*

The following variables depicted in Table 7.31 had a significant relationship *with involvement alternatives and social support*:

- Apart from the factor, **enjoyment, personal investments and involvement opportunities** (r_s = 0.681; *p* = 0.001), **dedication and social support** (r_s = 0.517; *p* = 0.001) also had large positive correlation coefficient. Respondents, who ranked this factor higher, will have more *involvement alternatives and social constraints* and vice versa.
- The lifestyle adaption factors all had significant correlations (*p* = 0.001) with *involvement alternatives and social constraints*. There were small, positive relationships with the factors ***media consumption*** (r_s = 0.295) and ***sport development*** (r_s = 0.264), medium, positive relationships with ***health and fitness*** (r_s = 0.389) and ***enhanced performance spending*** (r_s = 0.356) and a large positive relationship with ***leisure and event participation*** (r_s = 0.597). Respondents who have more *involvement alternatives and social constraints* will adapt their lifestyle to a greater extent in terms of these factors and vice versa.
- ***Attractiveness and exposure*** (r_s = 0.332; *p* = 0.001) had a medium, positive correlation coefficient while ***accessibility and affordability*** (r_s = 0.093; *p* = 0.037), ***challenge and reputation*** (r_s = 0.208; *p* = 0.001) and ***climate and location*** (r_s = 0.113; *p* = 0.011) had positive, small correlation coefficients. This shows that respondents who have more *involvement alternatives and social constraints* will rank these event attributes as more important. Equally, respondents that rank these event attributes as important will have more *involvement alternatives and social constraints.*
- The travel behaviour factor ***individual travel opportunities*** (r_s = 0.382; *p* = 0.001) had a positive, medium correlation coefficient, and ***group destination travel opportunities*** (r_s = 0.235; *p* = 0.003) had a small positive correlation coefficient, indicating that respondents who have more *involvement alternatives and social constraints* will have more *individual travel* and *group destination travel opportunities*. In addition, respondents who indicated that they have more *individual travel opportunities* and *group destination travel opportunities* will have more *involvement alternatives and social constraints*. ***Destination choice travel opportunities*** (r_s = -0.133; *p* = 0.001) had a negative small correlation coefficient which shows that respondents with higher *involvement alternatives and social constraints* will have less *destination choice opportunities*. Therefore, they are less likely to have separate event and holiday destinations. On the other hand, respondents with more destination choice opportunities will have lower *involvement alternatives and social constraints.*

Factor 3 (commit 3): *Dedication and social support*

Apart from the relationships with the commitment factors already discussed for factor 2, the following variables had a significant relationship with *dedication and social support*:

- All lifestyle factors had significant correlations (p = 0.001) with *dedication and social support*. Small positive correlation coefficients indicate that respondents who have higher dedication and social support will adapt their lifestyle more in terms of ***health and fitness*** (r_s = 0.181), ***media consumption*** (r_s = 0.274), ***leisure and event participation*** (r_s = 0.288), ***sport development*** (r_s = 0.204) and ***enhanced performance spending*** (r_s = 0.203). In the same way, respondents who adapt their lifestyle more in terms of all the lifestyle factors will have more *dedication and social support*.
- When comparing *dedication and social support* with the event attributes, ***attractiveness and exposure*** (r_s = 0.273; p = 0.001), ***challenge and reputation*** (r_s = 0.193; p = 0.001) and ***climate and location*** (r_s = 0.203; p = 0.011) all had small positive correlation coefficients. Respondents with higher dedication and social support will see the above-mentioned event attributes as more important when choosing an event and vice versa.
- ***Individual travel opportunities*** (r_s = 0.378; p = 0.001) had a medium positive correlation coefficient and ***group destination travel opportunities*** (r_s = 0.176; p = 0.001) had a small positive correlation coefficient, thus indicating that respondents that have higher *dedication and social support* agreed to have more *individual travel opportunities* and *group destination travel opportunities*. Likewise, respondents that agreed to have more *individual travel opportunities* and *group destination travel opportunities,* ranked dedication and social support higher.

Factor 4 (commit 4): *Status, socialisation and travel*

It is evident from Table 7.31 that apart from the relationships with the commitment factors already discussed, the following variables had a significant relationship with *status, socialisation and travel*:

- The lifestyle adaption factor ***sport development*** (r_s = 0.100; p = 0.025) had a small correlation coefficient which indicates that respondents who agreed to have higher *status, socialisation and travel* will adapt their lifestyle more in terms of sport development and vice versa.
- Both ***attractiveness and exposure*** (r_s = 0.207; p = 0.001) and ***climate and location*** (r_s = 0.240; p = 0.001) had small positive correlation coefficients. Indicating that respondents who participated for more *status, socialisation and travel,* will regard to the above-mentioned event attributes as more important when choosing an event. Conversely, respondents that choose an event based on the *attractiveness and exposure* as well as

climate and location will agree to have more *status, socialisation and travel* from their event participation.

- ***Destination choice travel opportunities*** (r_s = 0.101; *p* = 0.024) had a small positive correlation coefficient which shows that respondents with higher *status, socialisation and travel* will have more *destination choice opportunities*, therefore they are more likely to have separate event and holiday destinations. Similarly, respondents who indicated that they have higher *destination choice opportunities* will have a higher agreement with the *status, socialisation and travel* factor.

7.5.2.2 Spearman's rho results for the lifestyle adaption factors

The following section reviews the significant relationships for the five lifestyle factors. Only the relationships that were not already mentioned in the preceding discussion are specified (Table 7.31).

Factor 1 (life 1): *Health and fitness*

- In the comparison of the *health and fitness* lifestyle adaption factor with other lifestyle factors, statistically significant correlations were found (*p* = 0.001). Medium correlation coefficients showed that respondents who adapt their lifestyle more in terms of *health and fitness* will also adapt their lifestyle more in terms of ***media consumption*** (r_s = 0.374) and ***sport development*** (r_s = 0.381) and vice versa. Large correlation coefficients shows that respondents who adapt their lifestyle more in terms of *health and fitness* will also adapt their lifestyle more with regards to ***leisure and event participation*** (r_s = 0.537), and ***enhanced performance spending*** (r_s = 0.502) and vice versa.
- It is evident from Table 7.31 that a medium correlation coefficient revealed that respondents who choose an event that is based on the ***attractiveness and exposure*** (r_s = 0.404; *p* = 0.001), will adapt their *health and fitness* to a greater extent. Likewise, respondents who adapt their lifestyle more in terms of *health and fitness,* will see the *attractiveness and exposure* of an event as a more important event attribute. Small positive correlation coefficients for the factors ***challenge and reputation*** (r_s = 0.198; *p* = 0.001) and ***location and climate*** (r_s = 0.141; *p* = 0.002), show that respondents who adapt their *health and fitness* more, will rank these two factors as more important when choosing an event and respondents who see these event attributes as more important will have more *health and fitness* lifestyle adaption.
- The travel behaviour factors ***individual travel opportunities*** (r_s = 0.261; *p*= 0.001) and ***group destination travel opportunities*** (r_s = 0.151; *p*= 0.001) had positive correlation coefficients with *health and fitness*. This result shows that the more a respondent adapts their *health and fitness*, the more *individual travel opportunities* and *group destination travel opportunities* they will have and vice versa.

Factor 2 (life 2): *Media consumption*

- Statistically significant correlations (p = 0.001) and medium correlation coefficients shows that respondents with higher media consumption will also have increased ***health and fitness*** (r_s = 0.374), ***leisure and event participation*** (r_s = 0.374), ***sport development*** (r_s = 0.397) and ***enhanced performance spending*** (r_s = 0.486). Conversely, respondents with increased *leisure and event participation*, *sport development* and *enhanced performance spending*, will have higher *media consumption*.
- A medium correlation coefficient revealed that respondents who adapt their lifestyle more in terms of *media consumption* indicated that ***attractiveness and exposure*** (r_s = 0.379; p = 0.001) was a more important event attribute when choosing an event. Equally, respondents who see *attractiveness exposure* as more important will have a higher media consumption. Small correlation coefficients also showed that respondents who have increased *media consumption* will rate ***challenge and reputation*** (r_s = 0.215; p = 0.001) and ***location and climate*** (r_s = 0.182; p = 0.001) as more important event attributes. Respondents, who indicated that the *challenge and reputation* and *location and climate* were important event attributes, will then also have a higher *media consumption.*
- Small and medium positive correlation coefficients showed that respondents with higher media consumption will have more ***individual travel opportunities*** (r_s = 0.328; p= 0.001) and ***group destination travel opportunities*** (r_s = 0.296; p= 0.001). In addition, respondents who have more *media consumption* agreed that their event participation has more of an influence on their *individual travel opportunities* and *group destination travel opportunities.*

Factor 3 (life 3): *Leisure and event participation*

- Medium correlation coefficients showed that respondents who adapt their lifestyle more with regard to ***sport development*** (r_s = 0.370; p = 0.001) and ***enhanced performance spending*** (r_s = 0.442; p = 0.001) will also have increased media consumption and vice versa.
- The event attributes ***attractiveness and exposure*** (r_s = 0.350; p = 0.001), ***challenge and reputation*** (r_s = 0.246; p = 0.001) and ***location and climate*** (r_s = 0.150; p = 0.001) had small to medium positive correlation coefficients with leisure and event participation. Respondents with increased *leisure and event participation* will perceive the above-mentioned event attributes as more important when choosing an event. Likewise, respondents that choose an event based on the *attractiveness and exposure, challenge and reputation* and *location and climate* will have more *leisure and event participation.*
- It is clear from Table 7.31 that the travel behaviour factors ***individual travel opportunities*** (r_s = 0.490; p= 0.001) and ***group destination travel opportunities*** (r_s = 0.391; p= 0.001)

both had low positive correlation coefficients. Unsurprisingly, respondents with higher *leisure and event participation* will have more *individual travel opportunities* and *group destination travel opportunities* and vice versa. On the other hand ***destination choice opportunities*** (r_s = -0.266; *p* = 0.001) has a negative small correlation coefficient with the factor. Respondents who have higher *leisure and event participation* will have less *destination choice opportunities*. The result shows that the respondents' event and holiday destinations are more likely to be different. Equally, respondents who have more *destination choice opportunities*, will adapt their lifestyle less in terms of *leisure and event participation.*

Factor 4 (life 4): *Sport development*

- Respondents with higher *sport development* lifestyle adaption will see the ***attractiveness and exposure*** (r_s = 0.419; *p* = 0.001), ***challenge and reputation*** (r_s = 0.219; *p* = 0.001) and ***location and climate*** (r_s = 0.269; *p* = 0.001) of an event as the most important event attributes when choosing an event. On the other hand respondents that indicated that the *attractiveness and exposure, challenge and reputation* as well as *location and climate* are important attributes when choosing an event, will adapt their lifestyle to a greater extent in terms of *sport development.*
- Small positive correlations coefficients showed that respondents who adapt their lifestyle more in terms of sport development will have more ***individual travel opportunities*** (r_s = 0.303; *p*= 0.001) and ***group destination travel opportunities*** (r_s = 0.288; *p*= 0.001). In addition, respondents with more *individual travel opportunities* and *group destination travel opportunities* will have an increased *sport development* lifestyle adaption.

Factor 5 (life 5): *Enhanced performance spending:*

- Respondents who have more *enhanced performance spending* regard ***attractiveness and exposure*** (r_s = 0.383; *p* = 0.001), ***challenge and reputation*** (r_s = 0.245; *p* = 0.001) and ***location and climate*** (r_s = 0.223; *p* = 0.001) as important factors when choosing an event to participate in. Similarly, respondents that indicated that these are important event attributes, will adapt their lifestyle to a greater extent in terms of *enhanced performance spending.*
- Small positive correlations coefficients showed that respondents who have more *enhanced performance spending* will have more ***individual travel opportunities*** (r_s = 0.278; *p*= 0.001) as well as ***group destination travel opportunities*** (r_s = 0.153; *p*= 0.001) and vice versa.

7.5.2.3 Spearman's rho results for the event attribute factors

The statistically significant relationships for the event attribute factors are accordingly discussed. Again, only relationships are not previously discussed is reviewed below (Table 7.31).

Factor 1 (event 1): *Attractiveness and exposure*

- The event attribute attractiveness and exposure is directly correlated (p = 0.001) to the other event attributes and small to medium correlation coefficients supported this result. Respondents who find the attractiveness and exposure important will also find ***accessibility and affordability*** (r_s = 0.283), ***challenge and reputation*** (r_s = 0.445) and ***location and climate*** (r_s = 0.491) as important attributes when choosing an event and vice versa.
- The travel behaviour factors ***individual travel opportunities*** (r_s = 0.418; p= 0.001) and ***group destination travel opportunities*** (r_s = 0.358; p= 0.001) had medium relationship with the factor. Respondents who find *attractiveness and exposure* as an important event attribute agreed that their event participation has a greater influence on their *individual travel opportunities* and *group destination travel opportunities* and vice versa.

Factor 2 (event 2): *Accessibility and affordability*

- Medium and small positive correlation coefficients show that respondents who seek the *accessibility and affordability* of an event will also find the ***attractiveness and exposure*** (r_s = 0.283; p = 0.001), ***challenge and reputation*** (r_s = 0.453; p = 0.001) and ***location and climate*** (r_s = 0.345; p = 0.001) of an event as important event attributes. Likewise, respondents who find the above-mentioned attributes as important will also find *accessibility and affordability* of an event, important.
- Respondents who find *accessibility and affordability* as important will have more ***group destination travel opportunities*** (r_s = 0.136; p= 0.002), this result is supported by the small, positive correlations coefficient. This result shows that respondents who regard *accessibility and affordability* as important agreed that their event participation has more of an influence on their *group destination opportunities* and vice versa.

Factor 3 (event 3): *Challenge and reputation*

- ***Attractiveness and exposure*** (r_s = 0.445; p = 0.001) ***accessibility and affordability*** (r_s = 0.453; p = 0.001) and ***location and climate*** (r_s = 0.461; p = 0.001) all had small correlation coefficients, which indicate that respondents who see *challenge and reputation* as an important attribute will also see the other event attributes as important when choosing an event and vice versa.
- Positive correlations coefficients showed that *challenge and reputation* had a small relationship with the travel behaviour factors ***individual travel opportunities*** (r_s = 0.258;

p= 0.001) and ***group destination travel opportunities*** (r_s = 0.157; *p*= 0.001). This result shows that respondents who find *challenge and reputation* as an important event attribute agreed that their event participation has a greater influence on their *individual travel opportunities* and *group destination travel opportunities*. Also respondents who indicated that they have more *group destination travel opportunities* and *individual travel opportunities* will see the *challenge and reputation* of an event as an important attribute.

Factor 4 (event 4): *Location and climate*

- The travel behaviour factors ***individual travel opportunities*** (r_s = 0.393; *p*= 0.001) and ***group destination travel opportunities*** (r_s = 0.343; *p*= 0.001) both had medium positive correlations coefficients, which indicate that respondents who find *location and climate* as an important event attribute agreed to having more *individual travel opportunities* and *group destination travel opportunities*, because of their event participation. Also, respondents who indicated that they have more individual and group destination travel opportunities, will regard the *location and climate* as an important event attribute (Table 7.31).

7.5.2.4 Spearman's rho results for the travel behaviour factors

The final section discusses the significant variables for the travel behaviour factors. Important to note is that only the correlations that were not already stated in the previous discussions are considered below (Table 7.31).

Factor 1 (travelb 1): *Individual travel opportunities*

- The travel behaviour factor ***group destination travel opportunities*** (r_s = 0.555; *p*= 0.001) is largely positively correlated to *individual travel opportunities*, therefore respondents with more *individual travel opportunities* will also have more *group destination travel opportunities* and vice versa. On the other hand, a negative small correlation coefficient shows that respondents with more *individual travel opportunities* will have less ***destination choice opportunities*** (r_s = -0.294; *p* = 0.001). Therefore the more a respondent agreed that their event participation influences their *individual travel opportunities,* the less likely they will have separate event and holiday destinations and vice versa.

Factor 2 (travelb 2): *Group destination travel opportunities*

- ***Destination choice opportunities*** (r_s = -0.198; *p* = 0.001) had a small negative correlation coefficient with *group destination travel opportunities*, therefore respondents who agreed that their event participation has led to more *destination travel opportunities* will have less *destination choice opportunities* and vice versa.

Factor 3 (travelb 3): *Destination choice opportunities*

The significant relationships between *destination choice opportunities* and the other factors are outlined above. However all relationships were small and negative.

7.6 Results from the SEMs

In addition to the multiple statistically analysis conducted as discussed in the previous sections, the researcher wanted to confirm the findings. For this purpose, various SEMs were developed. The purpose of the SEM analysis within the context of the present study is to determine the relationship between the factors (lifestyle, event attributes and travel behaviour as identified in the factor analyses. These factos individual and combined) and the factor commitment. The results from the SEMs will show which factors or combination of factors has the greatest unique influence on the commitment of endurance sport athletes in South Africa. The next section outlines the SEM process.

7.6.1 Evaluating structural equation modelling

Structural equation modelling (hereafter referred to as SEM) is a confirmatory multivariate statistical approach to empirical data, both conventional and recently developed approaches in a diagrammatic form. In SEM the interaction amongst these variables are modelled (Dion, 2008:365). SEM is described as a methodology for representing, estimating and testing a network of relationships between variables (measured variables and latent constructs) (Suhr, 2006:1). The goal is to select a model that best accounts for the data (Foster, Barkus & Yavorsky, 2006:103; Dion, 2008:365). The primary goal of a SEM analysis is to confirm research hypotheses about the observed means, variances, and covariance of a set of variables (Kline, 1998:343; Suhr, 2006:1; Dion, 2008:365; Bowen & Guo, 2012:7). In social sciences research, SEM can be viewed as a combination of factor analysis and regression or path analysis (Hox & Bechger, 1998:354; Bowen & Guo, 2012:5). In order to test hypotheses about data, each pathway in the model is determined through multiple regressions and then various direct and indirect effects are described. The resulting path diagram “model” demonstrates the significance (or spuriousness) of different paths (Hox & Bechger, 1998:354; Foster *et al.,* 2006:103). Furthermore, contrasting to conventional regression models, SEM can estimate a single analysis procedure model in which one or more variables can simultaneously be predicted or act as a predictor variable.

The SEM analysis has been widely used in social sciences, economics, population genetics, marketing, ecology and other fields where an analysis of complex data sets can be used to make educated decisions about the behaviour and the market (Foster *et al.,* 2006:103). SEM is suitable for multivariate data aimed at qualitative and quantitative research approaches. SEM also requires large sample sizes ($n \geq 200$), but the most collective rule of thumb is that the number of

observations in SEM is dependent on how many variables there are (Hox & Bechger, 1998:358; Boomsma, 2000:462; Foster *et al.,* 2006:105-106; Bowen & Guo, 2012:8). In SEM, all of the relationships in the model (arrows) are tested at one time by making use of a path diagram, which consists of boxes and circles that are connected by arrows. A rectangle or square box and latent (or unmeasured) factors by a circle or ellipse (Hox & Bechger, 1998:355; Drukker, 2011:4) represent observed (or measured) variables. Single headed arrows or paths are used to define causal relationships in the model, with the variable at the tail of the arrow causing the variable at the point. Double-headed arrows indicate covariance or correlations, without a causal interpretation. Statistically, the single headed arrows or paths represent regression coefficients and double-headed arrows covariance. Extensions of this rotation have been developed to represent variances and means (Hox & Bechger, 1998:355).

Foster *et al.* (2006:108) and Kenny (2011:1) divided the SEM procedure into four steps. In view of that, a discussion of each step follows.

Step 1: Specification

The first step can be seen as the development of a theoretical model regarding equations or a diagram. This step is constructing the path diagram, which are the researcher's hypotheses about the relationship between variables. The path diagram is a summary of theoretically suggested relationships among latent variables and indicators as well as directional (regression) and non-directional relationships (i.e. correlations) among latent variables. (Bowen & Guo, 2012:7). The model specification is usually guided by a combination of theory and empirical results from previous research (Hox & Bechger, 1998:358). Here it is important for the researcher to review the relevant theory and research literature to support the model specifications and to specify a model regarding diagrams and equations (Suhr, 2006:2).

Step 2: Identification

In Step 2, the model, in theory, could be estimated with the observed data. This step, therefore, involves finding a solution for the model (Blunch, 2013:78). According to Kelloway (1998:14), identification consists of the estimation of unknown parameters (e.g. factor loadings or path coefficients) based on observed covariance/ correlations for models. There are usually three basic solutions for models: Just-identified (one single unique solution for each parameter estimate); Under-identified (models where there are an infinite number of parameters estimates, and thus any reliable solution becomes a remote possibility); and Over-identified (models that have a number of solutions, except a single "best solution"). Working with an over-identified model is preferred, and the current study therefore, makes use of this type of model.

Step 3: Estimation

Estimation involves that models' parameters are estimated statistically from the data. Multiple regression is one method of estimating parameters. Different computer programs estimate model parameters. This takes place "behind the scenes" where a comparison is made between the implied covariance matrix with the observed covariance matrix repeatedly until it arrives at a position where the two are very similar (Suhr, 2006:2; Blunch, 2013:81).

Step 4: Testing of model fit

The final step entails the comparison of the predicted correlations or covariance that was observed against the actual correlations or covariance, including the assessment of the extent of agreement between the predicted and actual correlations or covariance. The real question in practice, however, is not whether the input and implied matrices are truly identical, but how similar the two are to each other. The terms "goodness of fit" refers to how similar the two matrices are and whether they are similar enough that the researchers can claim support for the hypothesised model (Bowen & Guo, 2012:141). The fit indices are intended to inform the researcher how closely the data fit the model (Byrne, 2016:102). If the fit is not adequate, it becomes common practice to modify the model, by deleting parameters that are not significant and adding parameters that improve the fit (Hox & Bechger, 1998:363). The most commonly used fit indices, include:

Model Chi-Square x^2

Model Chi-Square x^2 is the most basic and common fit statistic that is used to evaluate structural equation models and should always be provided in reports on SEM analysis. It is a measure of the difference between what the actual relationships in the sample are, and what would be expected if the model were assumed correctly. Thus, a large difference suggests that the model does not fit. A model that represented the sample data well would yield a ratio close to 1, and most researchers would reject a model that was close to or over 2 (Dion, 2008:366). If the chi-square is highly significant, the hypothesised model is rejected and search for a better model should start (Hox & Bechger, 1998:358).

Root mean square error of approximation (RMSEA)

RMSEA is a measure of how close the implied matrix is to the observed variance-covariance matrix. RMSEA is related to the difference in the sample data and what would be expected should the model be assumed correct (Dion, 2008:366). In practice, a value of RMSEA ≤ 0.05 indicates close approximate while fit values between 0.05 and 0.08 suggest reasonable error of approximation, and values > 0.10 indicate poor fit (Dion, 2008:366; Bowen & Guo, 2012:145; Byrne, 2016:98).

Comparative Fit Index (CFI)

The model complexity does not affect CFI, and it has a maximum value of 1. A good fitting model should have a CFI greater than 0.95 (Dion, 2008:366).

Goodness-of-fit index (GFI)

Values exceeding 0.90 are recommended for the GFI (Bowen & Guo, 2012:145), but with these indices, larger values mean a better fit (Suhr, 2006:2). Table 7.32 summarises the fit indices as mentioned above as well as the appropriate criteria for each. It is important to note that the values and criteria indicated are only guidelines and should not be seen as cut-off points for the interpretation of the SEMs.

Table 7-32: Recommended fit indices and guideline criteria

Fit index	Fit Criteria	Recommended by
Chi-square (x^2)	x^2 values needs to result in a nonsignificant *p*-value ($p > 0.05$)	Bollen (1989:303) and Kline (2015:270)
Root mean square error of approximation (RMSEA)	Close fit: ≤ 0.05 Reasonable fit: 0.05-0.08 Poor fit: ≥ 0.10	Browne and Cudeck (1993:136)
Comparative fit index (CFI)	≥ 0.95	Hu and Bentler (1999:1)
Goodness-of-fit index (GFI)	≥ 0.90	Hoyle and Panter (1995:158)

Source: Adapted from Bowen and Guo (2012:146)

SEM works like a regression by taking the correlation of the independent variables into account in order for the standardised regression weights to be similar to the semi partial correlation and ordinary regression. Spearman's Rank Order Correlations (Table 7.31) showed the correlation between the different factors with commitment. The SEMs will however give an indication of the unique (over and above) relation between each factor with commitment. For the purpose of the study, seven SEMs were therefore developed. The first three SEMs were developed to show the individual relationship between the lifestyle, event attribute and travel behaviour factors and commitment. Another SEM was developed to demonstrate the relationship between the combined factors and commitment. Then three mediation models were developed. In each case, the steps discussed above were applied. Consequently, the results from the SEMs are discussed. Table 7.33 was designed to recognise the different abbreviations and numbers used in each of the SEM models. As shown in Table 7.33, each number represents the particular item below the factor, as was measured in the questionnaire.

Table 7-33: Item description for SEM model purposes

Item as numbered in SEM	Item Description
Commitment	
Commit1: Enjoyment, personal investment and involvement opportunities	
1	I enjoy participating in endurance sport
8	Continued participation in endurance sport keeps me fit and in shape
12	Continued participation in endurance sport gives me the opportunity to do something exciting
16	Continued participation in endurance sport challenges me
2	I have fun while participating in endurance sport
15	Continued participation in endurance sport gives me a feeling of accomplishment
11	Continued participation in endurance sport relieves me from stress
9	Continued participation helps me attain certain goals
3	I put lots of time, energy and effort into training and participating in endurance sport
6	Continued participation in endurance sport makes me feel confident
4	I invest lots of money in endurance sport
Commit2: Involvement alternatives and social constraints	
5	There are other more attractive sport activities
18	I only participate because of the social pressures
17	I feel pressure from my significant others to keep participating in endurance sport
Commit3: Dedication and social support	
21	I will do anything not to abandon endurance sport
20	I am dedicated and will adapt my lifestyle to continue the practice of endurance sport
19	Family and friends provide me with consolation and like to watch and support me while I participate in endurance sports
22	I am committed to continue participation in endurance sport
Lifestyle	
Life 1: Health and fitness	
1	I adopted a strict, healthy diet
2	I supplement with vitamins and other nutritional products
3	I have a strict training programme
4	I adapt my sleeping patterns when and participating in events
8	I hired a coach to help me with my training
9	I joined a sports club or gym
Life2: Media consumption	
16	I watch sports on TV
18	I read sport magazines or newspapers
19	I listen to sport on the radio
20	I read about and watch sport on the internet
21	I attend and support sport events
22	I actively follow sport on social media
23	I use sport-related apps on my phone or personal computer
Life3: Leisure and event participation	

5	I constantly search for events to participate in and adapt my work schedule to suit my endurance sport activities
6	I plan my holidays around endurance sport
7	I plan my travel to fit in with the events I participate in
10	I motivate my friends and family to become involved as spectators and participants
Life4: Sport development	
13	I make donations to sport development programs
14	I actively attend sport lifestyle expos to keep up to date with the latest trends and sports gear
15	I am actively involved in youth development programs
Life5: Enhanced performance spending	
11	I invest in the best training equipment and sport gear
12	I invest in the best sportswear and accessories
17	I subscribe to sport magazines and newspapers
Event attributes	
Event1: Attractiveness and exposure	
18	The event gets a lot of media exposure and coverage
17	The event has a loyalty programme
16	The event gives away a lot of prize money
15	The event attracts the world's best endurance athletes
14	The event has different categories I can participate in (professional, amateur, charity)
19	The event takes place annually
7	The event has international standing
8	The event will help me qualify for other events
13	The event has pre-events that involve the whole family (e.g. fun run, junior events)
Event 2: Accessibility and affordability	
2	The event registration and travel costs are affordable
1	The event is close to my home city or town
20	The event is easily accessible (e.g. available information and easy registration process)
Event 3: Challenge and reputation	
12	The event is challenging
4	The event has a good reputation
3	The event has an interesting race course or location
9	The event is well organised
11	I've never participated in the event before
Event 4: Location and climate	
5	The event location has many things to do and places to see
6	The event is ideally located in terms of climate and altitude
Travel behaviour	
TravelB 1: Individual travel opportunities	
7	I see my endurance sport participation as an opportunity to travel overseas
9	I plan my sport participation in order to see different attractions and destinations

10	I plan to return to the destinations I have participated in for holiday purposes
8	My sport participation gives me an opportunity to explore the city/town that I participate in
6	I only choose a holiday destination if it gives me an opportunity to train (e.g. facilities and resources)
3	Participation in endurance sport gives me the opportunity to travel
TravelB 2: Group travel opportunities	
1	Family and friends can accompany me to endurance events
2	I visit tourist attractions before, during and /or after participating in endurance events
5	I travel in the area where my endurance event takes place
TravelB 3: Holiday choice opportunities	
4	**My sport participation and holiday destination(s) are separate**

Source: Authors own compliation

Previous results and relevant literature were used to form the hypotheses that are relevant throughout the discussion of the SEMs. The next section reviews the literature that was applied to develop the hypothesis for the different SEM models (Model 1-4).

