THE IMPACT OF AN ACCREDITATION SYSTEM FOR TRAILS ON GROWTH IN HIKING TOURISM

by

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ABSTRACT

The key determinants influencing consumer behaviour and consumer decision making in hiking tourism has not been clearly defined at an academic level. A particular knowledge gap exists in literature concerning the role of accreditation systems in consumer decision making regarding the consumption of hiking tourism products. In order to address these shortcomings, this study took a quantitative approach in the form of a survey research strategy to measure the importance of and future intended response towards trail accreditation, as determined by consumers from two different populations: hikers and non-hikers. This was achieved by presenting a hypothetical country-wide implementation of a case study accreditation system to respondents. The findings from this study demonstrate a link between accreditation and consumer decision making and the future uptake of hiking tourism amongst both hikers and non-hikers. Consumer response to the individual constructs represented by accreditation, such as trustworthy information, is demonstrated and the most important information aspects in decision making are highlighted. The study also contributes to the existing body of knowledge regarding consumer awareness and willingness to pay (WTP) towards accreditation systems and ecolabels in tourism.

KEYWORDS: Hiking tourism, nature-based tourism, adventure tourism, accreditation, certification, ecolabels, consumer behaviour, consumer decision-making, information needs.

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I dedicate this dissertation to my best friend, Johan, who has been the most incredible source of support any wife could ask for!

for firstly recognising the dream in me and encouraging me to pursue it
for your infinite patience with my impatience
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I am eternally grateful!

"Life's a journey – let's get lost"

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CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 BACKGROUND

South Africa with its pristine beauty offers a world of choices to any hiker in search of an authentic nature-based experience. From rugged coastlines to mountainous landscapes and abundant wildlife, the natural attractions of South Africa is a true jewel alluring tourists from all corners of the globe (SA Tourism, 2015a & 2015b:1). One of the best ways to experience such attractions first-hand is through a hiking trail. It is therefore no surprise that South Africa, with over 10 224 km of footpath (Groenhof & Saintz, N.d.:2), offers a range of different types of hiking tourism products.

These offerings, together with other adventure tourism products, are employed by SA Tourism as key marketing messages in luring both international and domestic tourists (SA Tourism, 2014a). Hiking or mountain climbing activities were undertaken by more than 14% of domestic visitors to the province of KwaZulu-Natal in 2012 (Tourism KwaZulu-Natal, 2013:7), making hiking's contribution to overall tourism, albeit sometimes indirect, a significant one. Hiking was listed as one of the main activities undertaken by foreign visitors to the area in 2003 (Kohler, 2009:8). Recent visitors surveys conducted in some of South Africa's national parks ranked hiking as one of the top three activities enjoyed by visitors (TREES, 2014a:16, 2014b:19, 2014c:10). Hiking was regarded an important activity, second only to whale watching, amongst visitors to the Table Mountain National Park (TREES, 2014b:19). Hiking, backpacking and trekking tourists often spend more nights at a destination, therefore increasing overall spend , although average spend per day is less than some of the other tourism categories (UNWTO, 2014:24). The direct benefits hiking tourism pose to rural economic development is also noteworthy (Ndlovu & Rogerson, 2003:124;

Ntshona & Lahiff, 2003:42-43). Spending often filters through to local communities so that the benefits of tourism are shared amongst a broader society (UNWTO, 2014:24).

Reality is that the hiking tourism industry in South Africa is experiencing serious challenges. Bossert (2013a), chairman of the Hiking Organisation of Southern Africa (HOSA), estimates that around 60% of hiking trails in South Africa no longer comply with normal hiking requirements due to challenges such as poor standards of accommodation, safety issues, general lack of maintenance of trails, environmental degradation and inadequate water supply. HOSA receives numerous complaints from hikers and hiking clubs each year about the basic conditions of trails in South Africa.

Coupled with the deteriorating conditions and in some cases closure of existing trails, is the fact that the uptake of new trails that have been developed in the last couple of years has been rather disappointing. Reasons for these are widely speculative; one possibility pointing to the fact that hikers are reluctant to venture on new trails due to a lack of trusted information around key trail attributes such as the difficulty grading and available facilities (Hugo, 2013). Bossert (2013b) mentions another worrying trend of declining number of hiking clubs and hikers. Although there are no official statistics available on the number of hikers in South Africa, it is well-known that the number of hiking clubs has decreased tremendously over the last two decades. Whether the decline in club numbers is a direct result of the decline in the quality of trails or if it can be ascribed to other developments, such as changes in consumer behaviour, is not known.