7.6.1.1 Lifestyle and sport commitment

Endurance athletes have been reported to make significant lifestyle adjustments to accommodate their sporting efforts (Hill & Robinson, 1991:85; Lamont & Kennelly, 2012:236). Endurance athletes are the prime example of having healthy lifestyles as they rarely exhibit typical health-related risk behaviour such as smoking and they normally have a healthy diet, and try to have unchanging sleeping patterns (Schnell, Mayer, Diehl, Zipfel & Thiel, 2014:165). A lifestyle in which sport is the main focus mostly includes motives such as satisfaction and enjoyment, developing abilities, establishing friendships and overcoming the challenges inherent to a sport activity (Chen, 2006:5; Rauter, 2014:8). The intertwining of all these motives results in feelings of enjoyment that can drive people to become committed to a sport, invest more energy in sport and ultimately become a way of life (Rauter, 2014:8). Shipway and Jones (2007:373) report that sport enthusiasts also demonstrate a specific type of consumption, for example, they share a similar style of dress and usually only wear those brands that are renowned and popular in a specific sport. Many theories and models such as recreation specialisation, event travel careers, and enduring involvement show that people adjust their daily schedules and even their lifestyle to accommodate leisure and sport activities. These concepts are very relevant to niche tourist markets such as endurance sport participants, since these athletes tend to exhibit high levels of involvement (Ritchie *et al.,* 2010:412). Consequently, participants take part in endurance sport events to find happiness, satisfaction, their personality and self-assurance that are many times subdued by other parts of their lifestyle (Rauter, 2014:8). The following null and alternative hypotheses are thus formulated:

$H_{0\ (1a):}$ Lifestyle has no unique relation to commitment.
H_{1a}: Lifestyle has a unique relation to commitment.

7.6.1.2 Event attributes and sport commitment

Research has shown that endurance athletes are very selective when it comes to choosing an event. Endurance athletes consider race attributes such as the type of sport, the distance, pre- and post-event activities, event size, event location or destination, event reputation and the challenge of the course (Rundio, Heere & Newland, 2014:25). The endurance event can furthermore have a direct influence on sport commitment. An event can influence both the initiation and continuation of participation through its impact on attitude formation and change that occurs during the event (Funk & James, 2001:120). As a result, endurance events can serve as a catalyst to increase attitudes toward physically active leisure that would correlate to increased behavioural activity and participation (Wilhelm Stanis, Schneider & Russell, 2009:290). Theoretically, if an endurance event can promote positive and stronger attitudes toward physical activity, it could play an influential role in developing two significant consequences, namely increasing psychological commitment to a specific sport; and cultivating intentions to engage in general exercise activity and event participation (Funk & James, 2001:120; Funk *et al.,* 2011:251; Beaton *et al.,* 2011:130).

$H_{0\ (1b):}$ Event attributes has no unique relation to commitment.
H_{1b}: Event attributes has a unique relation to commitment.

7.6.1.3 Travel behaviour and sport commitment

Another factor prominent to sport tourism is the travel behaviour of participants. Various studies have confirmed the positive economic impact of sports on host destinations and tourism development (Li, Blake & Thomas, 2013:235; Giampiccoli, Lee & Nauright, 2015:229; Hinch, Higham & Moyle, 2016:163). However, the direct link between commitment and the influence of commitment on travel choice and travel behaviour has to date not been researched or empirically validated. Although not the primary focus, Kruger and Saayman (2013a:88) showed the influence of participation in sport on participants' (marathon runners competing in the Comrades Marathon, South Africa) holiday choice and travel behaviour. The study identified that participation in sport *sometimes* influenced holiday selection and travel behaviour while some participants preferred to take a holiday to a destination other than the destination where they had to participate. Results about different types of runners revealed that more serious runners regularly made their travel choices based on their event participation (Kruger & Saayman, 2013a:88). Runners that are more dedicated also visited tourist attractions in the area coincidentally during the event (Kruger & Saayman, 2013a:87-88). These results are relevant as it shows that sport participation can have an influence on travel behaviour and those more serious participants (more dedicated in terms of

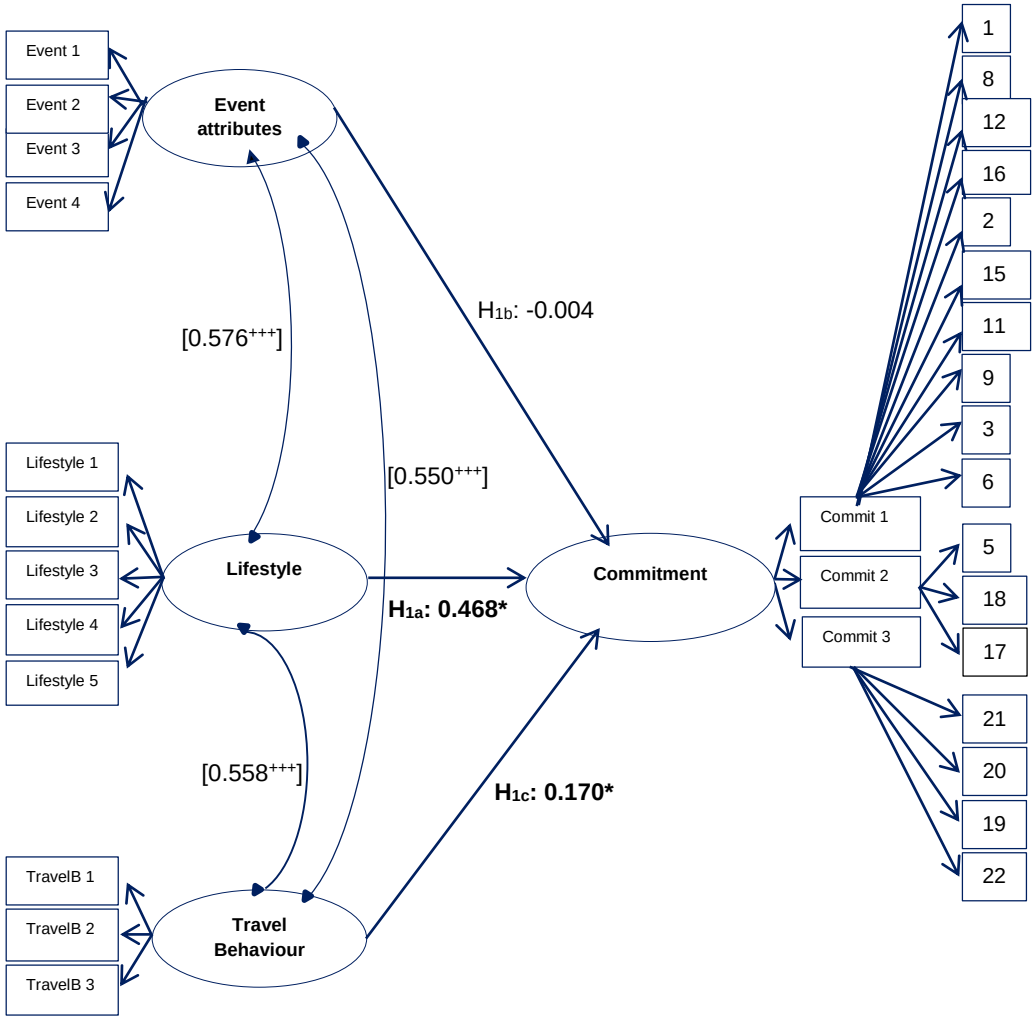
their motives to compete and loyalty to the event), unify their holidays and event participation. However, empirical evidence for this relationship is yet to be substantiated.

$H_{0\ (1c)}$: Travel behaviour has no unique relation to commitment.
H_{1b}: Travel behaviour has a unique relation to commitment.

With the afore-mentioned hypotheses in mind, the following sections discuss the results from the seven SEM models.

7.6.2 Results from the combined factors and commitment SEM (Model 1)

The SEM model (Model 1) shows the relationship between the combined lifestyle, event attribute and travel behaviour factors with regard to commitment. In Figure 7.1, the statistical significance of each construct is indicated as well as the commitment factor correlation paths based on the hypotheses formulated above. The inspection of the standardised coefficients for regression paths was the method applied for examining the relationship between the identified latent variables. The correlations between the different factors are also shown [in box or square brackets] with values that can be interpreted at three levels in the correlation matrix: r_s=0.10 – 0.29=small^{+}; r_s= 0.30 - 0.49=medium^{++}; r_s= 0.50 – 1.0=large^{+++}.



MODEL 1: *Lifestyle, event attributes* and *travel behaviour* with *commitment*	
Null hypotheses	
$H_{0\ (1a)}$:	*Lifestyle* has no unique relation to commitment.
$H_{0\ (1b)}$:	*Event attributes* has no unique relation to commitment.
$H_{0\ (1c)}$:	*Travel behaviour* has no unique relation to commitment.
Alternative hypotheses	
H_{1a}:	*Lifestyle* has a unique relation to commitment.
H_{1b}:	*Event attributes* has a unique relation to *commitment*.
H_{1c}:	*Travel behaviour* has a unique relation to *commitment*.

Figure 7-1: SEM Model 1 the relationship between lifestyle, event attributes, travel behaviour and commitment with the null hypotheses and alternative hypotheses

(*See* Table 7.33 for item descriptions)

* Significant 5% = $p < 0.05$; r_s: [0.10 – 0.29=small^{+}; rs= 0.30 - 0.49=medium^{++}; rs= 0.50 – 1.0=large^{+++}] (Cohen, 1988:79-81)

The fit indices in Table 7.34 show that The Root Mean Square Error of Approximation (RMSEA) is 0.105 with 90% confidence that it lies between 0.097 and 0.114 which is less desirable. Values for the Comparative Fit Index (CFI) should be between 0.0 and 1.0 and the values closer to 1.0 indicated a good fit. The CFI was 0.822, which means that it is acceptable. Also, the relative/normed chi-square or x^2/df is divided by its degrees of freedom and is advised to be between 2.0 and 5.0. Therefore, the value of 6.512 is not considered acceptable. The CMIN/DF as well as RMSEA shows that the model is a poor fit. Therefore, the model will be used for explanatory purposes only and not for predictive purposes.

Table 7-34: Goodness-of-fit indices

Model	CMIN/DF	CFI	RMSEA with 90% CI
Model 1	6.512	0.822	0.105 [0.097; 0.114]

Table 7.35 shows the maximum likelihood estimates; the regression weights of the structural parts of the model and the statistical significance of the factors (also *see* Figure 7.1).

Table 7-35: The standardised regression weights, estimates and *p*-value for Model 1

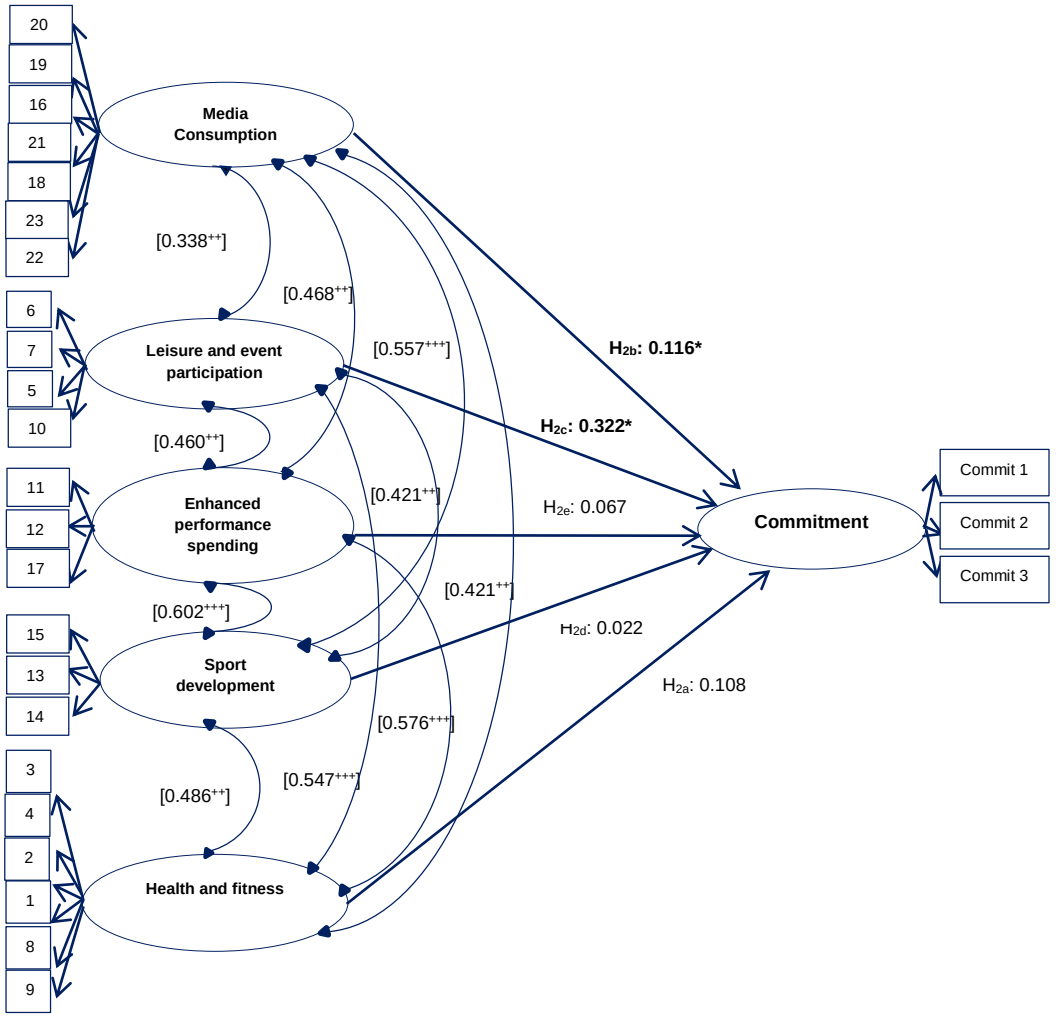
Hypothesis			Factors	Standardised regression weights	Sig. level
MODEL 1					
H_{1a}	**Commitment**	**<---**	***Lifestyle***	**0.468**	**0.001***
H_{1b}	Commitment	<---	*Event attributes*	-0.004	0.961
H_{1c}	**Commitment**	**<---**	***Travel behaviour***	**0.170**	**0.016***

Both *lifestyle* (0.468) and *travel behaviour* (0.170) had significant positive standardised regression weights. *Event attributes* (-0.004) on the other hand had a non-significant standardised regression weight. The results from Table 7.35 therefore indicates that H_{1a} (p = 0.001) and H_{1c} (p = 0.016) are supported at a level of significance ($p \leq 0.05$), while H_{1b} (p= 0.961) is rejected, thereby rejecting $H_{0\ (a\ and\ c)}$ (Figure 7.1). *Lifestyle* and *travel behaviour* thus have a unique relation to commitment. Thus, if the aim is to increase commitment, the focus should be on managing these two aspects.

7.6.3 Results from the individual factors and commitment SEM models

Model 1 described the relationship of the combined factors with commitment. It is evident from Model 1 that *Lifestyle* and *Travel behaviour* have a positive influence on commitment. The researcher furthermore wanted to explore which individual factors had a unique contribution to commitment. The SEM models (Model 2, 3 & 4) therefore show the relationship between the event

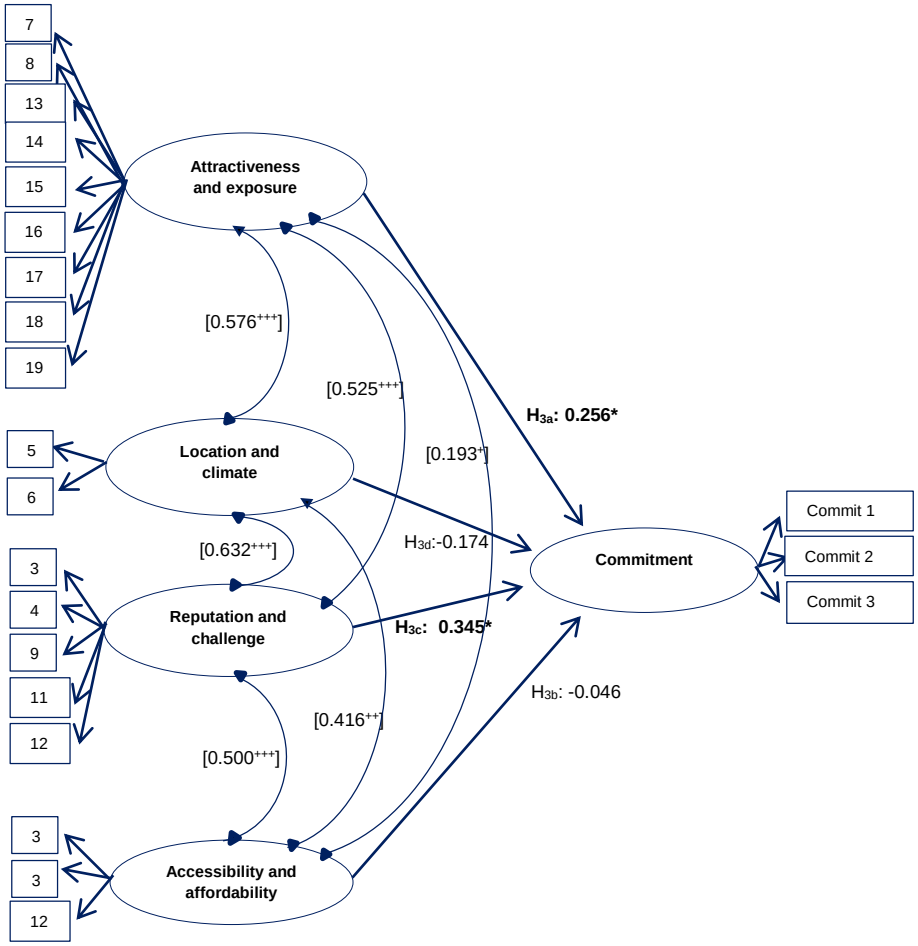
attribute - individual lifestyle - and travel behaviour factors with regard to commitment. The hypotheses and each of the models are displayed in Figure 7.2, 7.3 and 7.4 respectively. Again the statistical significance of each construct is indicated as well as the commitment factor correlation paths [in block brackets] based on the hypotheses formulated above. The inspection of the standardised coefficients for regression paths was again the method applied for examining the relationship between the identified latent variables.



MODEL 2: Individual *lifestyle* factors with *commitment*	
Null hypothesis	
$H_{0\ (2a\text{-}e)}$: The individual *lifestyle* factors have no unique relation to *commitment.*	
Alternative hypotheses	
H_{2a}	*Health and fitness* has a unique relation to commitment.
H_{2b}	*Media consumption* has a unique relation to commitment.
H_{2c}	*Leisure and event participation* has a unique relation to commitment.
H_{2d}	*Sport development* has a unique relation to commitment.
H_{2e}	*Enhanced performance spending* has a unique relation to commitment.

Figure 7-2: SEM Model 2 confirming the relationship between individual lifestyle and commitment of endurance sport athletes

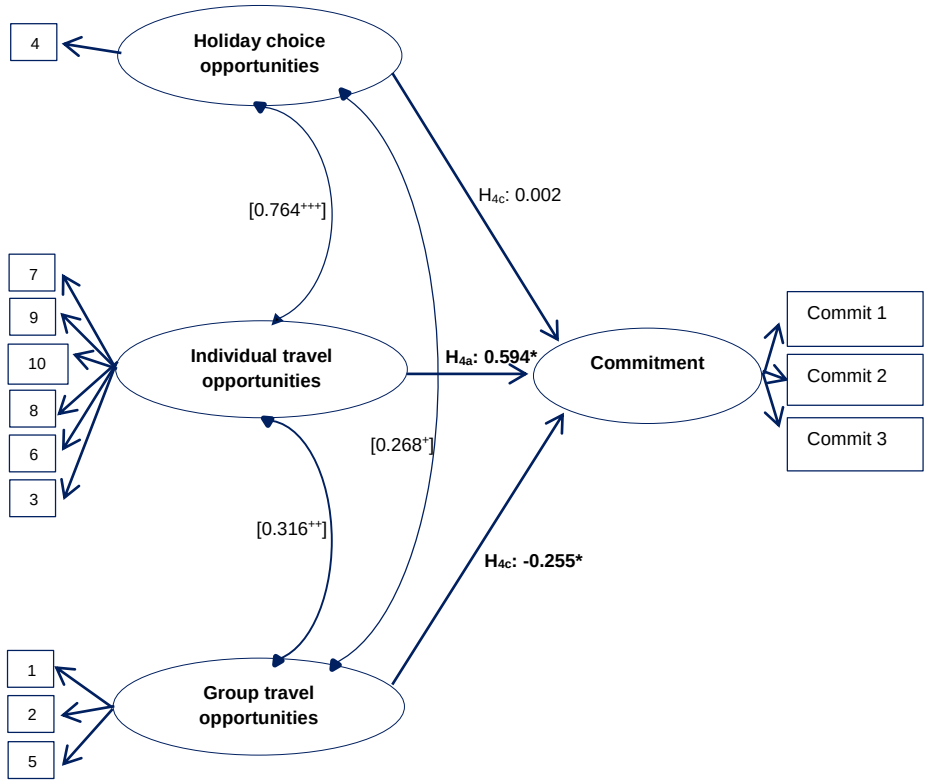
(*See* Table 7.33 for item descriptions)* Significant 5% = $p < 0.05$;; r_s: Cohen (1988:79-81) indicated that values can be interpreted at three levels in the correlation matrix [r_s=0.10 – 0.29=small^{+}; r_s= 0.30 - 0.49=medium^{++}; r_s= 0.50 – 1.0=large^{+++}]



MODEL 3: Individual *event attributes* factors with *commitment*	
Null hypothesis	
$H_{0\ (3a-d)}$: The individual *event attributes* factors has no unique relation to *commitment*	
Alternative hypotheses	
H_{3a}	*Attractiveness and exposure* has a unique relation to *commitment*.
H_{3b}	*Accessibility and affordability* has a unique relation to *commitment*.
H_{3c}	*Challenge and reputation* has a unique relation to commitment.
H_{3d}	*Location and climate* has a unique relation to *commitment*.

Figure 7-3: SEM Model 3 confirming the relationship between individual event attributes and commitment

(*See* Table 7.33 for item descriptions)* Significant 5% = $p < 0.05$; r_s: Cohen (1988:79-81) indicated that values can be interpreted at three levels in the correlation matrix [r_s=0.10 – 0.29=small^{+}; r_s= 0.30 - 0.49=medium^{++}; r_s= 0.50 – 1.0=large^{+++}]



MODEL 4: Individual *travel behaviour* factors with *commitment*	
Null hypothesis	
$H_{0\ (4a\text{-}c)}$: The individual *travel behaviour* factors has no unique relation to *commitment.*	
Alternative hypotheses	
H_{4a}	*Individual travel opportunities* has a unique relation to *commitment*.
H_{4b}	*Group travel opportunities* has a unique relation to *commitment*.
H_{4c}	The reversed *holiday choice opportunities* factor has a unique relation to *commitment*.

Figure 7-4: SEM Model 4 confirming the relationship between individual travel behaviour and commitment

(*See* Table 7.33 for item descriptions) * Significant 5% = $p < 0.05$; r_s: Cohen (1988:79-81) indicated that values can be interpreted at three levels in the correlation matrix [r_s=0.10 – 0.29=small^{+}; r_s= 0.30 - 0.49=medium^{++}; r_s= 0.50 – 1.0=large^{+++}]

The fit indices in Table 7.36 provide the evidence of a good fit for each of the proposed models (*see* Figures 7.2-7.4). In all cases, the Root Mean Square Error of Approximation (RMSEA) is not below the expected margin of 0.08. However, according to Blunch (2013:118), models with RMSEA values of 0.10 and larger should not be accepted and thus all three models are still acceptable with 90% confidence. The values consequently, still fall in a reasonable range of respectively 0.083 [0.078; 0.087], 0.088 [0.083; 0.094] and 0.085 [0.075; 0.096]. Values for the Comparative Fit Index (CFI) should be between 0.0 and 1.0 and the values closer to 1.0 indicated a good fit. The CFI was respectively 0.821, 0.825 and 0.904 which means that all three models are acceptable. In addition, the relative/normed chi-square or x^2/df were considered acceptable as the values were respectively, 4.394, 4.884 and 4.636. Therefore, all three cases were in the acceptable ratio for the chi-square divided by its degrees of freedom, which should be between 2.0 and 5.0.

Table 7-36: Goodness-of-fit indices for SEM models 2 to 4

Model	CMIN/DF	CFI	RMSEA with 90% CI
Model 2 [$H_{(2a-e)}$]	4.394	0.821	0.083 [0.078; 0.087]
Model 3 [$H_{3(a-d)}$]	4.884	0.825	0.088 [0.083; 0.094]
Model 4 [$H_{4(a-c)}$]	4.636	0.904	0.085 [0.075; 0.096]

Table 7.37 shows the maximum likelihood estimates, the regression weights of the structural parts of the models and the statistical significance of the factors as evident in Figures 7.2-7.4.

Table 7-37: The standardised regression weights, estimates and *p*-value for lifestyle, event attribute and travel behaviour factors

Hypothesis			Factors	Standardised regression weights	Sig. level
MODEL 2					
H_{2e}	Commitment	<---	*Enhanced performance spending*	0.067	0.362
H_{2c}	**Commitment**	**<---**	***Leisure and event participation***	**0.322**	**0.001***
H_{2d}	Commitment	<---	*Sport development*	0.022	0.795
H_{2b}	**Commitment**	**<---**	***Media consumption***	**0.166**	**0.009***
H_{2a}	Commitment	<---	*Health and fitness*	0.108	0.130
MODEL 3					
H_{3c}	**Commitment**	**<---**	***Challenge and reputation***	**0.345**	**0.001***
H_{3d}	Commitment	<---	*Location and climate*	0.174	0.072
H_{3b}	Commitment	<---	*Accessibility and affordability*	0.046	0.517

H_{3a}	**Commitment**	**<---**	***Attractiveness and exposure***	**0.256**	**0.001***
MODEL 4					
H_{4a}	**Commitment**	**<---**	***Individual travel opportunities***	**0.594**	**0.001***
H_{4b}	**Commitment**	**<---**	***Group travel opportunities***	**-0.255**	**0.021***
H_{4c}	Commitment	<---	*Holiday choice opportunities*	0.002	0.973

* Statistically significant: $p \leq 0.05$

Looking at the results for Model 2 (individual lifestyle factors), H_{2b} ($p = 0.009$) and H_{2c} ($p = 0.001$) are supported, thereby rejecting the null hypothesis $H_{0\ (2b\ and\ 2c)}$ (Figure 7.2). Although all the lifestyle factors have an influence on commitment as specified by Spearman correlations (see Table 7.31) the only lifestyle factors that have a unique relation to commitment are *leisure and event participation* and *media consumption*. The results from Table 7.35 further indicate that for Model 3 (individual event attributes), H_{3a} ($p = 0.001$) and H_{3c} ($p = 0.001$) were significant at a 5% level of significance, rejecting $H_{0\ (3a\ and\ 3c)}$ (Figure 7.3). The standardised regression weights of *challenge and reputation* (0.345), as well as *attractiveness and exposure* (0.256), are both positive. Again as seen with the correlations in Table 7.31, the event attributes were all correlated with commitment. However, based on the results of the SEM, the *challenge and reputation*, as well as *attractiveness and exposure* when choosing an event, have the greatest unique relation on commitment.

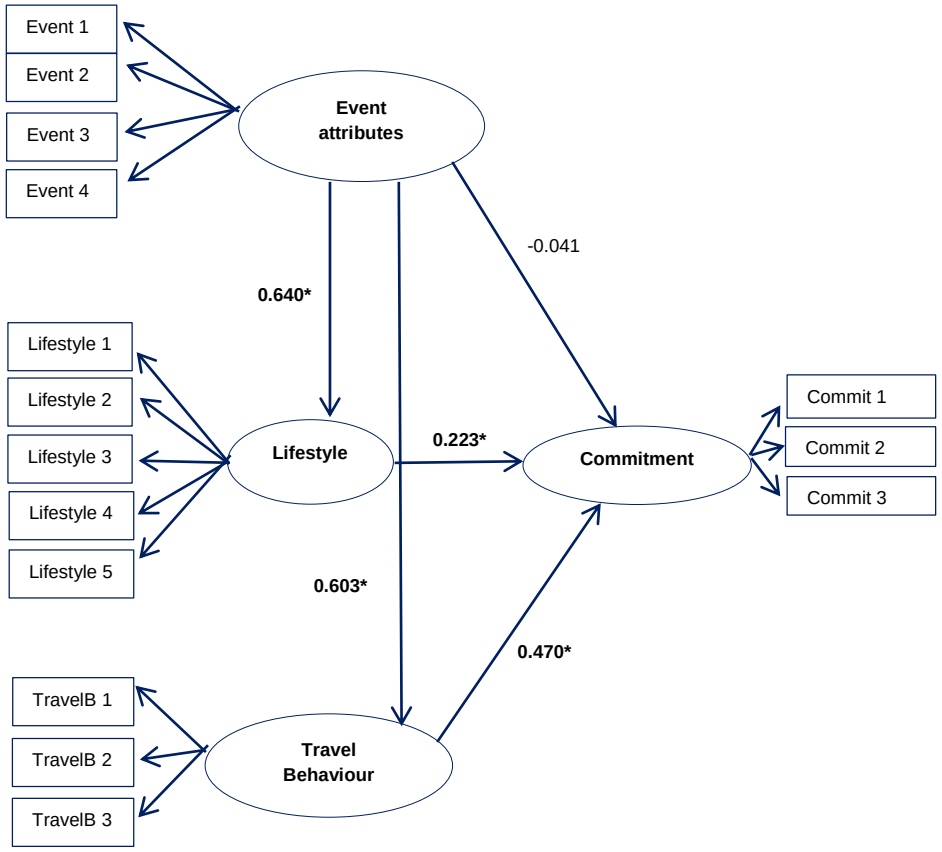
Finally Table 7.37 shows that for Model 4 (individual travel behaviour factors), H_{4a} ($p = 0.001$) and H_{4b} ($p = 0.021$) is accepted at a 5% level of significance, while H_{4c} ($p = 0.973$) is rejected. Moreover, $H_{0\ (4a\ and\ 4b)}$ is rejected (Figure 7.4). In the analysis of the standardised regression weight of *individual travel opportunities* (H_{4a}) (0.594), the value was positive, while *group travel opportunities* (H_{4b}) (-0.255) had a negative standardised regression weight. Although all three individual travel behaviour factors had a positive influence on commitment (see table correlations), *individual travel opportunities* had the greatest unique relation to commitment. Although *group travel opportunities* are positively correlated to commitment as a factor on its own, measurement in combination with the other two factors indicates a negative unique relation to commitment, thus a suppression effect occurs. This implies that when the aim is to enhance commitment among endurance sport respondents, by putting the emphasis on group travel in combination with the other factors, commitment will decrease. Therefore, the emphasis should rather be on increasing *individual travel opportunities* to increase commitment.

7.6.4 Results from mediation SEMs for event attributes, lifestyle, travel behaviour and commitment

The previous SEMs (Model 1-4) showed the unique relations between the factors (in combination and individually) and commitment. It is evident from the previous discussion, that event attributes was the only aspect to not have a unique relation to commitment (see Model 1). Event attributes, however, had a positive correlation with commitment with a standardised regression weight of 0.33 and a statistically significant value ($p < 0.001$). To examine the relationship closer, the researcher sought to explore whether lifestyle and travel behaviour might be mediators for the relationship between event attributes and commitment. This was done by firstly assessing both factors as possible mediators (Model 5) and then individually (Models 6 and 7).

Mediating models is a recently developed tool to investigate the mediation to better understand the relationships within social sciences. Researchers examine the presence of a mediator, also known as intervening variables in relationship among other variables. These models show the mechanisms or process that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third hypothetical variable known as a mediator variable (Sussman, 2017:195). A mediator variable can either account for all or some of the observed relationships between two variables; this is known as either full or partial mediation (Hayes, 2009:410). Full mediation is maximum evidence of mediation. This occurs if the inclusion of the mediator variable drops or increases the relationship between the independent variable and dependent variable. Partial mediation, on the other hand, maintains that the mediating variable accounts for some, but not all of the relationship between the independent and dependent variables (Zhao, Lynch & Chen, 2010:199). Partial mediation implies that there is not only a significant relationship between the mediator and the dependent and independent variables but also some direct relationship between the independent and dependent variable (Zhao *et al.,* 2010:199).

Model 5 determined the mediation relationship between *event attributes* as independent variable with *lifestyle* and *travel behaviour* as mediating variables and commitment as the dependent variable. The following hypotheses (Figure 7.5) were made based on the preceding SEM results. Figure 7.5 furthermore shows the mediation Model 5. The statistical significance of each construct is indicated as well as the commitment factor correlation paths based on the hypotheses.



MODEL 5: *Lifestyle, event attributes* and *travel behaviour* with *commitment*	
Null hypotheses	
$H_{0\ (5a-b)}$	*Lifestyle* and *Travel behaviour* are not mediators for the relationship between *Event attributes* and *commitment.*
Alternative hypotheses	
H_{5a}	*Lifestyle* is a mediator of the relationship between *event attributes* and *commitment.*
H_{5b}	*Travel behaviour* is a mediator of the relationship between *event attributes* and *commitment.*

Figure 7-5: Mediating SEM Model 5 confirming the relationship between event attributes, lifestyle, travel behaviour

(*See* Table 7.33 for item descriptions) * Significant 5% = $p < 0.05$

As shown in Table 7.38, The Root Mean Square Error of Approximation (RMSEA) is 0.107 with 90% confidence which lies within the [0.099; 0.116] margins, this is however not below the expected margin of ≤0.10, which indicates a poor fit. Values for the Comparative Fit Index (CFI) should be between 0.0 and 1.0 and the values closer to 1.0 indicated a good fit. The CFI was 0.812, which means that it is acceptable. Also, the relative/normed chi-square or x^2/df is not considered acceptable as the value was 6.754 and not in the acceptable ratio for the chi-square divided by its degrees of freedom which is between 2.0 and 5.0. It is clear from the RMSEA and CMIN/DF that Model 5 (Figure 7.5) is not a good fit. Therefore, this model will not be used for predictive purposes, but only for exploratory purposes.

Table 7-38: Goodness-of-fit indices

Model	CMIN/DF	CFI	RMSEA
Model 5	6.754	0.812	0.107 [0.099; 0.116]

Table 7.39 shows the maximum likelihood estimates, the regression weights of the structural parts of the model and the statistical significance of the factors.

Table 7-39: The standardised regression weights, estimates and *p*-values for Model 5

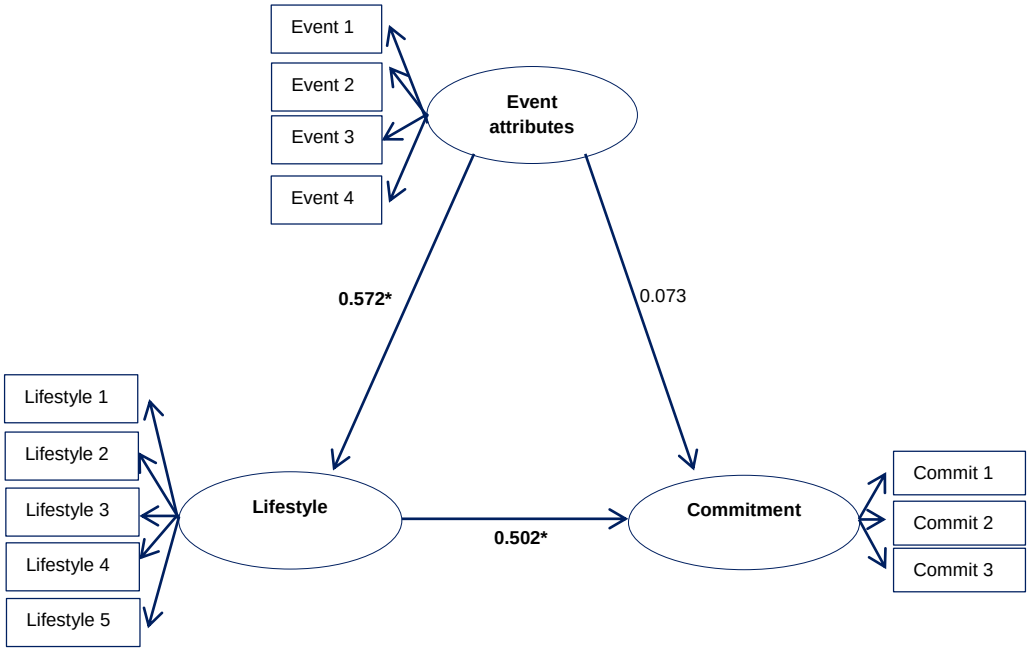
Hypothesis			Factors	Standardised regression weights	Sig. level
MODEL 5					
N/A	Commitment	<---	*Event attributes*	-0.41	0.658
H_{5a}	**Lifestyle**	**<---**	***Event attributes***	**0.640**	**0.001***
H_{5a}	**Commitment**	**<---**	***Lifestyle***	**0.470**	**0.001***
H_{5b}	**Travel Behaviour**	**<---**	***Event attributes***	**0.603**	**0.001***
H_{5b}	**Commitment**	**<---**	***Travel Behaviour***	**0.233**	**0.003***

Although event attributes is positively correlated to commitment (c.f. 7.6.4), as it is grouped with lifestyle and travel behaviour it results in event attributes without a unique relation to commitment (Figure 7.5). This can be seen in the non-significant standardised regression weight of event attributes with commitment (-0.041). It is evident in Table 7.39 that lifestyle as mediator, shows standardised regression weight of *event attributes* with *lifestyle* (0.640) and *lifestyle* with *commitment* (0.470) are positive and statistically significant ($p < 0.05$). This indicates that H_{5a} can be accepted. With travel behaviour as mediator, the standardised regression weight of *event attributes with travel behaviour* (0.603) as well as *travel behaviour with commitment* (0.233) are

also both positive and statistically significant ($p < 0.05$), thus accepting the H_{5b} and rejecting $H_{0(a-b)}$. It is clear that the combination of *lifestyle* and *travel behaviour* act as full mediators of commitment. Although a relationship could be observed between event attributes and commitment, when lifestyle and travel behaviour are added as mediators, this relationship becomes insignificant.

7.6.5 Results from individual mediation SEMs

Model 5 did not have a good fit and therefore mediators were examined individually. Model 6 shows whether lifestyle on its own is a mediator of the relationship between event attributes and commitment while Model 7 shows whether travel behaviour is a mediator of the relationship between *event attributes* and *commitment*. The mediation and hypotheses for Models 6 and 7 are depicted in Figures 7.6 and 7.7. Once more, the statistical significance of each construct is indicated as well as the commitment factor correlation paths based on the hypotheses formulated above. The inspection of the standardised coefficients for regression paths was the method applied for examining the relationship between the identified latent variables.

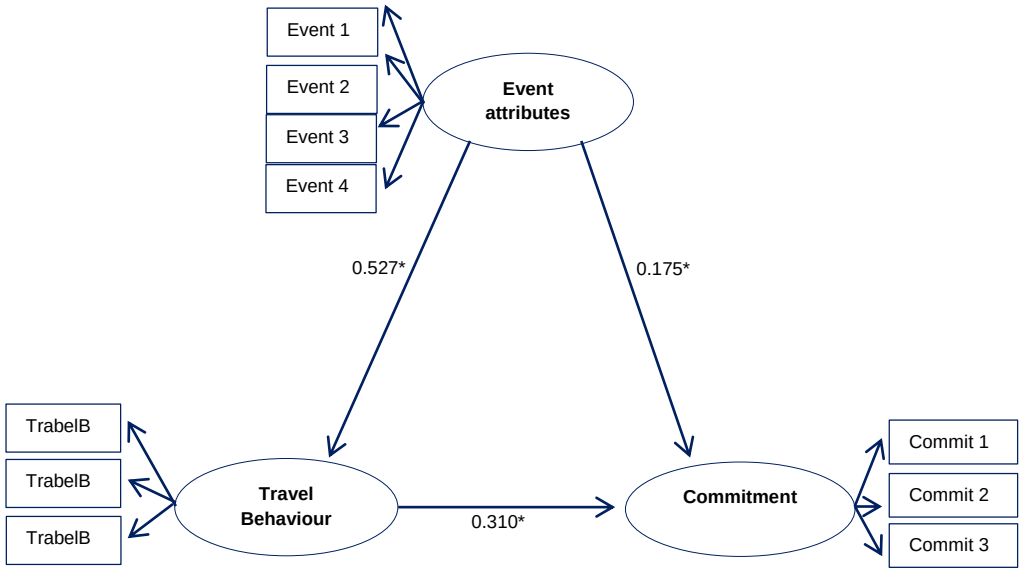


MODEL 6: *Lifestyle* as a mediator for *event attributes* with *commitment*	
Null hypothesis	
H_0 (6a)	*Lifestyle* is not a mediator of the relationship between event attributes and commitment.
Alternative hypothesis	
H_{6a}	*Lifestyle* is a mediator of the relationship between *event attributes* and commitment.

Figure 7-6: Mediating SEM Model 6 confirming the relationship between lifestyle, event attributes and commitment

(*See* Table 7.33 for item descriptions)

* Significant 5% = $p < 0.05$



MODEL 7: *Travel behaviour* as a mediator for *event attributes* with *commitment*	
Null hypothesis	
$H_{0\ (7a)}$	Travel behaviour is not a mediator of the relationship between event attributes and commitment.
Alternative hypothesis	
H_{7a}	Travel behaviour is a mediator of the relationship between of event attributes relationship and commitment.

Figure 7-7: Mediating SEM Model 7 confirming the relationship between travel behaviour, event attributes and commitment

(*See* Table 7.33 for item descriptions)

* Significant 5% = $p < 0.05$

In the analysis of the fit indices in Table 7.40, it is evident that Model 6 (Figure 7.6) and Model 7 (Figure 7.7) are both not a good fit and should therefore, be used for exploratory purposes and not for predictive purposes. The poor fit is shown by the Root Mean Square Error of Approximation (RMSEA) which for both models with 90% confidence was 0.103 [0.092; 0.114] and 0.115 [0.101; 0.128] respectively. These values fall in the poor fit range of ≥0.10. Values for the Comparative Fit Index (CFI) should be between 0.0 and 1.0 while the values closer to 1.0 indicated a good fit. The CFI was 0.866 and 0.863 respectively, which means that it is acceptable. The last fit indices applied is the relative/normed chi-square, or x^2/df is considered not acceptable since both the model's values were 6.285 and 7.545 which is outside the acceptable ratio for the chi-square divided by its degrees of freedom which is between 2.0 and 5.0.

Table 7-40: Goodness-of-fit indices

Model	CMIN/DF	CFI	RMSEA
Model 6	6.285	0.866	0.103 [0.092; 0.114]
Model 7	7.545	0.863	0.115 [0.101; 0.128]

Table 7.41 shows the regression weights of the structural parts of the model, the maximum likelihood estimates, and the statistical significance of the factors for the final two models.

Table 7-41: The standardised regression weights, estimates and *p*-value for Models 6 and 7

Hypothesis			Factors	Standardised regression weights	Sig. level
MODEL 6					
H_{6a}	**Lifestyle**	**<---**	***Event attributes***	**0.572**	**0.001***
H_{6a}	**Commitment**	**<---**	***Lifestyle***	**0.502**	**0.001***
H_{6a}	Commitment	<---	*Event attributes*	0.073	0.287
MODEL 7					
H_{7a}	**Travel behaviour**	**<---**	***Event attributes***	**0.572**	**0.001***
H_{7a}	**Commitment**	**<---**	***Event attributes***	**0.175**	**0.011***
H_{7a}	**Commitment**	**<---**	***Travel Behaviour***	**0.310**	**0.001***

* Statistically significant: $p \leq 0.05$

The results from Table 7.41 indicate that for Model 6 only two paths were significant ($p < 0.05$), namely *lifestyle* with *event attributes* ($p = 0.001$) and *commitment* with *lifestyle* ($p = 0.001$) (Figure 7.6). This indicates that $H_{0\ (6a)}$ is rejected. However, event attributes with commitment is not statistically significant ($p > 0.05$). These results confirm that *lifestyle* is a full mediator for the relationship between *event attributes* with *commitment*. This implies that the focus should mainly

be on lifestyle and that event attributes cannot be managed in isolation of lifestyle when the goal is to increase commitment.

For Model 7, H_{7a} can be accepted as all paths are significant at 5% of significance, and the standardised regression weights of *travel behaviour* and *event attributes* (0.572), *event attributes* and *commitment* (0.175), as well as *travel behaviour* and *commitment* (0.310), were all positive. This shows that the relationship with *event attributes* and *commitment* is partially mediated by *travel behaviour*. In this case, the effect of mediation is defined as the indirect standardised effect (0.163) divided by the total standardised effect (0.339) multiplied by a 100 which resulted in a 48% mediation. Therefore as seen in Figure 7.7, event attributes when combined with travel behaviour increase commitment partially (48%), as well as commitment without travel behaviour as mediator.

7.7 Development of a commitment framework for endurance sport in South Africa – academic and research perspective

Figure 7.8 outlines the framework to foster commitment among endurance sport athletes in South Africa. The research framework developed in Chapter 6 formed the basis for the framework; however, the variables included in the framework are based on the empirical results as discussed in this Chapter. This framework is aimed at researchers and academics. The framework is consequently discussed in detail.

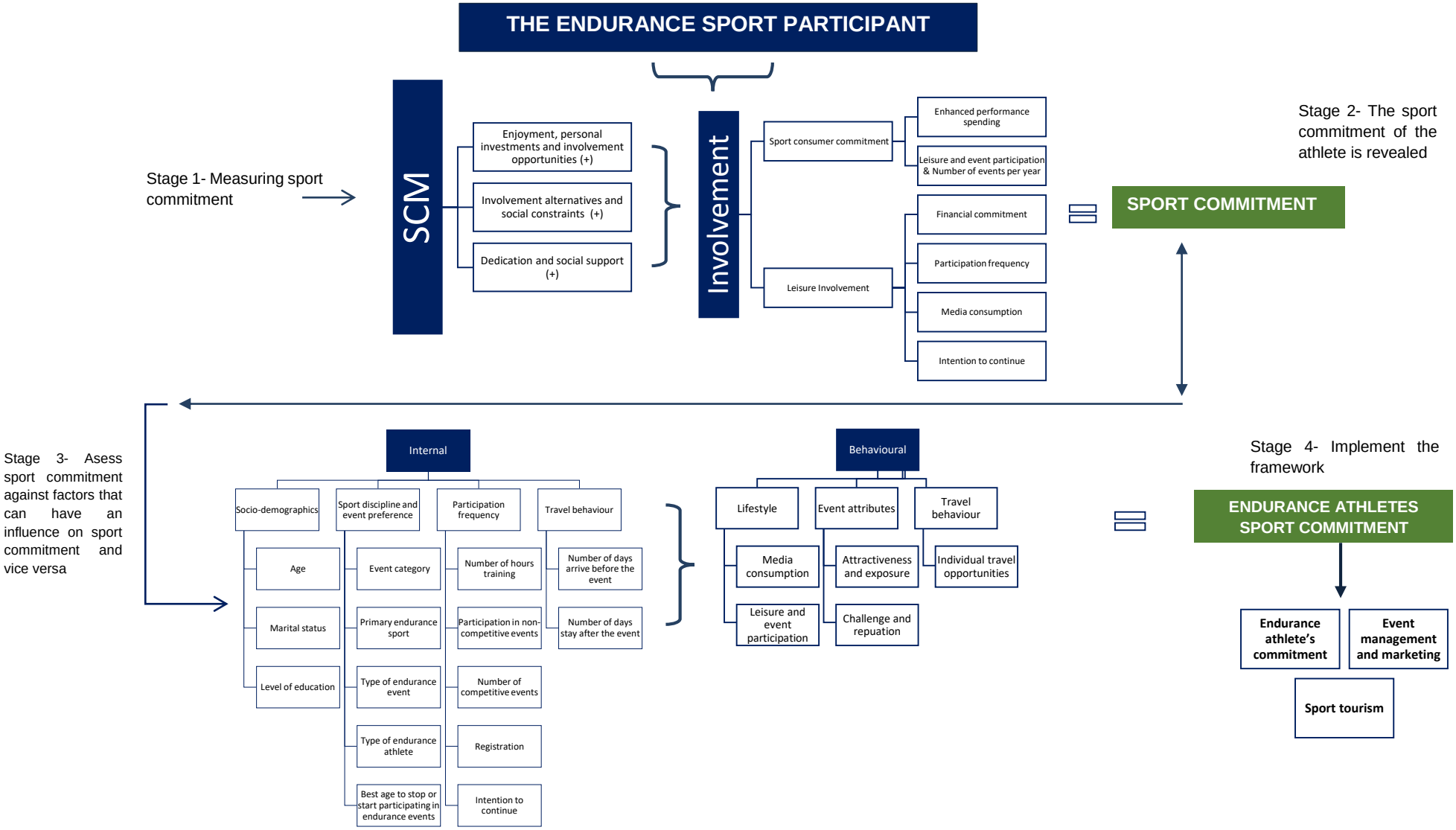


Figure 7-8: The framework for fostering sport commitment for endurance sport tourism in South Africa – aimed at researchers and academics

Source: Researchers' compilation based on the results

Stage 1: Measuring sport commitment

As shown in Figure 7.8, the Sport Commitment Model (SCM) was used to determine the commitment predictors that contribute to the commitment of endurance athletes. Apart from the SCM, the Involvement of endurance athletes was also measured seeing that the commitment of endurance athletes is more complex. The previous literature has also shown that involvement in sport is a technique that has been used in an endurance sport context. The inclusion of involvement with the SCM was, therefore, a type of validation technique, which ensured that the behaviour of endurance athletes is also taken into account. The implementation of the SCM and the Involvement theory on endurance athletes is discussed in the next section:

a) Sport commitment model

As shown in Figure 7.8, the results from the factor analyses revealed four unique factors that predict the commitment of endurance athletes (*enjoyment, personal investments and involvement opportunities, involvement alternatives and social constraints, dedication and social support* and *status, socialisation and travel).* These four factors are distinct to the current study and have not been found in the previous literature that focuses on the SCM. In preparation for the structural equation models, the results from the reliability analyses did reveal that the factor *status, socialisation and travel* had no significant contribution to commitment; therefore the factor was excluded from any further analyses and is therefore not part of the final framework. Respondents agreed to all three the factors, therefore in accordance to the SCM endurance athletes can be regarded as committed to their endurance sport. For researchers, this aspect in the framework indicates the first variables that need to be identified to determine the commitment of their market. However, this aspect alone is not enough to explain commitment. Although the SCM has given the predictors of endurance athletes' sport commitment, it is important to further measure the commitment by analysing the involvement of endurance athletes. The framework, therefore, includes the variables relevant to both these theories.

b) Involvement theory

Figure 7.8 shows that the involvement of athletes, which should be the second measure of commitment, can be divided into sport consumer commitment and leisure involvement. These two measures are discussed below and applied to the present study as examples. This is done to show researchers the additional necessary aspects to consider and determine when applying this aspect of the framework. Commitment among endurance sport participants cannot only be determined by the SCM, but knowledge of their involvement also becomes necessary as discussed next.

Sport consumer commitment

(1) The first aspect that forms part of sport consumer commitment is athlete's willingness to investment money on sport goods. From the factor analysis, the lifestyle factor *enhanced performance spending* clearly showed that endurance athletes agreed to invest in the best sports gear, sportswear, and training equipment. It is, therefore, important to determine whether participants are willing to spend money and invest in their sport, as this can be an indicator of long-term commitment.

(2) The second aspect is to determine if athletes attend/ participate in sport events. From the factor analysis, the lifestyle factor *leisure and event participation* received the highest mean value which indicated that endurance athletes agreed to adapt their lifestyle regarding travelling to the event and adapt their schedule to participate in events. The large number of events respondents participate in per year also confirms this aspect. The frequency of participation and interest in participating in sport events are therefore two vital aspects to consider in measuring commitment.

Leisure involvement

(1) The leisure involvement is firstly measured by analysing the spending of athletes. In the current study, this can be seen as the financial commitment of endurance athletes which is evident from their high total spending per year (R 50 300.61) on aspects such as event registration, equipment, and gear, travel related expenses and medical services.

(2) Participation frequency is the second indicator of leisure involvement. When analysing the participation frequency of endurance athletes the following is evident, they had a high number of training hours per week, they had been competitively participating for an average of 10.36 years, they participate in a significant number of events per year, and they register for an event as soon as registration opens. These aspects can, therefore, be important indicators of participants' commitment.

(3) Media consumption is the third sign of leisure involvement. The media consumption of endurance athletes was apparent from the lifestyle adaption section and results revealed that *media consumption* was one of the factors within the lifestyle adaption of endurance athletes. Apart from the factor analysis results the SEM models also indicated that *media consumption* had a unique relation to commitment. This aspect shows the importance of marketing and stimulating participants' interests in sport subscriptions.

(4) The last aspect that measures the leisure involvement of respondents is their intention to continue. The results of the present study revealed that 92% of endurance athletes have the intention to continue their event participation. Participants' intention to continue is, therefore, an important indicator for loyalty as this aspect can be further stimulated to enhance commitment. Once participants' intention to continue declines, it will become more difficult to influence their commitment.