The need for a quality control system was seemingly met when an accreditation system was developed by Prof. M.L. Hugo of the University of Pretoria to assess trails through an independent body. As a result, the Green Flag Accreditation System (Green Flag) was implemented in South Africa in 2006. Trails are assessed according to its difficulty grading, safety levels, service and trail facilities, accommodation, the type of environment the trail is set in as well as the environmental management of the trail. As an output of the auditing process, an independent and reliable account of the trail attributes is made available to trail owners, hikers and non-hikers through, amongst other channels, the Green Flag Trails website (Green Flag Trails, 2015). It is argued that the availability of accurate information about trail attributes reduces the likelihood of a mismatch between customer expectations

and product offering. Although the value of Green Flag has been recognised by the major conservation authorities in South Africa such as SANParks, KZN Ezemvelo and Cape Nature, implementation of Green Flag to the wider trail network has been slow with only 60 trails accredited in total. Half of these trails are currently due for a re-audit. The auditing of trails relies heavily on voluntary efforts within the hiking fraternity as no remuneration is offered to auditors. Marketing activities of Green Flag have been limited due a lack of resources and budget by the accreditation authority. Interest and support from governmental bodies such as the National Department of Tourism (NDT), has been lacking (Hugo, 2015).

The general lack of support to the industry extends into the research sphere with a clear deficiency in literature related to hiking tourism. An inspection of the available research in the field indicates significant gaps in the areas of consumer behaviour and decision making, and the key determinants thereof. Another neglected area in hiking tourism research is the impact of accreditation and certification systems on the quality of tourism products and consequently the benefits thereof to consumers and suppliers. The majority of available academic publications dealing with the aforementioned subjects are only somewhat related to hiking and sits on the peripheral boundaries between the hiking tourism industry and its host sectors such as adventure tourism (Buckley, 2002:183; Chang & Gibson, 2011:162; Patterson & Pan, 2007:26; Schlegelmilch & Ollenburg, 2013:44; Terblanche, 2012:iii; Williams & Soutar, 2009:413), nature-based and ecotourism (Esparon, Stoeck & Gyuris, 2013:51; Kil, Holland & Stein, 2014:16; Kil, Holland, Stein & Ko, 2012:603; Schoeman, 2010:iv-v; Tangeland, 2011:435).

Most studies directly related to hiking tourism focus on a specific geographical region (Boller, Hunziker, Conedera, Elsasser & Krebs, 2010:320; Chhetria, Arrowsmith & Jackson, 2004:31; Den Breejan, 2007:1417; Englin, McDonald & Moeltner, 2006:665; Kastenholz & Rodriques, 2007:5; Ntshona & Lahiff, 2003:2; Yamaki & Shoji, 2004:318). Literature on the use of accreditation, certification, grading and classification systems in hiking tourism focusses primarily on the standards applied to trail building standards with the majority of research limited to a particular country such as the work done by Arias (2007:2) in which the researcher compared existing walking trails classification systems used in Australia. No studies related to the impact of trail accreditation systems on consumer behaviour could be found. In the wider context of tourism, the work by authors such as Bentley, Page and Walker

(2004:280), Bergin-Seers and Mair (2009:109), Bergin and Jago (1999:223), Buckley (2002:183), Fairweather, Maslin and Simmons (2005:82-87), Font (2002:197), Foster (2003:1), Kozak and Nield (2004:138), Lacher (2012:120-122), Leonard (2011:35), Marchoo, Butcher and Watkins (2014:16-29), as well as Puhakka and Siikamäki (2012:64) provide some context as to the influence of accreditation systems on tourism and consumer behaviour in tourism.

1.2 PROBLEM STATEMENT

A knowledge gap exists in literature concerning accreditation systems in hiking tourism. More research is required to fully comprehend the role accreditation systems has to play in both the supply of hiking tourism products and to determine if, how and to what extent it may influence current and potential consumers' decision making regarding the consumption of hiking tourism products. Further development of hiking tourism is dependent on the acquisition of this knowledge, more particularly, knowledge of the influence of improved trail quality and the availability of trustworthy product information on buying behaviour of both current and potential hikers.

Apart from this, the unique components of consumer behaviour and consumer decision making in hiking tourism has not been clearly defined at an academic level. The nature of buyers, their motivations and perceptions, their buying behaviour and the role and influence of information in purchase decisions needs to be investigated further to identify the key determinants influencing consumer behaviour in this subsector of tourism.

1.3 PURPOSE STATEMENT

The purpose of this study is to strengthen and enhance the international body of knowledge concerning accreditation systems in adventure and nature-based tourism. More specifically, this study aims to uncover linkages between trail accreditation systems and current and future consumer purchase behaviour and in doing so, raising the level of understanding of

the role accreditation has to play in hiking consumer behaviour and consumer decision making globally.