The next stage takes into account the results from both the SCM and involvement theory in order to reveal if the respondents are committed to endurance sport.

Stage 2: The sport commitment of the athlete is revealed

Consequently, endurance athletes' commitment should be measured by making use of the SCM and involvement theory. The results showed that endurance athletes agreed to each of the commitment factors, are willing to invest money to participate in endurance sport, consistently participate in events, has a high participation frequency, high media consumption, and has the intention to continue their event participation. Therefore, endurance athletes that took part in the current study are committed to their sport. However as mentioned, while the SCM and Involvement theory indicates the variables that influence endurance sport participants' commitment, they do not take into account other independent variables. The framework, therefore, shows that commitment should be measured against different endurance sport participation factors. This is required as it gives an indication of what other factors have an influence on commitment and how commitment influences these aspects, this will be done in Stage 3 of the framework.

Stage 3: Assessing sport commitment against factors that can have an influence on the commitment of endurance athletes and vice versa

Commitment cannot be generalised. Therefore, to measure the influence of commitment on different factors the results from the ANOVAs, *t-tests* and the SEM models are taken into account. The first section reviews the internal factors that can have an influence on endurance athletes' commitment, while the second section reviews behavioural factors of endurance athletes. Both these sets of factors are valuable for researchers and practitioners to consider as endurance sport participants' commitment cannot be determined by a single construct.

1. **Internal Factors**
   (a) The first internal factor is the socio-demographic characteristics of participants. Results revealed significant differences based on the age, marital status and level of education of the respondents. Overall commitment decreases with age, although one's dedication and social support is not dependent on one's age. Endurance athletes that are in other types of relationships (e.g. living together) were more likely have higher levels of commitment. Higher levels of education does not influence commitment, endurance athletes with secondary education as their highest level of education are more likely to be committed to their sport. The influence of these variables will, however, vary depending on the context. Nevertheless, they are vital to consider especially in an endurance sport context.

(b) Sport discipline and event preference are the second internal factors that have an influence on endurance athlete's commitment. The results revealed that respondents' sport discipline and event preference has a greater influence on commitment than the socio-demographic variables of respondents. The event category, primary endurance sport, type of endurance event, type of endurance athlete and best age to start participating in competitive endurance events all had an influence on the commitment of endurance athletes. Results revealed that the event category respondents participate in was directly correlated to the commitment of endurance athletes; therefore as the difficulty of the category increases so does their commitment. Respondents whose primary sport was multi-disciplinary or athletes that participated in multi-disciplinary events had higher levels of commitment compared to other sport disciplines and sport events. The type of athlete a respondent classify themselves as also had direct influences on commitment. The classification which is directly linked with why athletes participate show that Hard-core, Intermediate and Veteran athletes were more committed compared to beginner athletes or athletes that participate for recreational purposes. The best age to start participating in endurance events revealed that respondents that start as young adults are more likely to be committed to their endurance sport. This aspect in the framework, therefore, shows the importance of thoroughly understanding the market under investigation.

(c) A large number of differences with commitment were revealed based on the participation frequency of athletes, which is also an involvement predictor, indicating the importance of this aspect. The number of hours training, participation in non-competitive events, the number of competitive events per year, when respondents register and intention to continue all had significant differences with regards to commitment. The number of hours an athlete train is directly linked to their strength in commitment. The results showed that as the number of hours increases so does the level of commitment towards endurance sport. Respondents that frequently take part in non-competitive endurance events are more committed than respondents that do not participate in non-competitive events. As with a number of hours it is clear that as the number of competitive events per year rises so does the commitment. Therefore the more events per year, the more committed an endurance athlete will be. When a respondent registers to participate also has an influence on commitment. As results showed that respondents that register as soon as registration opens (early bird) have a higher level of commitment. Unsurprisingly, respondents that have the intention to continue their event participation in the future are more committed compared to respondents that do not have the intention to continue.

(d) The influence of travel behaviour on commitment also revealed significant differences. The number of days athletes arrive before the event or the number of days stayed

after the event has taken place has a direct influence on commitment as results showed that as the number of days before or after increases so does the commitment towards endurance sport. This aspect in the framework indicates the importance of considering the markets' travel behaviour as this cannot only have an influence on their commitment but also on stimulating tourism activities in the destinations where events are hosted.

The next section reveals how the behavioural factors lifestyle, event attributes, and travel behaviour influences sport commitment. These aspects in the framework show the interrelationship between the variables and that these aspects cannot be excluded or neglected when measuring commitment. Again, it is important to note that the combination of behavioural factors will vary depending on the nature of the study and market under investigation. The framework however comprehensively shows the aspects to consider when fostering commitment among endurance sport participants. The discussion below practically explains these factors using the results from the research and shows the necessity of applying various statistical analyses to validate the findings.

2. Behavioural Factors

(a) As seen from the correlation analysis and SEM models, lifestyle was positively correlated to commitment and vice versa. The SEM models, however, revealed that when the aim is to increase commitment, the focus should be placed on the lifestyle factors *media consumption* and *event and leisure participation*. Furthermore, lifestyle is a full mediator of event attributes relationship with commitment. Therefore event attributes need to be combined with lifestyle in order increase commitment. Indicating that getting the greater population to adapt a specific lifestyle from a young age can lead to commitment to sport as an adult.

(b) Concerning event attributes, correlations did reveal that event attribute is positively correlated to commitment. The SEM models however reveal that event attribute is not related to commitment. Nevertheless, the individual event attribute factors *attractiveness and exposure* as well as *challenge and reputation* both had a unique relation to commitment and can be used to increase the commitment of endurance athletes. Although event attributes does not have a unique relation to commitment, it is still important that endurance event adapt the event based on the attributes participants seek.

(c) Results from both Spearman's correlations and the SEM models revealed that *travel behaviour* is positively correlated to commitment. This is invaluable information for sport events as it shows that if more travel opportunities are created for participants it will lead to an increase in their commitment. Further analyses, however, revealed that

the focus should be placed on the travel behaviour factor *individual travel opportunities* when the aim is to increase commitment. By cooperating with tourism authorities events can create more opportunities for participants to visit attractions in the event destination. This is important as Mediation models also showed that *travel behaviour* is a partial mediator of the relationship between event attributes and commitment.

Stage 4: Implementing the commitment framework

The framework in Figure 7.8 not only indicates that endurance athletes are committed, it also shows how this commitment influences different aspects and vice versa. Implementation of the framework is, however, the most important part. The implementation of the framework will be discussed in detail in the following section. Please note that the recommendations are made based on the results of the research and that separate practical frameworks aimed at the endurance sport and tourism industry will be presented in Chapter 8.

7.8 Recommendations and implications based on the results

As shown in Figure 7.8, the implementation of the framework is divided into different sections. The first section reviews how the framework can be used to ensure the commitment of sport participants. This can help event organisers and marketers retain participants and can also assist in reducing the drop-out of athletes in endurance sport. The second part provides practical suggestions for event managers and marketers to ensure successful endurance events across South Africa. The last section highlights the practical implications for sport tourism and how the framework can be applied to benefit the tourism industry. Each of these sections is accordingly discussed and recommendations are made based on the results of the research.

7.8.1 Recommendations to foster sport commitment amongst endurance athletes

The first set of recommendations focus on the factors that will keep endurance athletes committed not only to endurance sport but also to endurance events. This will be followed by recommendations to get the general public involved in endurance sport.

7.8.1.1 Keeping endurance athletes committed

A). The factor *enjoyment, involvement opportunities and personal investment* had the strongest influence on endurance athletes' commitment. This corresponds with the SCM hypothesis that *enjoyment, involvement opportunities and personal investments* each as individual factors lead to an increase in commitment. However, in this study for the first time, these three factors were grouped together forming a unique combined factor. This finding emphasises that there is no universally accepted set of factors that influence commitment. Instead, commitment and the influential factors are greatly determined by the type of market and discipline under investigation. It is important to note that all three identified factors are intrinsic.

Consequently, findings both support and expand on the findings from previous research that applied the SCM. Endurance athletes can be regarded, therefore as committed to their endurance sport because firstly, they enjoy their participation in the sport and the event and regard training for an event as fun. Secondly, they realise the potential opportunities and benefits from participating in endurance sport such as an increase in health and fitness, reaching goals, and being exposed to something exciting. Moreover, endurance athletes display their commitment to investing more time and money in their sport. Therefore if these factors are implemented it can ensure that fewer endurance athletes "drop-out" and that events can use the commitment to make participants loyal towards the event. Thus, commitment (or lack thereof) could be viewed as a motivational drive to continue (or discontinue) activity or competitive sport. To ensure commitment, the following aspects need to be considered:

- The participant must enjoy training and participation. Less focus should therefore be on the competitiveness of endurance sport and more on the enjoyment of participating. Coaches, clubs, event organisers and event parents can increase the enjoyment of endurance participation by "Mixing it up". In other words, encouraging participants to try out different disciplines, events, categories, and distances. As soon as the endurance participation starts to feel like an obligation and not a pleasurable experience, participants will most likely discontinue their participation. It is also important to identify the sources of enjoyment in endurance sport and the reason athletes enjoy participating in these events. Stakeholders could ensure that the factors that lead to enjoyment (e.g. having a training partner) are always in place.
- Participants must be willing to invest time, money and effort in the continued participation in sport. Participants should be "made aware" that these aspects will be lost if they discontinue their participation. It is important to remind endurance athletes how much they sacrifice to participate in endurance sport and remind them that their event participation can be seen as the reward. This can be done by focusing on participants' involvement opportunities. Participants must thus be made aware of the "opportunities" their participation leads to and how their participation is benefiting them. The focus should be placed on the unique aspects that they will not necessarily find in other parts of their life. These must be portrayed as opportunities, not risks (e.g. rather than telling a participant that they will not get fit if they do not participate in events, highlight that an event can help them reach their ideal fitness level). The reminding of participants of what they are sacrificing (personal investment) to participate, must be matched with fulfilling opportunities such as stress reliever, keeping a participant fit, giving them something exciting to do, mental challenge and a feeling of accomplishment. These aspects could also be highlighted to prospective endurance athletes, by encouraging them to talk to current endurance athletes and find out what opportunities they gain for endurance participation. This can also be done by giving them a "log-book" where they can write what

they want to gain from participating in endurance sport (expectations) and after the event. Participants can also indicate if the event offered what they expected or wanted. They can also add to their list by highlighting the opportunities the event granted them that was not initially expected.

- It is, however, important to remember that these aspects are one factor. Therefore the commitment of an endurance athlete will be dependent on keeping sport participation fun, motivating respondents to invest in their participation and highlighting the benefits of participation, namely that apart from the investment of participation, it will result in having fun.

B). Social constraints in many previous SCM studies had a negative influence on commitment. However, in the current study together with *attractive alternatives,* it is positively correlated to commitment. This result may be due to the study sample of endurance athletes who does not necessarily feel pressure from significant others to continue participation. On the other hand, the mental and physical challenge of these events may require some form of pressure to ensure continued participation. Therefore, the pressure from significant others helps respondents to keep going and stay involved with the sport. *Attractive alternatives* indicate that athletes have more engaging activities outside their current sport participation. As endurance sport has various disciplines, each with its challenge, many endurance athletes enjoy transitioning from one sport to another, many also participate in multi-disciplinary events. Since this factor is a positive predictor of commitment, the following recommendations can be made:

- It can be assumed that pressure from one's coach, spouse, training partner and significant other is needed to participate in endurance sport. This social constraint can also be seen as the competitive pressure an endurance athlete feels, as most endurance events attract a large number of participants. These events are also very mentally challenging, and subconsciously an athlete is participating against him- or herself. Therefore, the social pressure is not necessarily from other people, but the pressure one puts on oneself to complete an event. Furthermore, as young athletes move up in competitive level, this usually requires greater involvement, dedication, and investment by parents and coaches. Thus, potentially greater pressure is put on the athlete to be successful and to continue participation. This finding highlights that respondents need to have support in some form. Therefore, it would be beneficial to motivate endurance athletes to travel with spectators (supporters). It is also important to show spectators that without them, endurance athletes' commitment will decrease. Destination marketers can use endurance events to motivate participants to demonstrate their support to their significant others by spoiling them with a pre- or after event trip. Discounts could be given to endurance athletes that bring along a large number of supporters. Social media pages and workshops should be created for the

significant others of endurance athletes to help these groups understand what important role they play in an endurance athlete's career.

- Attractive alternatives, interestingly is a positive predictor in endurance athletes' commitment. This is, however, a positive finding as this contributes to the unique nature of endurance athletes. One of the most important aspects is that endurance athletes realise that there is an array of options within endurance sport. Significant others can also play a major role here; by encouraging an endurance athlete to try out different events, disciplines, and categories. Respondents will never feel that their benefits from participating are running out because there is always another challenge or event to take part in. Schools and universities should also highlight this important aspect. If younger people are made aware of the different options with endurance events, it could motivate even the least active to become involved in sport in some way. Endurance sport encompasses so many disciplines, difficulty levels, routes, and categories, that there is an opportunity for anyone. Also, even more importantly, there is a chance to progress which gives people endless opportunities.

C). The third factor was *dedication and social support*; this shows that respondents want to continue in their event participation and is willing to adapt their lifestyle to continue. It furthermore indicates that a respondent must feel dedicated and must receive some form of social support with a view to ensure that the athlete will be committed. This factor can be used in the following ways:

- Dedication can be seen as the feeling an athlete has towards his/her sport. In order to foster commitment an athlete must feel that they will do anything not to abandon their sport participation. If endurance athletes have this feeling towards their sport, they are more likely to be committed. Previous studies have shown that older participants are more likely to be dedicated. Concerning the current study, it seems that younger participants are not less dedicated, but that dedication, as in the case of the other factors, does not decrease with age. It can also be seen as perceived level of competence. Therefore as an athlete's age increases so does their feeling of being competent. Seeing that endurance sport has been found to be a lifetime sport, it can be a good motivational factor to get older individuals involved with sport. It is possible to distinguish endurance sport through marketing messages by highlighting that although one's competitiveness decreases with age that one's feeling of competence increases which lead to an increase in dedication. Therefore both events and sport clubs should highlight the fact that age is not a factor to demotivate one from participating in endurance sport, but rather a motivating factor to continue one's participation.
- Social support, apart from social pressure, indicated that an athlete must also feel encouraged by their significant others. As mentioned above, this highlights the importance

of training partners or spectators that travel with endurance athletes to events. The approval and endorsement for their participation lead to the participants not wanting to give up and abandon their endurance participation. Social programmes and clubs where athletes are introduced to one another can effectively be used for this purpose. This could also be a way to address both the social constraints and social support elements.

D). As seen in Figure 8.1, the sport commitment framework of endurance athletes supports the involvement theory that indicates that commitment can also be measured by analysing participants repeat participation, spending and behaviour (Kim, James & Kim, 2013). Therefore apart from the commitment predictors in SCM, the endurance participants that participated in the study had a high level of involvement (which is seen in their repeat participation, training and event participation frequency as well as high spending), which can be directly linked to their commitment. Higher commitment is associated with higher spending, increased media consumption continued participation and sport consumption to enhance their performance. The first aspect that event organisers should have in place is opportunities for athletes with spending money at the event. This can be done in some ways. Firstly, by providing athletes with packages that includes various aspects such as accommodation, transport, event registration and a visit to a local attraction. Secondly, ensure that the newest equipment, nutritional and healthcare products, magazine subscriptions and club membership opportunities are all available at the event. This could be done by hosting an expo before the start of the event. By hosting an event expo, it will not only stimulate other industries but will also motivate athletes to arrive before an event, which as seen from the results has a positive influence on the commitment and travel behaviour of these athletes. An expo also is the ideal opportunity to endorse other endurance events that athletes might not be aware of.

7.8.1.2 Getting the greater population involved with endurance sport

- From the endurance framework, it is clear that the respondents that took part in the current study are committed to their endurance sport. It would, however, be beneficial to use the existing framework to motivate the greater population to get involved with endurance sport. The easiest way in this regard, is for endurance events to start marketing at clubs, sport gymnasiums, schools, universities, health stores and sport shops. The marketing can take place in different ways, for example, hanging a banner that advertises the event or having event organisers visit these places with a stall, where they can hand out pamphlets and give people an opportunity to register or find out more about the event. The government can also fund this type of campaign as one of the biggest aims of the Department of Sport and Recreation is to get more people physically active. The misperception regarding endurance sport should be changed from it being an “elite only”, “the fittest of the fit” sport; and rather focus on selling the enjoyment it provides – an element that the results from

the present study firmly support. The incorporating of the different commitment factors in marketing messages, branding and marketing campaigns, will result in people being more aware of the opportunities and benefits (doing something exciting, travelling, attaining certain goals, staying fit and in shape and feeling a sense of accomplishment) that event participation can offer. It is also important to highlight that endurance sport has different formats and gives a person the opportunity to progress.

- One of the biggest improvements Government can make to ensure that more people, and especially the youth get involved in sport is to build more youth centres across the country that offer sport programmes. Currently, most sport programmes focus on team sports such as soccer. Unfortunately, the sport-retention rates of these types of sport are usually low. If government authorities make younger people more aware of endurance sport, what it entails, how it can benefit a person, the enjoyment that it can provide, and the many alternatives within the sport, the younger generation could get more physically active. National and provincial government authorities can also collaborate with local events, giving younger people that visit these youth centres an opportunity to participate in an event. This feeling of accomplishment of completing, for example, a five kilometre running event will motivate these kids to return to the youth centre and stay involved with the sport. The hosting of “park runs” or even “colour” runs have become a trendy way to encourage people to get involved with sport. These events are ideal as it uses existing infrastructure and it motivates people to travel for these types of events. The popularity of these types of events shows that there is currently a need for these types of events. It is, however, important that different sport disciplines have similar events, which will appeal to even a larger part of the population.

7.8.2 Recommendations for endurance event managers and marketers

The next section uses the framework in order to assist both event management and event marketing teams in the practical application of the results in order to ensure successful and sustainable endurance events.

7.8.2.1 Using the commitment framework for endurance sport event management purposes

- The factor *involvement alternatives and social constraints* was positively correlated with the sport commitment of endurance athletes. Events can use this factor in two ways. Firstly, by combining different disciplines at one event and secondly, ensuring that the event gives spectators the opportunity to attend. Endurance athletes tend to seek alternatives and different challenges. Therefore, an event that plays host to various disciplines will not only attract a larger number of athletes but it will also more likely ensure that these athletes return. Spectators at an event not only increase the economic impact,

but also motivate participants to become committed (loyal) towards the event. Athletes rely on the social support of their significant others, therefore having them there as spectators will have a direct influence on the commitment. Therefore, one of the most important aspects event organisers should focus on is motivating group travel to endurance events. This could be done by ensuring there are opportunities for accompanying friends and family and that it is an enjoyable experience for them as well. This could be achieved by hosting pre-events that involve the spectators such as "fun-runs" and live music or entertainment. Event organisers should also improve the communication with spectators by giving them information such as the route design, the layout of the spectator's area, the use of facilities and parking as well as other logistics. If a spectator enjoys an event as much as the participant does, they will want to return to the event and most likely will also motivate the athlete to take part in future events.

- The most popular endurance events are the more well-known events that draw a large number of participants. However, the descriptive results did show that a significant percentage of participants take part in lesser known events. For these events to become more well-known and draw greater numbers of participants such as the Cape Town Cycle Tour, these events should focus on the event attributes that endurance athletes seek as well as study the marketing management plans of the larger successful events. The most important event attribute for endurance athletes was the *reputation and challenge* of the event. This result corresponds with previous research, which showed that endurance athletes are very selective when choosing an event and that attributes such as the challenge, organisation and reputation are of particular importance (Higham & Hinch, 2009; Rundio *et al.,* 2014). One of the most important things event organisers therefore should realise is that if an endurance athlete does not see the event as challenging enough, they will search for a more challenging event to participate in. Endurance athletes, therefore, choose an event based on how well the event is organised, the reputation of the event among the endurance community, and how challenging the event is in terms of the course, distance and location. Endurance sport events should focus on these aspects when attracting new participants and ensuring repeat participation. Also, adapting the race route and location will give athletes something new to look forward to as well as ensure that the event stays challenging. It is paramount that events have different categories to attract different types of athletes at various competitive levels, to motivate athletes to improve their performance and to encourage them to be committed to participation. This could be beneficial for younger South Africans who are less physically active and therefore less competitive categories can be more appealing. The organisation of the event remains one of the most important aspects, as this has a direct influence on the event's reputation. Events should plan and ensure that all the event management aspects are in place before the event takes place. The government can also play a major role in the success of

endurance events, by funding these events and providing workshops in event management where event organisers from smaller and newer events can be practically trained and educated in the aspects that make up a well-organised event.

- The event attribute SEM model indicated that although *attractiveness and exposure* is a less important event attribute for endurance athletes when choosing an event, it has a positive contribution to commitment. Therefore, it should be in place at the event. Event organisers must ensure that aspects such as pre-events, media coverage, prize money and loyalty programmes are well organised and present at the event.
- The five most popular endurance sports in South Africa is marathon running, road cycling, mountain biking, triathlons, and trail running. This corresponds with the events that participated in the survey. To ensure the success of the overall endurance sport industry should realise that events should work together. An example of this collaboration can be partnerships between larger and smaller less known events where larger events promote the smaller events during their event registration or expo. Additionally, a strategy should be developed where sport disciplines combine marketing packages where an athlete can take part in multiple events within a season (e.g. Nissan trail seeker series, which give mountain bikers the opportunity to take part in different events, hosted in different provinces throughout the year).
- Events can use the lifestyle adaption of endurance athletes to their advantage, by hosting a pre-event training tour. From the framework, it is clear that committed participants adapt their lifestyle in different ways to participate in endurance sport. By giving endurance athletes the opportunity to prepare at the event location, adjust to the altitude and climate, will give respondents the sense of having a competitive advantage. These training tours can include aspects such as going on training routes that are similar to the event route, getting advice from professional athletes, getting a specially developed diet, and sleeping plan.

7.8.2.2 Recommendations for the efficient marketing of endurance sport events

- From a marketing perspective, it is important that event marketers highlight the fun and excitement associated with participating in current endurance events. It is important to emphasise participants' personal experiences of taking part in the event and also show highlights from previous events. This will give a good indication of the reputation and highlight what makes the event more challenging compared to other events. This could be done by developing short videos ("short stories") which can be shown on social media and can be combined with a television ad campaign. If prospective athletes see the stories from current participants and hear how these athletes stay committed because of the enjoyment, alternatives, and opportunities these events create, it will more likely motivate them to get involved with the sport. Coaches and event marketers could focus on the possibilities

(intrinsic motives) associated with their participation, reassuring participants that although they put in considerable time and money on their participation it will lead to benefits such as stress release, fitness, excitement, challenge them, and provide a sense of accomplishment. Communication with participants through newsletters, videos and blogs can enhance this aspect when it is linked with other forms of communication. This will help keep participants informed and can assist in motivating them and reminding them of how their personal investments are going to pay off. Events can also start a series of "preparation videos" that help endurance athletes with the lifestyle adaption required to participate in endurance events. The videos can be distributed through the event's website where each week participants can sign in and watch videos that are professionally produced and features professional endurance athletes. These videos will give helpful tips regarding aspects such as training, food consumption, sleeping patterns, equipment, and gear and share some advice concerning the event (e.g. some difficult sections of the route).

- The branding of endurance events can also benefit from the commitment framework. Event marketers must ensure that the events' brand is well established. This can be done by focusing on the distinct aspects of the event (e.g. "the longest marathon in the world", "the toughest race in the country", "the most challenging route known to man" and "the must-do endurance event"). A well-known event brand will ensure that the endurance community of both international and national participants become more aware of endurance events in South Africa.
- The SEM models showed that to increase the commitment of endurance participants, one should focus on travel behaviour and lifestyle. Furthermore, the results showed that the lifestyle factors *media consumption* and *leisure and event participation* had a unique relation to commitment. This is invaluable information for endurance sport events as it indicates that if the *media consumption and event participation* of athletes increase, it will lead to an increase in their commitment. Events, therefore, should ensure that their marketing platforms are modernised, easy to use and provides endurance athletes with regular updates. Athletes should also be motivated to subscribe to sport magazines and newsletters, which promote and announce where different endurance events take place throughout the country during the year. In the instances where expos are hosted before events take place, these events should be used to motivate the sport media to get involved by launching and advertising the newest sport "Apps", magazines, social media pages, training and motivational videos, blogs, and websites.

7.8.3 Recommendations to facilitate sport tourism in South Africa

The following section focuses on how different government stakeholders can use the commitment framework to ensure a tourism on-flow from endurance events. Again, these recommendations are based on the results from the current study.

7.8.3.1 Using sport events as a tourism spin-off

- The results indicated that respondents adapt their lifestyle to the greatest extent concerning *leisure and event participation*. This is a significant finding as is shows that committed participants are more willing to travel to participate in events. This finding corresponds with Kruger and Saayman's (2013a) research that revealed that more serious marathon runners base their holiday choices on their event participation. This lifestyle factor should be used to the advantage of events, by motivating respondents to travel longer distances, increase their length of stay, and participate in more events. One of the first things event marketers and organisers can do is promote different tourism attractions in and around the host destination. One of the best ways this can be done is by including destination marketing at the event expos hosted before the event. This will give tourism attractions (e.g. National Parks) in the destination a chance to market their product and provide athletes with holiday packages and discounts that they can use after the event has taken place. It is also important to expose event participants to the travel opportunities available in the destination before the event takes place. When advertising events on various media platforms the aim should include a short overview of the event destination. This can be done by adding tourist information on the event website or providing participants with special offers and discounts as soon as they have registered for the event. Secondly, it is important to note that although most events in South Africa have Expos before the event is held, and usually where participants register, it should however be marketed more efficiently to expose more people to these endurance expos. The Expos can introduce special offers and discounts to the participants of the endurance events and even to prospective participants that participants would not find commercially. It can also be beneficial to open a section of the Expo to the general public, where the public also has an opportunity to spend money and get exposed to endurance events, which can motivate future participation.
- The respondents agreed that their event participation had the biggest influence on their *group travel opportunities*, which corresponds with the research done by Kruger and Saayman (2013a) on marathon runners. Kruger and Saayman's (2013a) results showed that that level of sport participation could have an influence on travel behaviour and that more serious participants (more committed) unify their holidays and event participation. Consequently, more research is needed to confirm if different levels of participation (commitment) will lead to differences in participants' travel behaviour. This finding, however, shows that because of participants' event participation, endurance athletes are more inclined to visit tourist attractions in the event destination. Furthermore, they include their friends and family in the traveling to the destination when participating in an event. Event organisers should work together with local tourism managers to market local

attractions at the event. In addition, athletes should be given a reason to stay. Creating pre and after packages which are more affordable can be a useful way. However, these packages should provide participants with the opportunity to explore the destination, which can consequently lead to on-flow tourism from the event. There should also be different packages, at different prices, that include various activities and differs in length (number of days). Packages could include basic aspects as discounted dinners at local restaurants or expanded packages such as a seven-day post-event tour of the Eastern Cape. If participants feel that they have more opportunities to travel before and after the event at a discounted price, they are more likely to use this opportunity and stay longer or arrive more days in advance before the event. Events can even organise a pre-tour of the event destination for international participants, where they get the chance to see the destination, but also get the opportunity to settle in and adjust to the climate.

7.9 Conclusion

The purpose of this chapter was to present the multivariate results that were obtained from the data. *Enjoyment*, *involvement opportunities* and *personal investment* proved to have the strongest influence on endurance athletes' commitment. This corresponds with the SCM hypothesis that enjoyment, involvement opportunities and personal investments all individually lead to an increase in commitment. However, for the first time, these three factors were grouped together forming a unique combined factor. Furthermore, results revealed the specific predictors (factors) that can either increase or decrease the commitment of endurance athletes. The chapter also revealed the lifestyle, event attribute and travel behaviour factors that are unique to endurance athletes, thus expanding on the current research concerning the endurance athlete market in South Africa. The results also gave insight into how factors such as travel behaviour, lifestyle and event attributes have an influence on commitment. The results from the *t*-tests and ANOVAs revealed differences regarding demographic variables, event and sport discipline preferences, participation frequency and travel behaviour. This highlights the fact that endurance athletes' commitment is complex. These results fill the literature gap by determining the appropriate variables to include when measuring endurance athletes' sport commitment. Spearman's correlations also emphasised the complexity of endurance athletes' commitment, which clearly showed that commitment, event attributes, travel behaviour and lifestyle factors are all correlated and should be used in combination with one another in order to increase endurance athletes' commitment. Finally, the SEM models showed that in order to increase the commitment of endurance, participants should focus on travel behaviour and lifestyle. Furthermore, the results showed that the lifestyle factors *media consumption* and *leisure and event participation* and the travel behaviour factor *individual travel opportunities* had the strongest relation to commitment. Another significant finding showed that lifestyle is a direct mediator of commitment. The results showed that there is also a clear link between committed participants and their travel behaviour.

Therefore, this should be used to benefit the destination regarding motivating athletes to stay for a longer period at the event destination and make use of other tourism opportunities in and around the event destination. Although findings showed that event attributes were not related to commitment, the mediation models showed that the relationship between event attributes and commitment is fully mediated by lifestyle and partially mediated by travel behaviour. Therefore, in order to increase commitment of endurance athletes, one should combine event attributes with one of the other two factors. This Chapter also presented practical implications of the results to show how commitment can benefit not only the participants but also sport events and sporting destinations.

Chapter 8, the final chapter, concludes the previous chapters. In addition, the results are applied to highlight the contributions of the study and make recommendations regarding a commitment framework for endurance athletes in South Africa.

8.1 Introduction

The main aim of this study was to develop a commitment framework for endurance sport in South Africa. To achieve this aim, the following objectives were set in Chapter 1 and achieved in their respective chapters.

The first objective was to conduct a literature analysis on sport tourism, by defining sport tourism, classifying sport tourism and sport events, identifying the key stakeholders within sport tourism and highlighting the importance of the sport events in the sport tourism industry. This was achieved in Chapter 2. The literature showed that more sport events are taking place in developing countries and that these events play an important role within destinations for image creation, increased employment opportunities and the facilitation of tourism. From a research perspective, most literature on sport tourism has focused on sport spectators or solely on mega and hallmark events. This highlights the gap in the literature focusing on smaller events though these events can increase domestic and foreign tourism.

The second objective was to examine the distinct characteristics of endurance sport events and athletes within a sport tourism context by means of a literature review. This objective was accomplished in Chapter 3. A consideration of the literature showed that the participants that take part in these endurance events are a group of like-minded individuals who share similar characteristics, and most of these athletes adapt their lifestyle to participate in endurance events. Endurance events act as a catalyst for tourism, and it ensures economic benefits for the host destination. Endurance events are not only beneficial to the host destination, but also improve the well-being of the participants that take part in these events. Various factors such as the socio-demographic characteristics of the participant, the event, social constraints and travel behaviour influence endurance sports participation and ultimately also sport commitment.

The third objective was to critically analyse commitment, the Sport Commitment Model (referred to as the SCM) and related theories as well as understanding the complexity of sport commitment in the context of endurance sport. This analysis was done through a literature review and the objective was achieved in Chapter 4. The chapter found that the sustainability and future advancement of sport tourism and the event industry are largely dependent on repeat and committed participants. While the SCM gives a more theoretical explanation for an athlete's commitment to the sport, the commitment of an endurance athlete is more complex. This is because commitment differs from one individual to another and is influenced by a variety of factors including socio-demographics, the level of involvement, motivation, the type of sport and skill

level. These factors could lead to commitment changing over time. Taking these factors into account, it becomes necessary to understand how to enhance sport commitment among endurance athletes. In return, this will result in benefits such as sport event enhancement, effective sport marketing, loyalty, increased sport tourism, resistance to change and continuous participation. Consequently, it will lead to a decrease in sport withdrawals with the effect of increasing an overall healthier population.

The fourth objective was to analyse the current state of endurance sport tourism and events in South Africa by means of a literature review. This goal was achieved in Chapter 5. The literature review showed that the biggest problem in developing countries, and especially South Africa, is that government realised the importance of sport events in the broader tourism strategy. However, the emphasis is mostly placed on hosting mega-events. The South African sport industry also faces challenges such as policy processes that are not aligned with outcomes, physical education that does not form part of school's curriculum, the imbalance in sport participation, and a lack of cooperation between the tourism and sport industries. South Africa hosts an array of recurring events, especially endurance events that have become very popular seeing that South Africa is considered the ideal destination to host endurance sports events. The chapter also revealed that there is an increase in research focusing on the endurance athlete market. However, one of the biggest gaps identified is the lack of research that concentrates on the factors that contribute to the commitment of endurance athletes and how these factors can be used to benefit the South African sport tourism industry.

The fifth objective was to explore the methodological considerations applied in the study as well as to determine the aspects to be included in the theoretical and research framework for endurance sport commitment in South Africa. This objective was achieved in Chapter 6 and Chapter 7. The first sub-objective of Chapter 6 included the determining of the demographic profile, the event preferences and the participation frequency of endurance athletes that take part in endurance events hosted in South Africa based on the results of the survey. The results from the descriptive statistics revealed a detailed profile of endurance sport participants of various endurance events and disciplines in the country (c.f. 6.4.1-6.4.20). The second sub-objective was to determine the commitment, lifestyle, event attributes and travel behaviour factors of endurance athletes by means of exploratory factor analyses. Results gave the specific factors that either increase or decrease commitment of endurance athletes. Furthermore, the results revealed the lifestyle, event attribute and travel behaviour factors that are unique to endurance athletes. The third sub-objective was to determine the statistically significant differences based on respondents' socio-demographic, event and sport discipline preferences, participation frequency and travel patterns with the commitment, lifestyle, event attribute and travel behaviour scores by making use of *t*-tests and ANOVAs. Results revealed differences between most of the variables that illustrates

the complexity of endurance athletes' commitment. The last sub-objective was to show the relationship between commitment, lifestyle, event attributes and travel behaviour by means of Structural Equation Modelling (SEMs) to determine which factors had the largest unique correlation to sport commitment. The SEM models showed that to increase the commitment of endurance participants, one should focus on *travel behaviour* and *lifestyle*. Additionally, mediation models revealed *travel behaviour* and *lifestyle* are both mediators for the relationship between *event attributes* and commitment. Therefore, to increase the commitment of endurance athletes, *event attributes* have to be grouped with either *lifestyle* or *travel behaviour*.

The final objective of the research was to draw conclusions, to make recommendations concerning the results of the study, and to propose a commitment framework for endurance sport tourism in South Africa. The objective of this chapter is, therefore, to conclude the findings of the research and use the results to make recommendations concerning the survey and to propose a commitment framework for endurance sport tourism in South Africa to foster commitment of endurance athletes. Suggestions for future research will also be made.

8.2 Conclusions

The conclusions will be discussed with regard to the literature reviews and the survey, as reported in respectively Chapters 2, 3, 4, 5, 6 and 7 respectively.

8.2.1 Conclusions with regard to the literature reviews

This section summarises the key findings from the respective literature review chapters. Please note that only critical syntheses of the literature reviews are outlined.

Chapter 2: A literature overview of sport tourism

This chapter reviewed how endurance events form part of sport tourism. More people are becoming aware of the health benefits of an active lifestyle. Endurance events are seen as a good way to attract a large number and variety of people (regardless of age, physical ability, and gender). These events, therefore, get the greater population involved with sport (c.f. 2.2). Research focusing on sport events, especially endurance events is needed as it helps event organisers influence the behaviour of their market by motivating them to stay longer, return in the future and visit other tourism attractions in the area (c.f. 2.4). Consequently, when event organisers understand their market, they can use the information to improve the event and destination where the event is hosted (c.f. 2.4). Therefore one of the main goals for an event organiser is not only to convince a participant to take part in the event, but also convincing participants to come earlier or stay longer, stimulate other tourism industries and also motivating sport tourists to return to the event and bring along friends and family to tour the event area (c.f.

2.4). Unfortunately, there is currently a gap in literature focusing on the participants that take part in smaller recurring events (c.f. 2.2.2).

Chapter 3: A literature analysis of endurance sport

The content analysis of the chapter resulted in the realising that the first significant contribution to the study was grasping the reason for the need to address endurance events and participants as ideal research foci (c.f. 3.3.1-3.3.3). Endurance events are usually mass participation events because participants outweigh the spectators (c.f. 3.3.3). Endurance events are also ideal for tailoring and adapting in accordance to what the market wants, as not one endurance event is the same (c.f. 3.3.3). These events also can take place throughout the year, consist of different formats, and combine various formats to create new events (c.f. 3.3.3). Since endurance events are open to the general public, endurance sport does not necessarily rely on a specific talent, but rather a mental challenge combined with physical training. Also, an athlete improves participation with experience. Thus participation in the sport is not age bound (c.f. 3.3.3). A distinctive characteristic of an endurance athlete is the fact that most of the athletes are not participating as professionals. Therefore their main motivation to participate is not necessarily to win, but still, these athletes make various lifestyle adaptions to participate (c.f. 3.3.1). The importance of the sport as part of their lifestyle is also portrayed in the adoption of healthy habits; the money and time spend on the sport and the increased media consumption because of their sport participation (c.f. 3.3.1). Furthermore, these athletes will buy certain brands of clothing and equipment if they feel that it will enhance their performance. Plans and decisions (e.g. to decide on a holiday destination) are also normally measured against their participation in the sport (c.f. 3.3.1). If events, government, coaches, and event stakeholders are made aware of the factors that drive the commitment of endurance athletes, it can be used to benefit other aspects such as motivating a healthier population, the hosting of events that are more successful across the country and a positive influence on sport events on other tourism sectors (c.f. 3.5).

Chapter 4: An assessment of commitment in an endurance sport context

Sport commitment is the psychological state where a person convinces himself or herself to continue participating in sport (c.f. 4.2). Sport commitment is, therefore, commitment towards the sport. As a result, committed athletes will search for events to participate in and will train and adapt their lifestyle to improve their participation (c.f. 4.7.4). However, these athletes are committed to their sport, not necessarily to a specific event (c.f. 4.2). This observation leads to the question: can events use sport commitment to benefit the event? If sport events can harvest this commitment, the organisers can convince participants to return and influence their behaviour such as higher spending, staying longer, travelling in a larger group and acting as an ambassador for the sport event (c.f. 4.10). Consequently, the question the study aims to answer is if commitment can have a direct influence on other aspects such as the growth of a sport event,

motivating the population to get more involved with sport events and helping coaches and schools convince individuals, not to drop out of sport participation (c.f. 4.2). The SCM is the most well-known and commonly used framework which firstly measures if an athlete is committed to their sport and secondly what the main factors are that predicts this commitment (c.f. 4.6). Endurance athletes are unique in the sense that they are not like gymnasts or tennis players who participate to win. These athletes participate in their sport for an array of other reasons; these reasons are in most cases intrinsic (c.f. 4.7.5). The commitment of endurance athletes is complex and therefore difficult to measure. Thus, previous literature has shown that to fully understand the commitment of endurance athletes, one should also review other methods of measuring sport commitment (c.f. 4.8). The most appropriate way this can be done is by analysing how involved these athletes are with their sport. This can be done by analysing how often they participate in events, how many hours they train, how many years they have been participating and how they adapt other areas of their life to participate such as media usage, spending, travelling and preferences (c.f. 4.8). Unfortunately, to date, the combination of factors that influence the commitment of endurance athletes are limited. Not all events can increase the number of participants that take part in the event. Therefore, the events need to understand their current market to satisfy their needs but also use the market's commitment and behaviour to the advantage of the event (c.f. 4.8). Research that focuses on commitment can help an event organiser understand their current market, understand how to retain this market, and understand how to attract the ideal market (athletes that display high involvement levels) (c.f. 4.10).

Chapter 5: Endurance sport tourism and events in South Africa

Endurance events are ideal for expanding sport tourism in South Africa as there are already successful events taking place. These events are also held annually, which ensures more long-term benefits such as job creation, economic growth, and increase in tourist numbers (c.f. 5.2.2). There is however currently two major challenges for the growth of endurance events in South Africa. The first is the fact that current events hosted do not collaborate with other tourism stakeholders. Therefore, the sport event might be successful but does not contribute to the growth of tourism in general (c.f. 5.2.1). The second challenge is that South Africa’s sport tourism strategy does not focus on these types of events, so it is up to sponsors and the private sector, which consequently leads to smaller less known endurance events struggling to expand and continue (c.f. 5.2.1). Localised endurance events have been part of the South African sport industry for many years as South Africa was banned from international events during the Apartheids era (c.f. 5.4). This also helped the country developed successful smaller events. The biggest challenge, however, is that these events are not geographically spread and only benefits certain parts of the country (mostly major metropolitan cities) (c.f. 5.5). As South Africa is not as developed with regard to sport infrastructure in all the nine provinces, endurance sport events are not location bound and any location will contribute to the uniqueness of the event (c.f. 5.5). Consequently,

these events are ideal for hosting in South Africa as it can spread tourism to different parts of the country and reduce seasonality of tourism in many provinces (c.f. 5.7). Various endurance events attract different endurance participants who share similar profiles and motives, but to date, limited research has looked at the factors that keep them returning to participate (commitment) and why these athletes are willing to make lifestyle adaptions to accommodate their participation (c.f. 5.6.1-5.6.2). The latter is one of the literature gaps the present research attempted to fill.

The next section is a review of the conclusions from the survey and empirical analyses.

8.2.2 Conclusions from the survey

This section includes a review of the profile of the respondents and the conclusions from the statistical analyses (exploratory factor analyses, *t*-tests, ANOVAs, Spearman's Rank Order Correlations and SEM models).

8.2.2.1 Profile of the respondents

Table 8.1 summarises the main findings from the descriptive analysis as presented in Chapter 6 concerning the socio-demographic and behavioural profile of the respondents who took part in the survey (c.f. 6.4.1.1 - 6.4.1.20).

Table 8-1: Profile of respondents

Category	Respondents
Socio-demographic profile	
Gender	Male (81%); Female (19%)
Average age	42 years
Language	English (63%) Afrikaans (34%) Foreign languages (3%)
Province of residence	Gauteng (41%) Western Cape (22%) KwaZulu-Natal (20%)
Marital status	Married (66%)
Gross annual income	R552 001> (43%)
Field of profession	Engineering/Architecture (11%) Healthcare/ Medical (10%) Computers (7%)
Job title	Manager (23%) Owner (21%)
Endurance events and discipline preferences	

Endurance sports participants take part in	Mountain biking (66%) Road cycling (49%) Trail running (38%) Triathlons (36%) Marathon running (35%)
Primary endurance sport	Mountain biking (36%) Triathlons (19%) Cycling (10%) Canoeing (10%) Trail running (8%)
Endurance sport events participants prefer to participate in	Sani2C (30%) Cape Town Cycle Tour (18%) 94.7 Cycle Challenge (16%) Full Ironman South Africa (16%) Ironman 70.3 (11%) Comrades Marathon (11%) Dusi Canoe Marathon (10%) Two Oceans Marathon (10%)
Category of endurance events	Local events (85%) National events (84%)
Type of endurance athlete	Intermediate athlete (35%) Veteran athlete (18%)
Best age to start participating in endurance events	21-30 years (47%) 31-40 years (33%)
Best age to stop participating in endurance events	Never (34%) Over the age of 70 years (33%)
Participation frequency	
Hours per week training	4-8 hours (42%) 8-12 hours (40%)
How often respondents take part in non-competitive endurance events	Once a month (35%) Two to three times a month (32%)
Number of years participants have been competitively participating in endurance events	Average 10.36 years
Number of competitive events per year	3-4 events (37%) More than 8 events (20%)
Planning to take part in future endurance events	Yes (92%)
When respondents prefer to register to participate in competitive endurance events	As soon as registration opens (58%)
Financial commitment of endurance athletes	

Highest spending categories	Event registration (R 7904.01) Equipment and gear (R 13244.70) Travel related expenses (R 9 907.85) Medical services (R 7051.08)
Total average spending per year	R50 300.61
Travel patterns	
Number of days participants arrive in advance at the destination before the event takes place	Average 1.76 days
Number of days participants stay at the destination after the event has taken place	Average 1.5 days

The results from the research confirmed the findings from previous research especially regarding endurance athletes in South Africa (c.f. 5.6.1) that found endurance athletes should be branded a distinct sporting market. It is clear that endurance athletes have a distinctive demographic profile, high training and participation frequency, higher spending, specific event preferences and unique travel patterns. As seen from Table 8.1, the respondents were mainly affluent married males, with an average age of 42 years and originated from the Gauteng, KwaZulu-Natal and Western Cape provinces. They mostly considered themselves as intermediate athletes whose primary sport is either mountain biking, triathlons or cycling. They mostly participate in the Sani2C, Cape Town Cycle Tour and Ironman South Africa and spend an average of R50 300.61 per year on their endurance participation. The highest spending categories include equipment, gear and travel related expenses, registration for the event and medical services. These athletes train for four to 12 hours per week, participate in three to four competitive events per year and have been participating in endurance sport for an average of 10 years. When analysing the travel behaviour of these participants, they have a tendency to arrive at the host destination an average of 1.76 days before an event and tend to stay 1.5 days after the event has taken place.

8.2.2.2 Conclusions made from the exploratory factor analyses

Four exploratory factor analyses were performed. The first factor analysis was done to identify the commitment factors. The second analysis focused on the lifestyle adaption factor, while the third was conducted to identify the event attribute that respondents seek when choosing to participate in an event. The last factor analysis has identified the travel behaviour factors related to event participation. Table 8.2 reveals the factors that were found in each of the four exploratory factor analyses, the mean values in ascending order, and the Likert scale on which each of the different items were measured to ease interpretation.

Table 8-2: Factor analyses conclusions

Factors	Mean value	Likert scale
Commitment (c.f. 6.2.3.1)		
Enjoyment, personal investments and involvement opportunities	4.51	5-point Likert scale of **agreement** (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree).
Involvement alternatives and social constraints	3.92	
Dedication and social support	3.85	
Status, socialisation and travel	1.93	
Lifestyle (c.f. 6.2.3.2)		
Leisure and event participation	3.07	5-point Likert scale of **extent** (1= not at all, 2= a little, 3= to a moderate extent, 4= a lot and 5= totally).
Media consumption	2.92	
Health and fitness	2.89	
Enhanced performance spending	2.84	
Sport development	1.92	
Event attributes (c.f. 6.2.3.3)		
Challenge and reputation	3.69	5-point Likert scale of **importance** (1=not at all important, 2=slightly important, 3=moderately important, 4 important and 5=extremely important).
Accessibility and affordability	3.57	
Location and climate	2.77	
Attractiveness and exposure	2.30	
Travel Behaviour (c.f. 6.2.3.4)		
Group travel opportunities	3.29	5-point Likert scale of **agreement** (1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree)
Holiday choice opportunities	3.16	
Individual travel opportunities	3.02	

The main findings from the exploratory factor analyses are discussed next.

8.2.2.2.1 Conclusions regarding the factor analysis on Commitment

The results confirmed that the SCM factors positively influence South African endurance athletes' sport commitment. These results show that the main factors affecting endurance athletes' commitment were *enjoyment, personal investments and involvement opportunities, involvement alternatives and social constraints* as well as *dedication and social support. Enjoyment, personal investments and involvement opportunities* had the highest mean value that indicated that it had the strongest influence on the commitment of endurance athletes. This corresponds with the SCM hypotheses that *enjoyment* (c.f. 4.6.2.1), *involvement opportunities* (c.f. 4.6.2.5) and *personal*

investments (c.f. 4.6.2.3) all individually lead to an increase in commitment. However, the results, for the first time, found that these three factors were grouped together forming a unique combined factor. *Involvement alternatives and social constraints* were discovered in the current study as the second highest factor by which respondents agreed to influence commitment. This is in contrast with most studies that found that *involvement alternatives* and *social constraints* both have a negative influence on sport commitment (c.f. 4.6.2.2 & 4.6.2.4). The factors *dedication and social support* (c.f. 4.6.2.6) as individual factors were both identified as positive influences on commitment in previous research. The current study found that the combined factor of *dedication and social support* was a positive predictor of endurance athletes' commitment. This indicates that respondents see themselves as dedicated to endurance sport and also acknowledges the importance of social support from significant others. The factor *status, socialisation and travel* as an influence on commitment have not been found in previous sport commitment research, and most respondents agreed that this factor had less of an influence on their sport commitment.

8.2.2.2.2 Conclusions regarding the factor analysis on Lifestyle

From Table 8.2 it is clear that endurance athletes adapt their lifestyle in different ways, which correspond with previous research done in an endurance sport context. The most prominent lifestyle adaption was in terms of *health and fitness*, *media consumption* and *enhanced performance spending*. The results indicated that respondents adapt their lifestyle to the greatest extent regarding *leisure and event participation*, which has been found in previous research focusing on marathon runners, triathletes, and mountain bikers. This is a significant finding as it shows that committed participants are more willing to travel to participate in events. Endurance athletes adapt their lifestyle to a lesser extent regarding *sport development*. This result contradicts research focusing on charity-affiliated events which found the opposite to be true.

8.2.2.2.3 Conclusions regarding the factor analysis on event attributes

The event attribute factor, *attractiveness and exposure, accessibility and affordability, challenge and reputation* as well as *location and climate* have all been found in both international and South African endurance studies. The factor, *challenge and reputation*, was the most important event attribute factor that endurance athletes seek when choosing an event. This result corresponds with previous research, which shows that endurance athletes are very selective when choosing an event and that attributes such as the challenge, organisation and reputation are of particular importance when selecting an event. This attribute factor choice was closely followed by *accessibility and affordability,* which is also supported by an array of studies focusing on endurance sport. However, this factor was also observed as an important attribute when selecting other sport events. This result confirms that apart from the challenge the event provides, the event still needs to be affordable. Therefore, aspects such as proximity and the entry fee become vital.

8.2.2.2.4 Conclusions regarding the factor analysis on travel behaviour

The three travel behaviour factors *individual travel opportunities, group travel opportunities* and *holiday choice opportunities* are distinct to the current study for few studies have to date focused on the travel behaviour of endurance athletes. As seen in Table 8.2 respondents agreed that their event participation had the biggest influence on their *group travel opportunities*, which in part corresponds with the research done by Kruger and Saayman (2013) who found similar results in their study on marathon runners in South Africa. This finding shows that because of participants' event participation, endurance athletes are more inclined to visit tourist attractions in the event area, but also bring along their friends and family when participating in an event. This is a significant finding for enhancing sports tourism as it empirically shows the relationship between sport participation and tourism enhancement. This is furthermore the first time that commitment, lifestyle, event attribute and travel behaviour factors have all been found in one study focusing on one specific sport participant market.

The next section highlights the differences found by means of *t*-tests and ANOVAs.

8.2.2.3 Conclusions with regard to the *t*-tests and ANOVAs

The conclusions for the ANOVAs and *t-tests* are divided into four sections, each with a table highlighting the main findings when comparing the different categories of socio-demographic and behaviour characteristics of the respondents with the commitment, lifestyle, event attribute and travel behaviour factors. The first section looks at the differences in socio-demographic variables, followed by sport and event preferences, participation frequency and travel patterns (Table 8.3 - 8.6).

8.2.2.3.1 Conclusions regarding the socio-demographic variables of respondents

The socio-demographic variables did not reveal clear differences between the groups and most of the categories ranked the different factors similarly (Table 8.3). Taking into account the differences with regard to commitment, there are not many dissimilarities regarding the socio-demographics of the respondents. The most notable differences were found relating to age, marital status, and annual income. The results showed that younger participants have higher levels of *enjoyment, personal investments and involvement opportunities* as well as *involvement alternatives and social support.* It is, however, interesting to note that older participants had the highest scores for *dedication and social support,* which supports previous research that indicated that one's dedication does not decrease with age. Interestingly, respondents in other types of relationships (e.g. divorced, not married, widowed, engaged or living together) had higher scores with all the commitment predictors. This might be attributed to the fact that these athletes are independent and that endurance sport is their main priority. Respondents with *secondary education* as their highest level education reported to having the most *involvement alternatives*

and social constraints. These are most likely younger participants in the process of furthering their education, and consequently have different priorities and added pressures from parents and educators.

In considering lifestyle factors, socio-demographic variables such as gender, age, marital status, province of origin and annual income all revealed differences. The lifestyle differences between males and females revealed that females had a higher *health and fitness* lifestyle adaption, while males had higher *media consumption* and *enhanced performance spending.* Unsurprisingly, younger participants (Generation X) adapt their lifestyle to a greater extent regarding *health and fitness, media consumption* and *event and participation.* This shows that as age increases, lifestyle adaption for endurance participation purposes will decrease. Respondents in other relationships were found to have more *leisure and event participation* compared to respondents that are single or married. Predictably, respondents from the Gauteng Province, which is South Africa's financial hub, had the highest *enhanced performance spending.* Income also revealed differences with lower income groups adapting their lifestyle more regarding *health and fitness* and *leisure and event participation,* although the upper income group had more *enhanced performance spending.* This shows that an increase in income is directly linked to higher spending on endurance sport participation.

Socio-demographic differences that were observed for the event attribute factors where age, annual income, and level of education. From the results, it is evident that younger participants regarded the *attractiveness and exposure* as well as the *challenge and reputation* of an event as the most important attributes. This result shows that as athletes' age increases it influences their reason for participating in an event and the event attributes they seek from an event. Respondents that fell in the middle-class income group rated the *accessibility and affordability* as well as the *attractiveness and exposure* as the most important event attributes. The level of education also influenced the event attributes respondents seek. Respondents with secondary education as their highest level of education sought the *attractiveness and exposure* of an event, while respondents with vocational and verified education chose an event based on the *accessibility and affordability*. Lastly, respondents with undergraduate tertiary education regarded the *accessibility and affordability* as well as the *challenge and reputation* as the most important event attributes.

The travel behaviour factors revealed differences with all the demographic variables apart from Province of origin. The results showed that males as well as older participants (Generation Y and Baby Boomers), indicated that their *event participation* influences their *holiday choice opportunities*. This result indicates that these groups are more likely to keep their holiday and event participation separate. With reference to home language and marital status, results revealed that respondents that spoke Afrikaans and English or were married had higher scores

for *holiday choice opportunities*. This is an indication that for these groups of respondents event participation and holiday destinations are not connected. Respondents that fell in the lower income group agreed that their event participation had more of an influence on their *individual travel opportunities* and *group travel opportunities.* Furthermore, respondents in the middle class and affluent middle class also reported having more *group travel opportunities.* This shows that income is correlated with the extent to which event participation influences an athlete's travel behaviour. The more money a respondent has, the less likely their event participation will affect their travel behaviour. Respondents that have secondary school as their highest level of education have more *individual travel opportunities* because of their event participation.

Collectively the results show that socio-demographic variables play a role in the commitment, lifestyle, event attributes and travel behaviour of endurance sport participants. However, the extent of the differences is different for each factor. Age seems to be the only factor that plays a role in all four sets of factors.

Table 8-3: Conclusions with regard to the ANOVAs and *T-tests* of the socio-demographic variables

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and Travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Socio-demographic profile																	
Gender	Male						✓			✓							✓
	Female					✓											
Age	Generation X	✓	✓			✓	✓	✓			✓		✓				
	Generation Y																✓
	Baby Boomers																✓
Home language	English																✓
	Afrikaans																✓
	Foreign																
Marital status	Married																✓
	Single																
	Other relationship	✓	✓	✓				✓									
Province of residence	KwaZulu-Natal																
	Western-Cape																
	Gauteng									✓							
	Other provinces																

Table 8-3: Conclusions with regard to the ANOVAs and *T-tests* of the socio-demographic variables (continued)

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and Travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Socio-demographic profile																	
Annual income	Lower class					✓		✓							✓	✓	
	Middle class										✓	✓				✓	
	Affluent middle class															✓	
	Upper class									✓							
	Secondary education		✓								✓				✓		
Highest level of education	Vocational and certified education											✓					
	Undergraduate tertiary education											✓	✓				
	Post-graduate education																

Source: Researcher's own compilation based on the results

8.2.2.3.2 Conclusions regarding the event and sport discipline preferences of respondents

Table 8.4 shows that differences could be observed regarding respondents' sport and event preferences. All the event and sport discipline preferences had differences concerning the commitment factors. The event categories revealed that respondents that took part in international events hosted in South Africa had more *enjoyment, personal investments and involvement opportunities*, as well as *involvement alternatives and social constraints*. Therefore, these respondents appear to be more committed to their endurance sport. Respondents that had multi-disciplinary sport as their primary endurance sport agreed to have higher *involvement alternatives and social constraints*. This is expected as these athletes have more events and sport disciplines to master and choose from. Athletes that mostly take part in running and multi-disciplinary events also had more *involvement alternatives and social constraints.* Results clearly showed that the type of athlete a respondent classified himself or herself as and commitment, is firmly linked. Hard-core athletes, who can be regarded as professional athletes, had higher scores for all the commitment predictors, indicating that these athletes are more committed to their sport. In addition, intermediate athletes who are progressing in their endurance career agreed to have more *involvement alternatives and social constraints*, while veteran athletes agreed to be having more *dedication and social support.* This is an important finding as it shows that *dedication and social support* is likely to increase with time and experience. Best age to start endurance participation and best age to stop participation also revealed differences with respondents. The best age to start was indicated as a young adult having more *involvement alternatives and social constraints.* Respondents that indicated one should stop endurance sport participation between the ages 40 to 70 years, agreed more that *status, travel and socialisation* influence their sport commitment.

For lifestyle, there was an array of differences based on the event category. The results showed that as the scale of the category increases so does the lifestyle adaption. This is particularly the case regarding respondents that indicated they participate in international events hosted in South Africa as these respondents adapted their lifestyle more in terms of all the lifestyle factors compared to respondents that do not take part in these types of events. Concerning the specific sport discipline, it is clear that respondents that see multi-disciplinary sports as their primary sport, adapt their lifestyle to a greater extent in terms of *health and fitness, event and leisure participation, sport development* and *enhanced performance spending*, while running and cycling participants adapt their lifestyle more in terms of *enhanced performance spending.* Concerning the events respondents participate in, it is clear that the type of event leads to specific lifestyle adaption, although similar to the primary sport, multi-disciplinary event participants adapt their lifestyle more concerning all the lifestyle factors. The type of athlete respondents classified themselves as also revealed differences with hard-core athletes adapting their lifestyle more

regarding all the lifestyle factors apart from *sport development.* Therefore, the type of athlete, which is based on one's reason for participating, showed that respondents that participate for recreational purposes or have only started participating have less lifestyle adaption compared to intermediate, hard-core and veteran athletes. Respondents that indicated the best age to start participating as a young adult, had a higher lifestyle adaption in *leisure and event participation*.

Concerning event attributes, differences were found based on the event category, primary endurance sport, and the type of athlete as well as best age to start and stop participating in endurance sport. Most differences revealed that specific groups have specific event attributes they seek. Participants that take part in a local event considered the *accessibility and affordability* as an important event attribute, while respondents participating in international events hosted in South Africa and international events rated the *attractiveness and exposure* of the event as more important. The primary sport endurance athletes choose also leads to specific event attributes. Cycling and running participants felt that the *location and climate* was an important event attribute. Additionally, the *accessibility and affordability* is a major event attribute for running participants. Respondents that chose multi-disciplinary sport as their primary sport or classified themselves as hard-core athletes, choose an event based on the *attractiveness and exposure* of that event. Intermediate athletes regarded the *challenge and reputation* as an important event attribute. Therefore, an athlete's classification of himself or herself is directly linked to the event attributes they seek when choosing an event to participate in. The best age to stop and best age categories also revealed differences with regards to event attributes.

The travel behaviour factors showed differences based on the event category in which respondents participate in. Respondents that participate in international events hosted in South Africa, as well as international events, agreed to have more *individual travel opportunities* and *group travel opportunities*. Respondents taking part in international events hosted in South Africa agreed that their event participation had less of an influence on their *holiday choice opportunities.* This shows that the respondents that take part in these categories are more likely to travel to the destination where the event takes place. The primary sport also influenced the travel behaviour of cycling participants – they are more likely to keep their holiday and event destinations separate, while multi-disciplinary participants agreed that their event participation gives them more *individual and group travel opportunities.* The type of event that respondents participate in, also influenced the travel behaviour of the respondents (athletes). Apart from respondents that take part in cycling events, respondents that take part in the running, water-based events, multi-disciplinary and club members all agreed that event participation had an influence on their *individual and group travel opportunities.*

Consequently, the results show that respondents that take part in international events hosted in South Africa chose multi-disciplinary sport as their primary sport. Also evident from the results is that respondents who classified themselves as hard-core athletes had differences with regard to all four factors. This is a significant finding as each of these groups is important markets to target. These respondents are committed, have high lifestyle adaption, seek specific event attributes and travel in the event area.

Table 8-4: ANOVAs and *T-tests* conclusions with regard to sport and event preferences

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Sport and event preferences																	
Event categories	Local											✓					
	Regional					✓		✓									
	National					✓		✓		✓							
	International events hosted in SA	✓	✓			✓	✓	✓	✓	✓	✓				✓	✓	✓
	International					✓		✓	✓		✓				✓	✓	
	Charity								✓								
Primary endurance sport	Running									✓		✓		✓			
	Cycling									✓				✓			✓
	Water-based																
	Multi-disciplinary		✓			✓		✓	✓	✓	✓				✓	✓	
Type of endurance athlete	Average																
	Intermediate		✓			✓		✓					✓				
	Hard-core	✓	✓	✓		✓	✓	✓	✓		✓				✓		
	Veteran			✓		✓											
	Recreational																

Table 8-4: ANOVAs and *T-tests* conclusions with regard to sport and event preferences (continued)

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Sport and event preferences																	
Endurance events	Cycling events																✓
	Running events		✓					✓							✓	✓	
	Water-based events								✓							✓	
	Multi-disciplinary events		✓			✓		✓							✓	✓	
	Clubs					✓										✓	
Best age to start participating in endurance events	Adolescent																
	Young adult		✓					✓							✓		
	Adult																
	Senior											✓					
Best age to stop participating in endurance events	Never																
	40-70 years				✓						✓			✓			
	Over 70 years																

Source: Researcher's own compilation based on the results

8.2.2.3.3 Conclusions regarding the participation frequency of respondents

All the participation frequency groups, apart from the number of years, had significant differences regarding the commitment factors. Respondents that indicated to train between 8 to 12 hours and more than 12 hours had higher *enjoyment, personal investments and involvement opportunities* as well as *involvement alternatives and social constraints.* Respondents that take part in non-competitive events frequently also had higher *enjoyment, personal investments and involvement opportunities.* Respondents that are involved in more than five events per year had higher *involvement alternatives and social constraints.* Respondents that take part in seven to eight competitive events per year had a higher mean value for *enjoyment, personal investment and involvement opportunities.* Additionally, respondents that participate in five to six events and more than eight competitive events per year had more dedication and social support than respondents that take part in fewer events. A respondent that registers to participate and a respondent that show intention to continue, are both an indication of how committed the respondent is. Respondents that register as soon as registration opens and respondents that have the intention to continue their participation in the future both had higher commitment scores.

Seeing that participation frequency can be regarded as a form of lifestyle adaption, it is expected to see differences in all the frequency of participation groups. If taken into account the number of events and number of hours respondents' train, there is a clear link with lifestyle adaption. An increase in the number of events and number of hours clearly showed a higher level of lifestyle adaption concerning all the factors. Respondents that have taken part in competitive events for six to 10 years had higher *media consumption* and *enhanced performance spending*. This might be because these athletes are at the peak of their career and will, therefore, search for additional information and spend extra money to improve their performance. It is also evident that respondents who register as soon as registration open take their event participation seriously and this is also linked to the fact that this group of participants has a higher lifestyle adaption regarding all the lifestyle factors. Predictably, respondents that have the intention to continue their participation in endurance sport adapt their lifestyle more concerning all the lifestyle factors.

The number of hours respondents train is associated with the specific event attributes respondents seek. It is clear that the more hours a respondent trains; the more important the event attributes *attractiveness and exposure, as well as challenge and reputation,* become. Therefore, the more preparation, the less important aspects such as affordability becomes. On the other hand, the challenge, reputation and features of the event become more important and greater. Interestingly the opposite is true with respondents either occasionally or frequently taking part in non-competitive events. These respondents are more likely to choose an event based on the *accessibility and affordability* as well as the *location and climate*. The event attributes that respondents seek is therefore influenced by the type of event (competitive vs. non-competitive).

The *attractiveness and exposure* of an event become less important as the number of years competitively participating increases. Therefore, features such as prize money, international standing, and media exposure become less important as athletes' level of experience increases.

Travel behaviour had fewer differences, although results revealed that respondents who train more than 12 hours, participate in more than eight events, or have the intention to continue their event participation all had more *individual travel opportunities*, because of their event participation. On the other hand, respondents that have been competitively participating for 11-20 years indicated that event participation has an influence on their holiday choice opportunities. Therefore, this group of respondents is more likely to keep their event destination and holiday destination separate.

From Table 8.5 it is evident that the number of hours training, the number of competitive events per year, when respondents decide to register and the intention to continue to participate; revealed the biggest differences. These results show that participation frequency is a good indicator of commitment; as one's participation frequency increases, the level of commitment is likely to increase.

Table 8-5: Conclusions showing the differences between participation frequency groups

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Participation frequency																	
Hours per week training	Less than 4 hours																
	4-8 hours									✓	✓		✓				
	8-12 hours	✓	✓							✓	✓		✓				
	More than 12 hours	✓	✓			✓	✓	✓	✓	✓	✓		✓		✓		
How often participants take part in non-competitive events	Never																
	Rarely																
	Occasionally								✓			✓		✓			
	Frequently	✓										✓		✓			
Number of years competitively participating in events	0-5 years										✓						
	6-10 years						✓			✓	✓						
	11-20 years										✓						✓
	21 + years																

Table 8-5: Conclusions showing the differences between participation frequency groups (continued)

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Participation frequency																	
Number of competitive events per year	1-2 events																
	3-4 events							✓									
	5-6 events		✓	✓			✓	✓	✓								
	7-8 events	✓	✓			✓		✓									
	More than 8 events		✓	✓		✓	✓	✓		✓					✓		
When do participants register for events	The impulsive																
	The last-minute partaker							✓									
	The early bird	✓	✓			✓	✓	✓		✓	✓						
	The contemplator																
Intention to continue	Yes	✓	✓			✓		✓	✓						✓		
	No																

Source: Researcher's own compilation based on the results

8.2.2.3.4 Conclusions regarding the travel behaviour of respondents

The travel patterns of respondents revealed the most differences regarding lifestyle and travel behaviour and less concerning commitment and event attributes. When analysing the differences with commitment factors, results showed that respondents who arrive three days or more in advance had higher *involvement alternatives and social constraints* as well as *dedication and social support.* Additionally, respondents who stay three or more days also had higher levels of *involvement alternatives and social constraints.* The number of days respondents stay before or after an event was also directly correlated to lifestyle adaption in all the lifestyle factors. Respondents that stay longer (two days and more) or arriving before (two or more days) the start of the event adapt their lifestyle more regarding *health and fitness, media consumption, leisure and event participation, sport development* and *enhanced performance spending.* Concerning event attributes, fewer differences were found although it was clear those respondents who stay longer or arrive earlier (more than three days), see the *attractiveness and exposure* of the event as important. Additionally, respondents that stay for three or more days after the event has ended also find the *location and climate* as an important attribute. This gives an indication that respondents search for events that have an appealing location and climate seeing that these respondents want to travel the area after the completion of the event.

Unsurprisingly, it is evident from Table 8.6 that the number of days an athlete either arrives before or stays after the event has a direct influence on travel behaviour. The more days a respondent arrive before or stay after the event is, therefore, an indication of more individual and group travel opportunities. Consequently, the number of days is an indication if a respondent will travel to the event destination or not.

Table 8-6: ANOVAs and *T-test* conclusions with regard to travel behaviour groups

Variable		Commitment factors				Lifestyle factors					Event attribute factors				Travel behaviour factors		
		Enjoyment, personal investments and involvement opportunities	Involvement alternatives and social constraints	Dedication and social support	Status, socialisation and travel	Health and fitness	Media consumption	Leisure and event participation	Sport development	Enhanced performance spending	Attractiveness sand exposure	Accessibility and affordability	Challenge and reputation	Location and climate	Individual travel opportunities	Group travel opportunities	Holiday choice opportunities
Travel behaviour																	
Number of days respondents arrive in advance	0 days																✓
	1 day														✓		
	2 days					✓	✓	✓	✓						✓	✓	
	3 or more days		✓	✓		✓	✓	✓	✓	✓	✓				✓	✓	
Number of days respondents stay after the event	0 days																✓
	1 day														✓	✓	
	2 days						✓	✓	✓						✓	✓	
	3 or more days		✓			✓	✓	✓	✓	✓	✓			✓	✓	✓	

Source: Researcher's own compilation based on the results

8.2.2.4 Conclusions from the Spearman's Rank Correlations

For the purpose of the SEMs, the reliability had to be calculated to see whether the factors could be included in the final models. Secondly, Spearman's Rank Order Correlations were calculated to describe the strength and direction of the linear relationship between continuous variables before the structural models were developed (c.f. 7.5). The main findings from the analysis are consequently discussed.

- The four commitment factors, *status, socialisation and travel* (factor 4) had a small negative corrected item-total correlation of -0.125. As this factor had no significant contribution towards commitment, this factor was excluded from further analysis (c.f. 7.5.1).
- The travel behaviour factor, *destination choice opportunities* (factor 3), had a negative corrected item-total correlation of -0.281. This negative relationship between the factor and others was confirmed by Spearman's rho (c.f. 7.5.2). This factor was reverse coded to be included in the further analysis.
- Spearman's Rank Order Correlations were furthermore calculated to describe the strength and direction of the linear relationship between continuous variables before the structural models were developed (c.f. 7.5.2).
- All three commitment factors (*enjoyment, personal investments, and involvement, involvement alternatives and social constraints* as well as the *dedication and social support*) had large positive correlation coefficients indicating that these factors are all positively correlated with one another (c.f. 7.5.2.1).
- All the lifestyle factors (*health and fitness, media consumption, leisure and event participation, sport development* and *enhanced performance spending)* were positively correlated with one another which was indicated by medium correlation coefficients. Thus stating that if respondents adapt their lifestyle in terms of one aspect all the other lifestyle aspects will increase (c.f. 7.5.2.2).
- Small and medium correlation coefficients indicated that the event attributes *attractiveness and exposure, accessibility and affordability, challenge and reputation,* as well as *location and climate,* were all positively correlated with one another (c.f. 7.5.2.3).
- When comparing the travel behaviour factors *individual travel opportunities* and *group travel opportunities,* it is evident these factors are positively correlated with one another. Conversely, *individual travel opportunities* and *group travel opportunities* both are negatively correlated to *destination choice opportunities* and vice versa (c.f. 7.5.2.4).
- Consequently, Spearman's Rank Correlations indicated that the commitment factors are positively correlated with all the lifestyle factors, to the event attributes *attractiveness and exposure,* and *challenge, as well as reputation;* and the travel behaviour factor, *individual travel opportunities* (c.f. 7.5.2.1-7.5.2.4).

8.2.2.5 Conclusions with regard to the combined lifestyle, event attribute and travel behaviour with commitment SEM model

The SEMs was an additional method to confirm the previous results since it was not only socio-demographic and behaviour variables that played a role, but that each factor also influenced one another (Spearman's Correlations). To further analyse the relationship between *commitment* to *lifestyle, event attributes* and *travel behaviour*, SEM models were used (c.f. 7.6). The SEMs, however, gave an indication of the unique (over and above) relation between each factor with commitment (c.f. 7.6.1). The main findings from the SEMs are as follow:

- Model 1 revealed that *lifestyle* and *travel behaviour* both had a unique relation to commitment. Therefore, if the aim is to increase the commitment of endurance athletes, the focus should be on managing these two aspects (c.f. 7.6.2).
- Previous results and relevant literature were used to develop the hypotheses for the different SEM models (c.f. 7.6.1). Previous literature hypothesised that each factor (lifestyle, event attributes, and travel behaviour) could have a unique relation to commitment. The results, therefore, confirm the hypothesis for lifestyle and travel behaviour, but reject the hypothesis for event attributes, which is a distinct finding made in the current study.

8.2.2.6 Conclusions with regard to the SEM models on the individual factors

- Although all the lifestyle factors had an influence on commitment as given by Spearman's Rank Order Correlations (c.f. 8.3.2.3), the only lifestyle factors that had a unique relation to commitment were *leisure and event participation* and *media consumption* (c.f. 7.6.3).
- The event attributes *challenge and reputation*, as well as *attractiveness and exposure* when choosing an event, had a unique relation to commitment (c.f. 7.6.3).
- For the travel behaviour factors, *individual travel opportunities* had a unique relation to commitment. *Group travel opportunities* was positively correlated to commitment as a factor on its own, but when measured in combination with the other two travel behaviour factors, a suppression effect occurs, and it has a unique negative relation to commitment (c.f. 7.6.3).
- The fit indices of the three models (Models 2-4) also provided the evidence of a good fit, indicating that these models can be used for predictive purposes (c.f. 7.6.3). Each of the individual factors found within *lifestyle* (Model 2), *event attributes* (Model 3) and *travel behaviour* (Model 4) which had a unique relation to commitment, is a distinct finding of the current study (c.f. 7.6.3).

8.2.2.7 Conclusions with regard to the Mediation SEM models

The results from the mediation models are distinct to the present study as these relationships have not yet previously been tested and therefore contribute to the sport commitment literature. The main findings were:

- From the SEM Model 1, it was found that *event attributes* was the only aspect not to be related to commitment. Event attributes, however, had a positive correlation with commitment based on its standardised regression weight and a statistically significant value ($p < 0.001$). To explore whether *lifestyle* and *travel behaviour* might be mediators for the relationship between *event attributes* and *commitment,* Mediation SEM models were used (c.f. 7.6.4).
- Mediation models show the process that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third hypothetical variable known as a mediator variable (c.f. 7.6.4). A mediator variable can account for either all or some of the observed relationships between two variables. This is known as either full or partial mediation (c.f. 7.6.4).
- From Model 5 it was clear that *event attributes* was not related to commitment when *lifestyle* and *travel behaviour* acts as mediators. Although a relationship could be observed between *event attributes* and *commitment* when *lifestyle* and *travel behaviour* are added as mediators, this relationship becomes insignificant (c.f. 7.6.4).
- When analysing *lifestyle* as a mediator in the relationship between *event attributes* and *commitment*, results reveal that *lifestyle* is a full mediator of the relationship between *event attributes* and *commitment*. Therefore, the focus should mainly be on *lifestyle* and that *event attributes* cannot be managed in isolation of *lifestyle* when the goal is to increase commitment (c.f. 7.6.5).
- The final model (Model 7) analysed the relationship between commitment and event attributes with *travel behaviour* as mediator. Results revealed that *travel behaviour* is a partial mediator for the relationship with *event attributes* and *commitment.* This result showed that when combined with *travel behaviour*, *event attributes* could increase commitment, but only partially (c.f. 7.6.6).

The next section reviews the recommendations grounded on the results and the analyses used. It is important to note that these recommendations are not only centred around the questionnaire and survey but also focuses on future surveys and questionnaires, for both of these aspects are interlinked.

8.3 Recommendations with regard to the survey

Based on the method of research applied in the study as well as the results, the following recommendations are made for future research and for researchers to consider regarding the survey.

- The success of this type of research is dependent on collaboration with the sport industry. One of the biggest challenges of this study was cooperation from the sport event industry. Although the organisers of the respective events were willing to distribute the questionnaire link to their participants, the problem was to consistently remind athletes to take part to get a representative sample. In the end, endurance clubs also formed part of the survey with the aim in obtaining enough questionnaires for the data analyses. It is therefore recommended that if a similar study is done, one should approach as many possible event organisers by making use of a detailed research proposal outlining the benefits of the research not only from a research point of view but also for the growth and sustainability of the sport tourism and events industry. In this study, the focus was mostly on the larger endurance events hosted in the country, since the events attract both national and international participants. It would, however, be beneficial to approach different event categories (local, national and international) which will ensure a larger number of participants and various types of endurance athletes (recreational vs. professional). It is important that event organisers realise the importance of this type of research. Therefore, when approaching events to take part in future studies, emphasis should be on how the findings can benefit the events, especially in future planning. It also recommended that club and event surveys are kept separate, but that the same questionnaire is used. This will give researchers the opportunity to compare endurance club members with event participants.
- The questionnaire that was applied, was adequate as it measured different variables for commitment. To compare the participation frequency with commitment, travel behaviour, lifestyle and event attribute factors it is suggested that some of the questions be converted to a 5-point Likert scale question as this would give more freedom for analysis such as factor analyses as well as structural equation modelling. For example, the participation frequency items such as training, event participation and how regular an athlete participates in events, could be converted to a 5-point Likert scale of extent.
- The questionnaire should also be sent to more international endurance participants to compare the national and international endurance markets to be able to develop a framework for each of the two markets. Destination surveys at international events hosted in South Africa (Ironman South Africa) would be ideal, as this would give researchers the opportunity to use a purposive sample where quotas from different groups of participants are set in place. It is also recommended that endurance events and clubs be contacted to apply the commitment framework to endurance athletes from other countries around the world. This can also lead to collaborative studies with academics from international universities and a comparative study

looking at a sport commitment framework for developing countries compared to the framework for developed countries.

- Based on the results and the statistical analyses, it is advisable to measure the commitment variable question as separate questions and not part of the rest of the commitment predictors on the 5-point Likert scale. To compare respondents who see themselves as committed with those that do not, a separate yes/no question should be included. An example of the question could be: Do you feel committed towards your chosen endurance sport? (Yes/ No). This question can then be used in a *t*-test analysis to identify if respondents that see themselves as committed, have higher commitment scores or different commitment predictors. It would also be advised that an open-ended question is included that examines what respondents regard as commitment towards sport. These aspects can then be refined to develop a separate scale to measure the commitment of athletes. These findings can help refine the current sport commitment model and can highlight that different types of athletes require different commitment models (measuring instruments). It is also a good way to bring together theory and practice.
- The financial commitment question should be converted into a question that can be used in ANOVAs and *T-tests.* While it is valuable for researchers to get an indication of how much money respondents spend on their endurance sport, it would also be beneficial to compare the financial commitment of different athletes. The amount respondents spend can be converted to a yes/no question, for example: Would you say you spend more than R30 000 per year on your endurance participation? This can further be used in a *t*-test analysis to compare if respondents that spend more, have higher levels of commitment. This can also be done with other types of personal investment such as time (e.g. Do you spend more than 12 hours per week training for endurance events). Future researchers can also measure the question mentioned above in a regression analyses. This will give a good indication of which variables has a significant influence on higher spending. This information will be valuable for especially economic impact analysis studies.
- The travel behaviour variables struggled to load in useable groups with the factor analysis. However, it is important to note that this variable has not been tested to this extent in previous research. The inclusion of the variable in the questionnaire and in the analysis was therefore subjected to trial and error. More research is needed concerning travel behaviour of endurance athletes, as this will lead to more relevant travel behaviour factors to measure and include in the measuring instrument. It is also suggested that all travel behaviour questions are asked in a similar way. In the current study one of the aspects needed to be reversed coded, which indicated that the question was not positively worded as the rest of the items. It is, therefore, important to ensure that all questions are either positively or negatively worded. The Likert scale can also include more questions to indicate that event participation does not influence an athlete's travel behaviour. For example on a 5-point Likert scale of agreement,

an item can include: I only participate in the event and visit no tourism attractions in the area. Again, the results from the present research paved the way for future researchers to test and validate the findings.

- To ensure an even event distribution of endurance participants, the number of questionnaires received from each type of discipline should be determined beforehand. This should be implemented by putting a cap on the number of questionnaires needed for each discipline (e.g. 100 questionnaires for five different endurance disciplines). The size of different endurance events should also be considered. With larger events (for example Cape Town Cycle Tour) it might be necessary to only target one or two events as with smaller events (for example Dusi Canoe Marathon) it would be desirable to target two to three similar events. This will ensure that the number of questionnaires is evenly distributed among the different disciplines irrespective of the time-constraints that researchers have on collecting a reprehensive sample (for example, researchers might only have a few months to get enough questionnaires from each discipline). However, a more even distribution of questionnaires among the different sport disciplines will ease comparisons.

Developing a framework fostering endurance sport commitment was the main aim of the research. The researcher, however, had to devise a plan and a process to develop this framework since this research has not been conducted before internationally or nationally. Limited guidelines were, therefore, available to assist the researcher in developing such a framework. The researcher, therefore, suggests the following steps in developing a framework of this nature. The researcher believes that these suggestions can be beneficial to future researchers.

The following steps were used to develop the framework in the present study.

- **Step 1: Conduct a thorough literature review**

First, to (or "intending to") develop any framework, a detailed and thorough literature review of the topic under investigation is required. This will give an indication of what factors will have an influence on the dependent variable under investigation. It is important to evaluate different studies done on the topic as well as related theories as this will ensure that the best method for measuring the dependent variable is used. With a detailed literature review, it is also possible and necessary to identify the gaps in the current literature on the topic.

- **Step 2: Develop a research framework based on the existing literature**

The comprehensive literature analyses will assist in drawing up a theoretical and research framework. The research framework not only indicates which aspects to include measuring the dependent variable, but also independent variables that may positively or negatively influence this variable. The research framework additionally helps with the designing of the questionnaire

and deciding which questions to include. The layout and design of the research framework should be straightforward and clear in what it attempts to identify and achieve.

- **Step 3: Develop the questionnaire to measure aspects identified in the research framework**

The research framework should be used in developing a questionnaire that will measure different variables within the framework. Carefully consider the best way to measure the various independent variables and the format to be used (open or close-ended or Likert scale) to obtain the best results and to ease the statistical analyses. To ensure that all the aspects included in the research framework are measured in the questionnaire, use a Table (as compiled in the present study) to indicate the type of question asked to test the variable, the section in which the variable is measured and what this aspect will measure in the framework. Again, it is important to show how the items that are measured in the questionnaire are substantiated by previous research. When new items are included, it is vital to indicate the gap in the current literature and the necessity of adding the items.

- **Step 4: Conduct an empirical survey**

The process followed to carry out the survey will depend on the nature and goal of the study. However, it is important that the researcher decides the best option i.e. quantitative, qualitative, or mixed method. In the case of the present study, distribution of the questionnaire online reached the most respondents and was more cost-effective than travelling to different events for a destination-based survey. It is however advised that if possible, a pilot study is conducted to ensure that respondents understand the meaning of each question and answers it appropriately.

- **Step 5: Conduct a thorough data analysis incorporating a variety of statistical analyses**

In the case of the present study, an array and combination of statistical analyses and tests could be performed. This, however, emphasises the importance of a thorough literature analysis as well as carefully considering the format of each question and the scales used. Where the relationship between variables appears to be evident, it is advised to use SEM models to analyse this relationship further. Mediation models are a relatively new phenomenon especially in sport tourism research. However, it is a viable way to explain relationships between variables and could be applied to various research areas and disciplines.

The final step involves the implementation of the framework, which will be discussed in detail below as part of the contribution of the research. For any framework, apart from being solidly grounded in theory, implementation is one the most important aspects. It is therefore advised that when developing frameworks, the practical and research implications be considered.

8.4 Contributions from the research

The contributions of the study are relevant to researchers, practitioners and key stakeholders. Next, these contributions are outlined.

8.4.1 Literature contributions

This research has various literature contributions that are invaluable to researchers in the field of sport tourism. These are as follows:

- This research firstly fills the gap in the endurance sport literature by proposing a commitment framework that considers various aspects within a South African sport context. However, other developing countries can also implement this framework or an adjusted form thereof, depending on the county. In this study, the Sport Commitment Model was applied for the first time in conjunction with other models and theories as well as different influential aspects (c.f. 6.2) to show that commitment to sport is complex and dependent on many variables. The proposed framework based on the research results was discussed in detail in section 7 (c.f. 7.7). The framework is ideal for researchers to better understand the complex nature of commitment among endurance sport participants. This framework can be seen as a benchmark in the field of endurance sport and sport tourism research and can easily be applied to test commitment in various sport settings. A practical framework based on this research framework will be discussed in this chapter under section 8.4.3. The framework is to include in sport tourism and sport psychology textbooks and modules for students as it clearly shows the various aspects that influence commitment and value of understanding the inter-relationship between the variables.
- This research secondly contributes to the sports tourism literature by giving results focusing on specifically endurance athletes and their sport commitment. The literature showed that sport commitment has been tested on an array of athletes. However, limited studies have focused on specifically endurance athletes where a higher degree of commitment is required. Sport commitment has also to date not been researched within a South African endurance sport context. This is another gap that the present research fills. Furthermore, empirical evidence shows the relationship between commitment, lifestyle, event attributes and travel behaviour of endurance athletes. Each of these variables has been verified in the literature, but for the first time, the relationship between each, and the influence each variable has on commitment has been validated by empirical results. This is a significant contribution especially in a South African endurance sport and sport event context, as the economic value of sport events is well reported. Nevertheless these relationships also show that a sport event has a direct impact on the tourism industry of a country. Sport events can, therefore, be used to facilitate and enhance the tourism industry.

- Thirdly, the current study gives a holistic picture of endurance participants by focusing on a range of endurance athletes and incorporating a variety of sport disciplines. This is furthermore the first study to conduct a nationwide survey among endurance athletes in South Africa. Currently, most studies looked at only one sport discipline and not at the entire sport market. Endurance athletes that participate in multi-disciplines have also not been taken into account in the currently available literature. Therefore this study can be regarded as a milestone.
- Lastly, this research fills the gap in the literature and provides insights on how commitment can be used to progress sport tourism. The sport literature emphasises the importance of sport tourism. Yet, up to now, the connection between travel behaviour and commitment to sport participation has not empirically been researched. The present study empirically tested and proves this connection, which is invaluable from a sports tourism perspective.

8.4.2 Methodological Contributions

This research has various methodological contributions that can be regarded as benchmarks in the current endurance sport and tourism literature.

- Firstly, the measuring instrument applied in this research fills the gap in the current sport literature by integrating various aspects to determine the most effective variables to include to measure endurance sport commitment in more developing countries such as South Africa. The SCM and related theories are well-known measuring instruments that measure sport commitment in mostly developed countries and also on other sport types (e.g. gymnastics and tennis) that cannot necessarily be classified (based on the definitions) as an endurance sport. It is important to be reminded that commitment from the SCM represents a psychological construct, not the actual behaviour of staying in or leaving an activity (Weiss & Ferrer-Caja, 2002; Weiss & Weiss, 2003). Moreover, these instruments do not take into account additional socio-demographic, behavioural, lifestyle or travel-related factors that may also play a role in athletes' commitment. Furthermore, the commitment to a particular event is also not taken into account. The questionnaire developed in the present study considers all the afore-mentioned aspects and can be used as a measuring instrument for future sport commitment studies and can be applied to various sport disciplines.
- This study is one of the few and most possibly, to the author's knowledge, the first South African study that has used mediation SEM models to measure the relationship between a series of independent variables with commitment. This analysis made the results more comprehensive and has paved the way for future commitment studies. The combination and extent of statistical analyses that were applied, are valuable to future researchers. Guidelines that are more practical and the implications of this finding are discussed in the sections that follow.

8.4.3 Practical contributions

Working in close collaboration with the endurance sport events industry throughout the study, organisers of the respective events that participated in the survey expressed the need for a more practical framework that they can easily apply. Moreover, one of the biggest challenges the sport tourism industry faces, is that the governing bodies that are responsible for sport and tourism development do not cooperate or work closely together. Currently, there are various departments and entities, each with a different strategy and mission, which do not take other strategies and plans into account. This leads to South Africa not capitalising on its sport and sport tourism potential. The Department of Sport and Recreation must ensure that sport governing bodies and key stakeholders and role players are not seen as separate entities. Rather these parties should all collaborate together to ensure commitment to sport participation, the development of sport in general and enhancing South Africa's image as a sports tourism destination. This research, therefore, proposes a practical framework, illustrated in Figure 8.1, to foster sport commitment among not only participants but also the greater population. This framework can be applied to all sporting types and disciplines and presents a comprehensive guideline to not only sport governing bodies, but also to event organisers and sport destinations to help foster commitment among sport participants (individual and team-based). The next section will discuss the practical implementation of this framework in detail as well as recommendations to ultimately foster and enhance sport commitment in general.

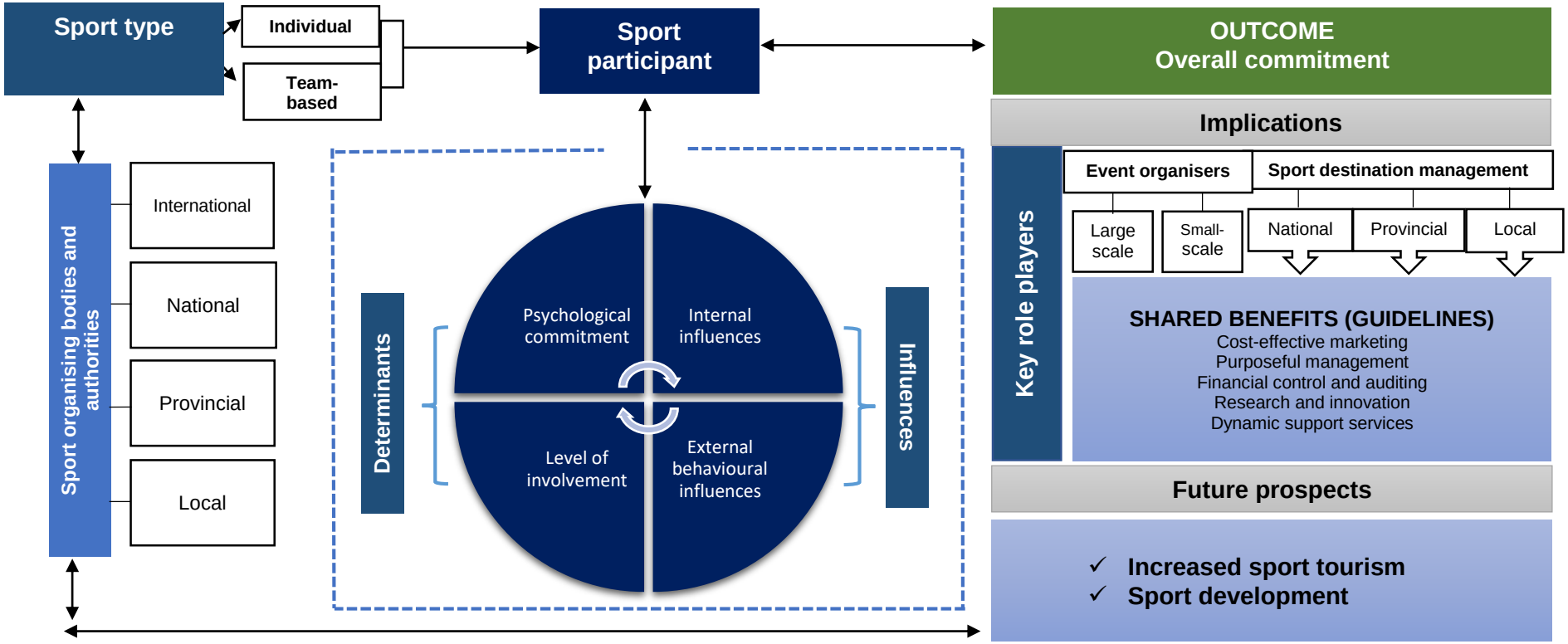


Figure 8-1: Practical framework and continuum for fostering sport commitment

Source: Researcher's own compilation

8.5 Recommendations regarding the interpretation and implementation of the sport commitment framework

Figure 8.1 illustrates the various factors, outcomes, and stakeholders necessary for fostering sport commitment. This section discusses in detail the interpretation and practical recommendations regarding the implementation of the framework.

8.5.1 Sport type

The framework begins with the sport type as the type of sport influences the type of participant, the consequent commitment, as well as the subsequent implications. The type of sport can be divided into individual and team-based sport. It is important to note that the commitment of participants and the influential factors will differ between these types. Therefore, it is vital that the commitment of participants be distinguished between these two classifications of sport types. The proposed framework is designed to consider both these classifications and can therefore easily be applied to both instances as will be practically outlined in the sections below.

8.5.2 Sport participant

As mentioned, the type of sport (individual or team-based) determines the type of sport participant. Since the aim of the framework is to foster sport commitment among participants, the participant is an essential component of the framework. From this research, and as indicated in the research framework discussed in Chapter 7, there are various determinants to consider when measuring sport commitment. The two main **determinants** of commitment is psychological commitment and the level of involvement. These are the two factors that lead to commitment. On the other hand there are also internal and external influences that can either increase or decrease this commitment. As seen in Figure 8.1 the two aspects that are labelled as **influences** are internal influence and external behavioural influence. It is important to note that there is no universal set of factors to determine sport commitment. Therefore, the determinants and influences indicated in Figure 8.1 serve as guidelines, which are solely based on the participant. The next sub-sections concludes these factors.

8.5.2.1 Psychological commitment

The psychological commitment is determined by analysing the commitment predictors of the sport participant. The most well-known method to determine the psychological commitment is to analyse the Sport Commitment Model factors that influence the participants' commitment. These factors include *enjoyment* (positive influence), *involvement opportunities* (positive influence), *involvement alternatives* (negative influence), *personal investments* (positive influence), *social support* (positive influence), and *social constraints* (negative influence). The

type of sport, as well as the sport participant, will determine if the factors have a positive or negative influence on their sport commitment. The combination of above-mentioned factors, as well as the positive and negative influences, will differ from each sport type, highlighting that these factors are not pre-determined and need to be measured within a specific sport context. It is also possible that additional commitment predictors can emerge with different sport types. Although these factors will give an indication of how psychologically committed a participant is, there are additional determinants of commitment that need to be considered such as level of involvement which will be discussed in the next section.

8.5.2.2 Level of involvement

The level of involvement of a participant can be divided into two aspects. The first aspect focuses on the athlete's sport involvement, while the second aspect looks at their leisure involvement.

- **Sport involvement**

  This determinant requires an analysis of the behaviour of participants by considering the different aspects that determine their level of involvement with the sport they participate in. The first determinant, which gives a good indication of sport involvement, is the **number of sport events** an athlete participates in annually. The greater the number of events per year, the higher the level of involvement will be. The sport type and participant will however have an influence on this aspect, as not all sports have a large number of events that a participant can take part in and some participants prefer to not take competitively part in events. The second aspect to consider is the repeat participation of an athlete. If a participant returns each year to an event(s), it could indicate high levels of involvement. Within level of involvement there are certain factors that can influence a participant’s involvement such as if an athlete participates in competitive versus non-competitive events. This is also linked with a participant’s motivation to participate; with some athletes only participating for recreational or social reasons and for charity, whereas others participate as professionals. These aspects need to be determined in order to divide the participant market, because the level of competitiveness as well as the reason for participating will influence the involvement level and ultimately, commitment. This highlights the fact that sport participants cannot be regarded as homogenous and therefore different groups of athletes will have different levels of involvement. An additional aspect that is a good indication of a participant’s level of involvement is their **spending on specifically sporting goods**, which in the end can improve their performance. This includes spending on equipment and gear, training (e.g. hiring a coach), event registration, participation, and travel expenses (e.g. transport and accommodation). Therefore, it is most likely that the more

a participant spends on sporting goods, the higher their level of involvement with the sport will be. The next section describes participants' leisure involvement, involve those parts of their lifestyle they have adapted in order to participate in sport.

- **Leisure involvement**

  As found in the current study among endurance sport participants, it may happen that athletes also have other types of involvement that are not specifically focused on the sport, but relate to or can have a positive influence on their sport participation. Leisure involvement is, therefore, an aspect that needs to be considered as this shows that a participant may adapt other parts of their life in order to improve their sport participation. The first component that plays a role is media consumption and include watching sport on television, subscribing to sport magazines, downloading sport related apps, and attending sport events amongst others. It can be argued that the greater athletes' **media consumption**, the higher their level of involvement. The second aspect that gives a good indication of athletes' leisure involvement is their financial obligations, which are not necessarily directly related to their sport and event participation. These **financial obligations** are focused on the lifestyle adaptions that participants make in order to take part in sport. These aspects include purchasing healthy food, supplements, and nutritional products, taking out medical aid and insurance, subscribing to sport-related media and attending sport-related expos. Although not one of these aspects is required for participating in sport, these aspects give a suggestion of how involved a participant is. If an athlete is willing to spend money on other aspects of their lifestyle, because these athletes feel it will improve their participation, it shows a high level of involvement with the sport. The next part will focus on the personal or internal influences that may play a role in a participant's commitment.

8.5.2.3 Personal (internal) influences

The first aspect that needs to be considered is athletes' **participation frequency**. Therefore "how frequent the athlete participates in sport" needs to be determined and this aspect cannot be measured by only looking at one factor, but is rather measured by analysing a combination of variables. The participation frequency can be determined by looking at how regular a participant takes part in competitive and non-competitive events; how many hours participants train; and how many years participants have been involved with the sport. These are all variables that will give a good indication of athletes' participation frequency. Yet again, these aspects are just a guideline as the specific variables will be dependent on the type of sport they participate in. However it can reasonably be anticipated that participation frequency is a good predictor of commitment, which shows that the higher an athlete's participation frequency, the more committed the participant will be. **Socio-demographic variables** are the

next aspects that need to be considered when determining the overall commitment of a participant. This includes variables such as age, gender, country of origin, the level of education to name a few. These variables are related to the participant and in most cases; the demographic variables will determine differences with psychological commitment as well as the involvement level. One of the most important things an event can do is to have a better understanding of their sport market. When athletes' needs are met, event managers and marketers are able to create an increase in the demand for their product or services (the event itself) leading to an increased market share. This important aspect not only applies to sport events but also when the aim is to expand participation in a particular sport. The sport type will also have a direct influence because previous research done on different sport disciplines have resulted in different socio-demographic predictors of commitment. The next internal influence that needs to be considered is the participants' **sport discipline and event preference**. This includes variables such as the event category, the primary sport of an athlete and the type of athlete the participants classify themselves as. In addition, these aspects will differ from each participant and will lead to different levels of commitment. It is however imported to determine these aspects as different types of athletes (e.g. recreational vs. veteran) and different categories of events (e.g. national vs. international) will have different participants who all have different levels overall commitment. The next section reviews the external behavioural indicators that need to be determined in order to achieve overall commitment.

8.5.2.4 External behavioural indicators

The external behavioural indicators can be either positively or negatively related to the overall commitment of participants. The first behavioural indicator of overall commitment **is travel and excursions**, which refers to participants' travel behaviour before and after their event participation. This includes aspects such as a participant's willingness to travel to the host destination, the willingness to visit tourist attractions and the influence their sport participation has on their holiday choice. Although all these aspects are internal decisions a participant must make, these are also aspects that external stakeholders can influence by understanding the needs of the participant and working closely with tourism and destination managers. Therefore the more willing a participant is to adapt their travel behaviour in accordance to his/her sport participation, the stronger the overall commitment will be. The next aspect to consider is the **sport and event attributes** that athletes seek. In most cases, the type of sport will correlate with the event attributes that a participant sees as important. These attributes can include the challenge and reputation of the event. Still, these aspects will most definitely differ for participants as the sport type also has a great influence on them. This is, a very important aspect that needs to be determined to see whether the sport event caters to the needs and attributes that an athlete seeks. If the needs of participants cannot be fulfilled, their sport event

participation will fall. This will result in a decrease in participants' overall commitment. The last indicator is the **lifestyle adaption** of the participant. This aspect is closely related to the level of involvement an athlete has towards his/her sport (Figure 8.1). The lifestyle adaption of an athlete can have a significant influence on overall commitment. It is, therefore, important that the components of the participants' life that they adapt in order to participate in sport should be determined within their specific sport type . This can include aspects such as health and fitness, spending, travelling, media consumption and supporting sport development initiatives. The specific factors and the influence of each factor are all dependent on the sport type and participants. It is, however, crucial to determine these factors, for it is directly related to overall commitment.

It is imperative to note that each determinant i.e. psychological commitment, the level of involvement, personal influences, as well as external behavioural indicators, and the sub-factors within each of these aspects are all related to each other. Therefore, the different factors will not only have an influence on commitment but also influence one another. This can be seen by the interrelationship between some of these factors, for example a participant's financial obligations can also form part of their leisure involvement, but also their lifestyle adaption. Consequently, there is not only one set of factors or determinants that play a role in a participant's overall commitment. Rather, the combination and the strength (influence) of these factors are all dependent on the participant and the type of sport under investigation.

8.5.3 Outcome: Overall commitment

By determining the commitment predictors based on the sport type and participant, the specific set of determinants will then lead to the outcome, which is overall commitment. These determinants will differ from each sport participant and especially the sport type, highlighting that there is not one universal framework that will lead to overall commitment. The overall commitment can also differ within the sport type, as different participants will have different degrees of overall commitment. Commitment is therefore a complex variable to define and to determine. Therefore the proposed framework aims to combine psychological, involvement, behavioural, internal and external influences which can all have an influence on overall commitment. It is important to note that overall commitment does not just entail one's intention to continue or to persist in one's involvement. Overall commitment entails that participants are not only psychologically committed, but also have certain behavioural characteristics such as higher spending, intention to continue participation, high levels of involvement, event loyalty, high levels of lifestyle adaption, high participation frequency, positive travel behaviour and seek specific sport and event attributes. The aim should therefore be to understand the variables that lead to overall commitment, as the aim of any event, sport destination or sport authority

should be to find their overall committed market or to motivate more participants to form part of this segment. As seen from the characteristics of overall commitment, this is the ideal participant market within each sport type. It is, however, essential that when this market is identified, that different stakeholders should use the information in order to ensure shared benefits as a result of committed sport participants. This can be seen as the implications of overall commitment for different stakeholders, which is discussed in the next section.

8.5.4 Implications

The implications of overall commitment affect two key stakeholders namely **event organisers** and the **sport destination managers and marketers**. The main role of the event organiser is to ensure that the sport event takes place successfully. The organiser therefore mostly focuses on the event marketing, management, technical aspects, legal issues and the execution of different event strategies. The event organiser's role mostly differs between large and small-scale events, although they always aim to promote sport events in a certain destination. On the other hand, sport destination management can be divided between national, provincial and local government who all play a major role in the hosting of sport events and expanding sport participation in general. These government organisations are responsible for making sure that sport and the event is marketed in a region or destination to sponsors, teams, and individuals. It is also important that these organisations expose the event participants to the travel opportunities available in the destination and that the stakeholders leverage sport events for international tourism promotion purposes. The sport destination managers are also responsible for ensuring that the infrastructure, on which the event is dependent, is maintained. If these two stakeholders use overall commitment, it can lead to the following shared benefits. It is important to note that these can only become benefits if both stakeholders implement the information gathered from the overall commitment.

8.5.4.1 Event organisers and sport destination management

There are certain implications for both stakeholders overlap; therefore, the guidelines for both stakeholders are discussed in the next section.

- **Cost-effective marketing**

By using the overall commitment determinants specific to the sport participant and sport type can lead to cost-effective marketing of a particular sport and sport event. The overall commitment will give the event organiser information, such as event attributes that committed athletes seek, which can help an event organiser to adapt the marketing strategy in accordance with these attributes. Furthermore, the overall commitment will also give specific demographic characteristics of the committed market, therefore promotional campaigns and strategies can

be more market specific, ensuring that less of the events budget is spend on less committed markets. The level of involvement and psychological wil, also give the event organiser an indication what the main motivation is for participating in sport events, which can be used in marketing messages. It is clear that the determinants of overall commitment can lead to different groups of participants with different levels of commitment. This information can be used to segment the sport participant market and develop a strategy for each group. Furthermore, it can help events create loyal markets, as well as attract potential participant markets.

Sport destination managers must realise that events, especially small-scale recurring events can in most cases be regarded as one of the attractions that a host destination offers in order to attract tourists and to retain visitors. Most sport destination managers tend to look past sport events when it comes to branding and marketing cities, regions or a country to both national and international tourists. As seen in the commitment framework a market that exhibits overall commitment is a market that needs to be targeted; providing that these participants have the intention to return, will stay beyond the period of an event and will travel with family and friends. Therefore if the government spends a portion of the South African Tourism budget on targeting sport tourists, it can benefit different tourism sectors in different parts of the country. Developing a strategy that focuses on this market will be cost-effective, for the framework provides valuable information regarding participants. Destination event marketers will know the profile, preferences, event attributes, motivation, media consumption and psychological commitment factors of the participant, which is all the information needed to develop a specific marketing strategy, marketing message, and marketing campaign.

- **Purposeful management**

Overall commitment can also help events with purposeful management where overall commitment is used to create successful and sustainable events in different regions within a country. The same can apply in expanding and growing different types of sport. When event organisers understand aspects such as psychological commitment, event attributes, participation frequency, as well as event preferences, an indication of how the event can adapt in order to meet the participants needs will be evident. For example, if a participant's main commitment predictor is *enjoyment* and *involvement opportunities* then event organisers can ensure that the event takes these factors and incorporate them in event services such as pre-races, communication with participants, expos, the race course and the activities and entertainment available before and after the event. It is also important that an event manager understands how the participants adapt their lifestyle as these aspects can be encouraged and promoted after the event has ended. In addition, event organisers will be able to use the

framework to increase the geographical range where these events take place. In addition, seeing that little infrastructure is needed to host most smaller-scale events, areas that are more rural will be able to host sport events and benefit from these events. In this way, more provinces and areas can benefit from hosting sport events and sport will be more accessible to the larger South African population.

From a sport destination managers' perspective, the framework can be used to firstly adapt the current sport tourism strategy that mainly focusses on hosting mega events. As seen with the withdrawal of the 2022 Commonwealth Games, this might not be the best strategy to follow. As a sport destination, South Africa should change their current sport strategy by focusing on and supporting smaller recurring sport events in the country. These events are more sustainable as most of these events have been taking place for a number of years. These events make use of existing infrastructure and give the host destination a boost in income. These endurance events are also more likely to involve the community by creating job and volunteering opportunities. It is important that government realises that although mega-events such as the FIFA World Cup leads to a large influx of income into the country, the benefits of this income and event is normally short-term; as with recurring events such as the Comrades Marathon the country gets an income influx every year which benefits the host destination. The implementation of the commitment framework on different sport types as well as different sport events can help increase the number of successful events hosted in the country. Also, all the sport events will form a large collection of sport disciplines and events on which sport destination managers can build their strategy for upcoming and future endurance and similar sport events. It is important that destination managers ensure that the sport infrastructure for both small-scale and large-scale sport events are maintained and on an international standard. This infrastructure not only includes sport stadiums, but also public funded sport and fitness centres.

- **Financial control and auditing**

Most small-scale events rely on sponsorships and local and regional government support. Hence, it is vital that the framework be implemented across different sport types as overall commitment will lead to higher spending, which can ensure a steady flow of income for different sport events. In the application of the framework, event managers will ensure that participants who have overall commitment will be targeted. This has many benefits for the event, for these participants will become loyal to an event as well as a particular sport. These participants are also more likely to have a higher spending at the event and at the pre and post event happenings, such as the event expo. These participants are also more likely to stay longer and bring along family and friends to the event, which will increase the overall spending at the

event. Consequently, these participants will ensure a higher profit margin for the event, which can ensure that the event has enough money to keep developing and adapting to participants' trends and needs. These participants, because of their overall commitment, can also act as an ambassador for the event and sport and will motivate other people to get involved and participate in the event, which ensures that the event gets a steady flow of new participants each year.

The financial control and auditing are also shared benefits for sport destination managers, because when a committed market is targeted it will lead to higher spending, return visits, longer stays, visits to tourist attractions as well as supporting other tourism industries. There appears to be a relation between commitment and travel behaviour. However, it is important to determine if this relation is evident within different sport types. By using the commitment framework, sport destination can work with event organisers in order to ensure that the travel behaviour of event participants is positively influenced. Destinations can ensure that sport events generate money for the destination, and be a catalyst to support other tourism sectors in the tourism destination through collaborating with event organisers. If the commitment framework is implemented it will ensure a steady influx of income from sport events across the country and it will also help destination managers motivate more South Africans to travel for events and sport participation and support, but combine this participation with a holiday or a short visit to attractions within the area.

- **Research and innovation**

The commitment framework underlines the importance of on-going research within the sport and tourism industries. As seen in the commitment framework, the participant is central to any success for both events and sport destinations, therefore it is imperative that both stakeholders understand the participant market. The implementation of this framework on different sport participants and sport types can help event organisers and destination managers identify key trends and changes within the market. The end outcome for both stakeholders should always be overall commitment. However, the determinants of this overall commitment are not unwavering. By adapting this framework and applying it to different markets, it can ensure that marketing and management strategies of both events and destinations are modified in order to ensure that it is still on trend and aligned with what the participants want. All the aspects of the framework are a continuum, therefore if one determinant changes it influences all the other determinants that will have a direct influence on overall commitment. Consequently, if South Africa and the sport events in the country want to have a competitive advantage above other sport tourism destinations, the framework should be refined for different sport types, monitored,

and then the framework should be adapted at least every two years. Continuous research is therefore imperative to ensure the successful implementation of the framework.

- **Dynamic support services**

Support services at sport events include hospitality, catering services, medical facilities, safety and security, volunteers, clothing providers as well as technical and administrative services. Therefore, if these support services are not in place the event will not be successful. Event organisers can use the commitment framework to train and assist support services, by providing this personnel with information regarding the participants. Information such as lifestyle adaption and different levels of involvement can ensure that support services cater to all participants that take part in the event and not only to the professionals. Since overall commitment ensures that participants have the intention to continue, this will ensure that the event has enough participants each year to afford quality and training support services. The participants that form part of the framework can also be asked to give feedback regarding the support services at the event, this will ensure that the support services are developed and improved each year.

On the other hand, local authorities/councils support services are responsible for aspects such as waste removal, traffic control, providing parking, provision of electricity and ensuring the health and safety in an area where the event or sport activity takes place. This clearly shows that small-scale and large-scale events are dependent on local, provincial and national government support. A sport destination manager should, therefore, realise that if the government does not support events, it will lead to more unsuccessful events and events that struggle to survive. However, if local authorities assist sporting activities and events with the support services mentioned above it will lead to more successful events and a greater enhancement of sport participation across the country. More events that are successful will ensure better influx of money into the community, more jobs to be created and more money to be available to fund infrastructure development and support services. As seen in the framework, the collaboration between event organisers and destination sport managers is crucial as both these stakeholders share similar benefits, but cannot work in isolation of one another. Regular communication between these two stakeholders is needed in order to identify which support services are needed for the event and how local authorities should provide these services.

It is clear from the aforementioned that the shared benefits are only achievable when destination managers and event organisers work together in a manner that enables an event to be cross-leveraged with other attractions in a host destination.

8.5.5 Future prospects based on the implications

The next section highlights the future prospects for South Africa if both stakeholders implement this framework.

- **Sport tourism**

As seen in Figure 8.1 the framework demonstrates that overall commitment has a positive influence on travel behaviour. Therefore, countries such as South Africa and event host destinations can use sport and sport events as a marketing tool to stimulate tourism. This is multi-beneficial, because a tourist will not only travel to participate in sport but will also travel to the event as destination (either before or after the event). Therefore, a sport event generates income for the area but also sources on-flow tourism, which stimulates other tourism industries. It is therefore recommended that the National Sport and Recreation Plan be adjusted to focus the strategy more on smaller recurring events. These events are more sustainable in the long-term, are events that have a direct tourism-spin-off, and the country already hosts successful, well-known recurring events from which to build South Africa's reputation as sport destination of the world. This has huge development advantages and the potential for the future of South Africa's sport and tourism industries.

Furthermore, South African Tourism can use the successful sport events hosted in South Africa in the current marketing and branding campaigns as these are aspects that can give South Africa a competitive advantage. One of the biggest aims of the Department of Tourism should be to get a larger number of sport events hosted in less-known parts of the country in order to expose tourists to different areas that are not so well-known. South African Tourism can, therefore, use these events as a marketing technique by directing the message towards the sport and the area where the event takes place (e.g. Running in the City of Gold, Trekking in the Karoo desert and Golfing alongside the Outeniqua Mountains). To focus on sport tourism as a marketing strategy, tourism can spread across the country and decrease seasonality. It is also important to emphasise that these events are some of the biggest and toughest events in the world.

- **Sport development**

One of the most important prospects that the framework aims to achieve is sport development within South Africa. One of the biggest challenges facing South Africa is that the greater population, especially the younger people who are physically inactive. Therefore, overall commitment should not only be used to increase successful sport event participation but must also be used to foster a love for sport (commitment) among the broader public. Therefore role-

players must use the overall commitment to making sport more accessible for every citizen irrespective of geographic location, gender, age, race and political background. The implementations of the commitment determinants at schools and exposing more people at an early age to sport and lifestyle adaption related to sport, can lead to commitment as adults and also motivate more of the youth to become physically active. It can also add an aspect in their life which gives them more enjoyment and purpose. Many events already focus on appealing to children at sport events by hosting fun runs and other child-friendly activities. This is, however, something that government and sport organising bodies should also focus on, giving every child in the country the opportunity to take part in sport. The government can use this framework, and especially the psychological commitment variables, in order to motivate younger people to start participating in sport and sport events. This can help with problems such as obesity, cardiovascular diseases society dilemmas such as drug abuse and crime. Sport can also be used as a development tool in poverty-stricken areas in order to give younger people an opportunity to escape and focus on something positive. Coaches and sport clubs also play a big role in the success of an athlete's career. Coaches and sport clubs can use the commitment framework and especially the psychological factors in order to ensure that younger people stay involved and that sport drop-out decreases.

Although sport development strongly focuses on being physically active, another level of participation can also include sport spectating and support. Sport can be used to unify the country, by giving more people the opportunity to attend and watch different sport events, this will help to ensure that a love for the sport is also fostered and that sport can be used to build national pride and overcome obstacles such as inequality, race, and discrimination. One of the first things that government should do is help fund different sport events in the country. It should also help smaller, less known events with workshops and management plans in order to ensure that the number of successful sport events in the country keeps expanding. Smaller events struggle to find sponsors that make it hard to establish and grow in terms of participant numbers. By helping smaller events it can ensure that more events take place across the country that can spread tourism geographically but can also get more people involved that did not always have access to events. Commitment in the context of sport development therefore also entails fostering a love for sport whether as a participant or a spectator.

8.5.6 Sport organising bodies and authorities

For each sport, there is an organising body, federation, and authority. The organisers of these authorities can be divided into local, provincial, national and international levels. These organising bodies determine the sport type under investigation. However, the implications for the key role-players (event organisers and sport destination manager) are also applicable to

these authorities within the sport industry. Therefore, the arrows in Figure 8.1 indicate both side-ways representing the shared benefits and implications for all the role-players. The biggest challenge for developing countries, such as South Africa, is that the different role-players and entities do not currently work together. The sport organising bodies aim to increase sport participation, sport development, while the sport destination manager aims to increase sport tourism in the country, and the event manager aims to create a successful event. What these role-players do not realise is that in order to achieve these aims, they need to work together as a team. Therefore the expectation is that this framework can motivate role-players to collaborate by developing strategies and plans which take into account the sport participant, overall commitment, sport events, sport tourism and sport development. A unified strategy will ensure that less money is wasted, more people work together, and that the aim of growing sport tourism in South Africa is reached.

8.5.7 The continuum framework

It is essential to note that the framework and all aspects within the framework have a reciprocal influence on one another and therefore sport commitment is an on-going process. There is also aspects in the framework that are not considered because the influence of these external aspects, such as natural disasters and financial recession, are difficult to determine. Furthermore, the influence of certain role-players such as sponsors are not discounted but was not measured in the current study. Therefore, it will be included in recommendations for future research. The framework, however, shows the interrelated aspects to consider when fostering sport commitment and show the key role players who can benefit from implementing the framework.

8.6 Recommendations for future research

The following recommendations are made for future researchers to consider:

- The results showed that the level of sport participation could have an influence on travel behaviour and those participants that are more serious to participate, are more likely to combine their holidays and event participation. Consequently, more research is needed to confirm if different levels of participation (commitment) will lead to differences in travel behaviour. Future studies should firstly determine different levels of commitment (e.g. slightly committed, committed and fully committed). This can be done by dividing participants based on their commitment predictor scores as well as their involvement levels. If results then reveal that participants who are fully committed have a higher probability of travelling before and after the event, the event and destination marketers can use this information to their advantage. Furthermore, strategies can be developed in order

to ensure that athletes who are less committed are also motived to exhibit some form of favoured travel behaviour (e.g. spending money on souvenirs from the area).

- As age and competitive level are often confounded in sport (i.e. as participants get older they move to a higher level of competition), it is important, when possible, to examine age and competitive level differences independently of one another. It would, therefore, be beneficial to divide an endurance market into different age groups to determine each age group's specific commitment factors, participation frequency, event attributes and travel behaviour. This will not only help event markets design different retention strategies for various age groups but can also determine if athletes' competitive level and commitment, declines with age as with many other sport types. This will help confirm that endurance sport is a lifetime sport and that an increase in age does not lead to a decline in competitiveness and commitment.
- It is recommended that future studies measure respondents' attitude with regard to brand awareness and attachment to sport labels as previous literature show these are also factors that indicate involvement in sport and ultimately commitment. Although the current study measured most of the involvement level determinants, some of the most recent studies have also shown that athletes that have higher brand awareness and attachment to sport labels are more likely to be committed. This would be an interesting add to the current framework, for endurance sport has strong brands such as Ironman.
- The number of days before an event starts and the number of days after the event has taken place is variables that led to significant results. These questions in conjunction with travel behaviour variables should be researched further as this gives a clear indication of the link between event participation and travel behaviour. Questions can also be included such as distance travelled and respondents could indicate what they spend their time on before and after the event takes place. This can help event organisers and destinations by knowing what athletes do before and after the event, and they can increase the options or develop packages (e.g. two day before the event hiking trail in one of the surrounding National Parks) that will motivate participants to come earlier or stay longer for the sport event as this can stimulate other industries in the area.
- The type of athlete respondents classifies themselves as, can be used as a market segmentation base, as this variable revealed differences with commitment, lifestyle, event attributes and travel behaviour. Therefore, event marketers can develop specific marketing strategies for each group. The type of athlete classification can also be further refined by using the main motivations of endurance athletes as found in previous literature.
- Future studies should focus on the different types of commitment that athletes might have towards their endurance participation. According to Scmidt and Stein (1991), there are three types of commitment namely attraction commitment, entrapment commitment, and

low commitment. Each of these types rates the commitment predictors differently. Dividing endurance athletes based on their type of commitment can give valuable insight in how to ensure that respondents that form part of the entrapment and low commitment categories do not drop-out of endurance participation. Research can furthermore analyse how different types of commitment leads to different behaviour specifically lifestyle, event attributes and travel behaviour. Considering that which motivates the athletes that fall within different commitment groups can help trainers and event organisers change their strategy to help athletes find another motivation that will increase their commitment towards endurance sport.

- Comparing females and males levels of commitment and developing a framework for each. Although results did not reveal many differences based on gender in the current study, it would be wise to spill the data and examine if the same commitment factors influence females endurance participation. It is also recommended that a larger sample of females to be surveyed. This has been a challenge for most of the endurance sport research, but a certain quota can be set, to ensure that females are well represented. These results can then help motivate more females to take part in endurance events, motivate more females to not drop out of sport and also make event organisers more aware of females' specific event needs.
- Longitudinal research to be executed, as commitment has been found to change over time. It would be recommended that a certain sample of endurance athletes be approached to participate in a longitudinal study where their commitment is firstly measured, and then the same athletes' commitment is measured, about five years later. This will show if these participants' commitment increased or decreased over the years. In conjunction with aspects such as lifestyle, researchers would be able to determine what led to a decrease or increase in commitment. Having knowledge regarding outside influences that affect commitment over time, can help the government develop different strategies that will ensure that especially younger participants' commitment increases and do not decrease with age.
- Currently, the youth in South Africa is less physically active, making research invaluable to explore how children can be more motivated to commit to the sport and start participating in sport events from a younger age. Commitment, on the other hand, is also necessary so that sport events can motivate people to stay with a sport for longer and not drop out at an early stage. Studies, therefore, need to determine what the factors are that would motivate less active people to take part in an endurance event. The determining of specific commitment factors for coaches, clubs, and educators is important as they can use this information to (or "intend to") adapt current training programmes that incorporate more of the commitment factors, thus ensuring less active members of the population getting

involved with endurance sport and continue their sport participation. The framework also needs to be measured from a supply-side persepective in order to determine wat roleplayers such as coaches and event managers feel should be part of the framework to foster commitment.

- It is evident from the current results and previous South African endurance literature that the market is mostly made up of males, with fewer females taking part in endurance events. To increase the number of females in endurance sport, the following can be done. Research is needed to understand why fewer females take part in this sport specifically, what females' specific commitment factors are, the event attributes they seek and how an event can influence their travel behaviour. Endurance events that are specifically designed for females should be launched in South Africa as most of the current events are focused on the male market.
- Based on the framework as seen in Figure 8.1, it is recommended that the framework is applied by other sport types, for example, team-based or adventure sports. The current research gives a clear indication of what determinants lead to the overall commitment of endurance athletes. It is, however, important to validate and test this framework based on other sport types, as the sport type is that factor that influences the participants' determinants; and ultimately the overall commitment.
- Future research should apply the commitment framework on different role-players such as spectators, supporters and sport fans. The overall commitment to sport as well as sport development in South Africa can only be sustainable if all role-players (e.g. spectators, coaches and health trainers) are considered. The commitment of a spectator will include different determinants and will change the framework although the outcome will remain overall commitment. Therefore, a framework focusing on the spectator/ supporter/fan should also be considered.
- Future research is also needed to determine the important role that sponsorship plays in the promotion of sport and sport events. This is very important research, especially in developing countries. In most developing countries, the sport governing bodies are non-profit organisations and therefore rely on sponsors. In order to ensure sustainable growth for the sport event industry in South Africa, it is important to define the role of sponsors and understand the factors that motivate a sponsor to support one event above another.

The commitment framework will make an invaluable contribution on how to foster commitment among not only sport participants but also among supporters of sport in general. The commitment framework can furthermore help ensure sustainable sport events and also increase sport tourism within developing countries. Ultimately the implementation of the framework will help with sport development by getting more

people involved with sport, giving more people access to participate in sport and developing a love for sport.

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Appendix A: Questionnaire

Commitment of Endurance Athletes in South Africa Cover Letter

Good day

We are conducting a study of what drives people to commit to an endurance sport and take part in endurance sport events. Your input will help us to assess the extent of endurance sport participation in South Africa, promote endurance sport events, and find ways to foster a love of sport from an early age.

Why is this research important? It's important for children. We know they are less physically active in these days. We need to find out how to encourage them to make a commitment to sport. Our research is important for adults too. We are all aware of the dangers that inactivity poses to health. We need to find out how to encourage people to stay with a sport longer and not become discouraged and drop out.

Sport commitment has not yet been researched in the context of South African endurance sports. Our study will use a Sport Commitment Model that covers a wide range of variables. Our findings will have many applications. It can be used:

- to develop a marketing and management plan for South African endurance sport
- to increase the number of endurance sport events in the country
- to give schools ideas on how to get children to enjoy and commit to endurance sports
- to inform event managers about the factors that influence an athlete's sport commitment, so that the event can be designed to encourage further commitment
- to help event managers meet the needs of all participants
- to ensure that the commitment of all potential endurance sport athletes is encouraged, irrespective of gender of race
- to market South Africa as an ideal endurance sport destination.

Our findings will have spin-offs for tourism. Successful endurance sport events will help market South Africa as an ideal sports destination, ensuring return participation and positive word-of-mouth recommendations, and ultimately boosting the economy.

Your answers to this 10 to 15 minute questionnaire will give us valuable information tor designing a strategy for South Africa's endurance sport events. Thank you for your participation. If you have any queries please contact :

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From which event website or correspondence did you access the questionnaire link?

Commitment of endurance athletes in South Africa

Section A: Demographic information

1. Gender

Male	Female

2. Year of birth

3. Home language

Afrikaans	1
English	2
Other (Specify)	3

4. Place of residence

KwaZulu-Natal	1
Gauteng	2
Eastern Cape	3
Free State	4
Western Cape	5
Mpumalanga	6
Northern Cape	7
North West	8
Limpopo	9
Outside RSA borders	10

5. Marital status

Married	1
Not married	2
In a relationship	3
Divorced	4
Widow/er	5
Living together	6

6. Gross annual income

< R20 000	1
R20 001-R140 000	2
R140 001-R221 000	3

R221 001-R 305 000	4
R 305 001-R431 000	5
R431 001-R552 000	6
R552 001 >	7

7. Field of your profession

Type and description	Choose one option
Accounting	1
Advertising	2
Aerospace/ Aviation	3
Automotive	4
Agriculture/ Forestry / Fishing	5
Biotechnology	6
Business/ Professional	7
Business Services (Hotels, Lodging Places)	8
Computers (Hardware, Desktop Software)	9
Communications	10
Construction/ Home Improvements	11
Consulting	12
Education	13
Engineering/ Architecture	14
Entertainment/ Recreation	15
Finance/ Banking/ Insurance	16
Food Service	17
Government/ Military	18
Healthcare/ Medical	19
Internet	20
Legal	21
Manufacturing	22
Marketing/ Market Research/ Public Relations	23
Media/ Printing/ Publishing	24
Mining	25
Non-Profit	26
Pharmaceutical/ Chemical	27
Research/ Science	28
Real Estate	29
Retail	30
Services	31
Telecommunications	32
Transportation/ Distribution	33
Utilities	34
Wholesale	35
N/A – I don’t work	36
Prefer not to answer	37

8. Which of the following most closely matches your job title?

Type and description	Choose one option

Intern	1
Entry Level	2
Analyst/ Associate	3
Manager	4
Senior Manager	5
Director	6
Vice President	7
Senior Vice President	8
C level executive (CIO, CTO, COO, CMO, etc).	9
President or CEO	10
Owner	11

Section B: Endurance sport and disciplines

9a. What type of endurance sport(s) do you take part in?
(You may tick more than one option.)

Marathon running	Yes/No
Road cycling	Yes/No
Mountain biking	Yes/No
Canoe or kayak race	Yes/No
Triathlon	Yes/No
Ski paddling	Yes/No
Open-water swimming	Yes/No
Trail running	Yes/No
Obstacle course race	Yes/No
Adventure racing	Yes/No
Cross-country skiing	Yes/No
Decathlon	Yes/No
Endurance riding	Yes/No
Long-distance race	Yes/No
Endurance motor racing	Yes/No
Mountain running	Yes/No
Race-walking	Yes/No
Rowing	Yes/No
Ultramarathon	Yes/No
Other (Specify)	Yes/No

9b. Indicate the primary endurance sport you participate in.

10. Name the endurance sport event(s) you prefer to participated in.
e.g. Cape Town Cycle Tour

11. In what category of endurance event(s) do you normally participate?

Local events (e.g. Potchefstroom Marathon)	Yes/No
Regional events (e.g. North West Cycling Championships)	Yes/No
National events (e.g. Cape Town Cycle Tour)	Yes/No

International events hosted in South Africa (e.g. Absa Cape Epic)	Yes/No
International events (e.g. New York Marathon)	Yes/No
Charity events (e.g. CANSA Relay for Life)	
Other (Specify)	Yes/No

12. What type of endurance athlete would you classify yourself as? Please choose only one option, i.e. the option that best describes you.

Type and description	**Choose one option**
Beginner (I've always been physically active, but I've only recently started participating in competitive endurance events. I plan to progress on the endurance ladder and participate in a variety of endurance events.)	1
Average athlete (I wouldn't consider myself a serious athlete, but I strive to do my best or reach a higher level of fitness. I occasionally take part in competitive endurance events.)	2
Obstacle challenger (I only participate in extreme events such as obstacle courses or events that challenge me and push me to my limits.)	3
Fitness participant (I participate in endurance events to help me achieve weight loss goals or to get in shape.)	4
Social participant (I participate in events to have fun, for charity or to spend time with friends, family, colleagues and other participants.)	5
Intermediate athlete (I've been taking part in competitive events for a few years and I now want to progress to more challenging events and disciplines. I'm working towards attaining the goals I've set for myself.)	6
Hard-core athlete (I consider myself a serious/professional athlete. I train intensively for the events I participate in, aiming to set my personal best or even win the event.)	7
Veteran athlete (I'm an older athlete. I've been participating in endurance events my whole life. I keep on participating because it gives me self-fulfilment and is part of my lifestyle.)	8

13. What do you think is the best age to start participating in endurance events (either competitive or non-competitive)?

Under 20 years	1
21–30 years	2
31–40 years	3
41–50 years	4
51–60 years	5
Over 60 years	6

14. What is the best age to stop participating in endurance events?

Never	1
40-50 years	2
51-60 years	3
61-70 years	4
Over 70	5
Other	Specify

Section C: Participation frequency

15. How many hours do you train per week?

Less than 4 Hours	1
4–8 hours	2
8–12 hours	3
More than 12 hours	5

16. How often do you take part in non-competitive endurance events (e.g. fun runs) as preparation for competitive endurance events?

I do not take part at all	1
Once a month	2
Two to three times a month	3
Two to three times a week	4
More than three times a week	5

17. How many years have you been competitively participating in endurance events?

18. On average, how many competitive endurance events do you participate in per year?

None	1
1–2 events	2
3–4 events	3
5–6 events	4
6–7 events	5
More than 8 events	6

19. Are you planning to take part in more endurance events in the future (Yes/No)

20. When do you typically register for a competitive endurance event?

I decide spontaneously	1
A week before	2
A month before	3
As soon as registration opens	4
Other	5

Section D: Sport commitment

21. Please indicate to what extent you agree with the following statements about commitment to endurance sport.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1. I enjoy participating in endurance sport.	1	2	3	4	5
2. I have fun while participating in endurance sport.	1	2	3	4	5
3. I put lots of time, energy and effort into training and participating in endurance sport.	1	2	3	4	5
4. I invest lots of money in endurance sport.	1	2	3	4	5
5. There are other more attractive sport activities I'd prefer to take part in.	1	2	3	4	5
6. Continued participation in endurance sport makes me feel confident.	1	2	3	4	5
7. Continued participation in endurance sport gives me social status.	1	2	3	4	5
8. Continued participation in endurance sport keeps me fit and in shape.	1	2	3	4	5
9. Continued participation in endurance sport helps me attain certain goals.	1	2	3	4	5
10. Continued participation in endurance sport helps to delay the effects of ageing.	1	2	3	4	5
11. Continued participation in endurance sport relieves me from stress.	1	2	3	4	5
12. Continued participation in endurance sport gives me the opportunity to do something exciting.	1	2	3	4	5
13. Continued participation in endurance sport gives me the opportunity to be with friends.	1	2	3	4	5
14. Continued participation in endurance sport	1	2	3	4	5

gives me an opportunity to travel.					
15. Continued participation in endurance sport gives me a feeling of accomplishment	1	2	3	4	5
16. Continued participation in endurance sport challenges me.	1	2	3	4	5
17. I feel pressure from my significant others (friends, family or peers) to keep participating in endurance sport.	1	2	3	4	5
18. I only participate because of social pressures (e.g. to please others or to be with friends).	1	2	3	4	5
19. Family and friends provide me with consolation and like to watch and support me while I participate in endurance sports	1	2	3	4	5
20. I am dedicated and will adapt my lifestyle to continue taking part in endurance sport.	1	2	3	4	5
21. I will do anything not to give up endurance sport.	1	2	3	4	5
22. I am committed to continue participating in endurance sport.	1	2	3	4	5

Section E: Lifestyle and financial commitment

22. How much money do you spend per year on average on the following?

Event registration	R
Club membership	R
Nutritional products	R
Equipment and gear	R
Sports clothes and accessories	R
Magazine subscriptions	R
Travel related expenses (e.g. transport to destinations where events are held and accommodation)	R
Gym membership	R

Medical services (physiotherapy, orthopaedics, surgery, hospital medical aid etc.)	R
Other (Specify)	R

23. Please indicate to what extent you adapted your lifestyle in order to participate in endurance events.

	Not at all	A little	A moderate extent	A lot	Totally
1. I adopted a strict, healthy diet.	1	2		4	5
2. I supplement with vitamins and other nutritional products.	1	2	3	4	5
3. I have a strict training programme.	1	2	3	4	5
4. I adapt my sleeping patterns when training and participating in events.					
5. I constantly search for events to participate in and adapt my work schedule to suit my endurance sport activities	1	2	3	4	5
6. I plan holidays around my endurance sports.	1	2	3	4	5
7. I plan my travel to fit in with the events I participate in.					
8. I hired a coach to help with my training.	1	2	3	4	5
9. I joined a sports club or gym.	1	2	3	4	5
10. I motivate my friends and family to become involved (as spectators and participants).	1	2	3	4	5
11. I invest in the best training equipment and sport gear (e.g. a heart rate monitor).	1	2	3	4	5
12. I invest in the best sportswear and accessories.					
13. I make donations to sport development programmes.	1	2	3	4	5
14. I actively attend sport lifestyle expos to keep	1	2	3	4	5

up to date with the latest trends and sports gear.					
15. I'm actively involved in youth sport development programmes (e.g. volunteering at junior training camps).	1	2	3	4	5
16. I watch sport on TV.	1	2	3	4	5
17. I read and/or subscribe to sport magazines or newspapers.	1	2	3	4	5
18. I listen to sport on the radio.	1	2	3	4	5
19. I read about and watch sport on the internet (e.g. events websites, training websites, Youtube clips).	1	2	3	4	5
20. I attend and support other sport events (that I do not participate in).	1	2	3	4	5
21. I actively follow sport on social media (e.g. Facebook, Twitter, sport-related blogs).	1	2	3	4	5
22. I use sport-related apps on my phone or personal computer.	1	2	3	4	5

Section F: Event attributes

24. Please rate how the following event attributes influence your decision to participate in an endurance sport event

	Not important at all	**Slightly important**	**Moderately important**	**Important**	**Extremely important**
1. The event is close to my home city or town.	1	2	3	4	5
2. The event registration and travel costs are affordable	1	2	3	4	5
3. The event has an interesting course or location.	1	2	3	4	5
4. The event has a high reputation (e.g. largest in the world).	1	2	3	4	5
5. The event location has	1	2	3	4	5

many things to do and places to see.					
6. The event is ideally located in terms of climate and altitude.	1	2	3	4	5
7. The event has international standing.	1	2	3	4	5
8. The event will help me qualify for other events.	1	2	3	4	5
9. The event is well organised.	1	2	3	4	5
10. Participation in the event benefits charity.	1	2	3	4	5
11. I've never participated in the event before.	1	2	3	4	5
12. The event is challenging.	1	2	3	4	5
13. The event has "pre-events" that involve the whole family (e.g. fun run, junior events).	1	2	3	4	5
14. The event has different categories I can participate in (e.g. professional, amateur, charity).	1	2	3	4	5
15. The event attracts the world's best endurance athletes.	1	2	3	4	5
16. The event gives away a lot of prize money.	1	2	3	4	5
17. The event has a loyalty programme.	1	2	3	4	5
18. The event gets a lot of media exposure and coverage.					
19. The event takes place annually.	1	2	3	4	5

20. The event is easily accessible (e.g. available information and easy registration process)	1	2	3	4	5

Section G: The influence of sport commitment on travel behaviour

25. Please indicate to what extent you agree with the following statements about how your endurance sport participation influences your travel behaviour.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1. Family and friends can accompany me to endurance events.	1	2	3	4	5
2. I visit tourist attractions before, during and/or after participating in endurance events.	1	2	3	4	5
3. Participation in endurance sport gives me the opportunity to travel.	1	2	3	4	5
4. My sport participation and holiday destination(s) are separate.	1	2	3	4	5
5. I travel in the area where my endurance event takes place.	1	2	3	4	5
6. I only choose a holiday destination if it gives me an opportunity to train (e.g. facilities and resources).	1	2	3	4	5
7. I see my endurance sport participation as an opportunity to travel overseas.	1	2	3	4	5
8. My sport participation gives me an opportunity to explore the city/town that I participate in	1	2	3	4	5
9. I plan my sport participation in order to see different attractions and destinations.	1	2	3	4	5
10. I plan to return to the destination I have participated in for holiday purposes					

26. Specify the number of days you usually arrive at the destination before the event takes in order to prepare.

27. How many days do you stay in die event area after the event (e.g. for sight-seeing)

26. Any comments or suggestions

Thank you for your time and valuable help!

Research conducted by TREES (Tourism Research in Economic Environs and Society) at the North-West University, Potchefstroom Campus. ©Copyright 2014