1.4 RESEARCH OBJECTIVES

The study will be guided by the following specific research objectives and sub-objectives:

1. To describe the current state of the hiking tourism industry globally and locally
2. To explain the key determinants of consumer behaviour in hiking tourism
3. To determine the role of accreditation systems in hiking tourism development
4. To explore purchase behaviour in hiking tourism along the lines of activity levels, club membership and booking channels used in South Africa
5. To describe the key factors influencing consumer behaviour in South African hiking tourism. More specifically
   - Determining motivations, constraints and perceptions of hiking
   - Determining pre-trip information needs
   - Exploring the potential influence of key information areas on consumer behaviour
6. To measure the importance of an accreditation system in decision making of consumers in the context of hiking tourism and whether this is influenced by
   - Purchase behaviour determinants (activity levels, club membership, booking channels used)
   - Perceptions about the safety of hiking conditions in South Africa
   - The perceived importance of information in decision making
7. To explore the potential impact of an accreditation system on future buying behaviour of consumers in the context of hiking tourism and determine if this is influenced by
   - Perceptions about the safety of hiking conditions in South Africa
   - The perceived importance of information in decision making
8. To measure consumer awareness of the Green Flag Accreditation System
9. To make recommendations for the future development of hiking tourism through trail accreditation in South Africa

1.5 ACADEMIC VALUE AND CONTRIBUTION OF THE STUDY

The findings from this study make a meaningful contribution to bridging numerous gaps in literature in the fields of adventure and nature-based tourism. Results from this study provide insight into the following subject areas: The first is concerned with the role of accreditation in ensuring a sustainable hiking tourism industry. The study demonstrates a link between accreditation and consumer decision making and future buying behaviour. The research further builds a foundation for consumer behaviour and its key determinants in hiking tourism, where a lack of research has left a void in the understanding of motivations, constraints, perceptions and buying behaviour. The study also investigates consumer response to the individual constructs represented by accreditation, such as trustworthy information. Further to that, the research reveals important findings involving the factors influencing the perceived importance of accreditation.

Lastly, the findings from the study contribute to the existing body of knowledge on consumer awareness and willingness to pay (WTP) towards accreditation systems and ecolabels in tourism, and in doing so, assist in filling the lacuna of literature in this area that specifically relates to nature-based and adventure tourism.

From an industry managerial perspective, the study aims to assist the Hiking Organisation of Southern Africa (HOSA) and its members in articulating the value of an accreditation system in contributing towards growth in hiking tourism. The research creates an understanding of how the decision to hike as well as which trail(s) to hike is influenced by the presence of an accreditation system. The outcomes of the study equip HOSA and other industry players with knowledge around the industry's unique market challenges, assisting industry participants in formulating an appropriate response to these challenges.

Ultimately, results from this study may be used as a reference point from which to argue for government support for Green Flag by recognising it as a uniquely existing industry standard of great relevance. International interest in this study could position Green Flag as a globally recognised system. According to Hugo (2013), the global World Trails Network and

members of the European Ramblers Association (with its 5 million members) has already shown interest in joining South Africa's Green Flag movement.

1.6 DELIMITATIONS

The scope of this study was demarcated by several boundaries. The extent of the impact of accreditation systems being studied was limited to consumer behaviour and consumer decision making. The study did not measure hikers' customer satisfaction levels with or physical experiences on trails. While the attributes of Green Flag was used as a case study to test the importance of certain information aspects amongst hikers, hikers' satisfaction with Green Flag as a trail accreditation system was not measured. This decision to delimit the study in this regard was based on the researcher's assumption that awareness of Green Flag was low amongst hikers, making such an assessment premature.

The literature reviewed in this study includes publications with a geographical context outside of South Africa, however, the empirical research is delimited by geographical context as it focused on studying hiking tourism from a South African context. The study was further delimited by choice of target populations. The target population of hikers for achieving Research Objectives 4 to 8 of this study were limited to individuals who regarded themselves as hikers. The populations of hikers and non-hikers were further delimited to those individuals who had access to email and internet for distribution of the questionnaire and data collection purposes. The non-hiker population was restricted to individuals assumed to have a strong interest in at least one of the following activities: nature-based tourism or outdoor recreational activities.

Furthermore, while the literature review takes into account the impact of accreditation systems on the providers of tourism products, mentioning benefits posed to the supply side of tourism, the empirical research did not investigate the impact of implementation of accreditation systems from a provider's perspective. The study did not measure the competitive advantage of an accredited trail above a non-accredited trail. The study was also not concerned with studying best practice models for the organisational structure or optimal positioning of accreditation systems within the broader industry structure.

1.7 DEFINITION OF KEY TERMS

The key concepts being dealt with and their definitions for the purposes of this study are described below:

Adventure tourism: Defined as encompassing "… all types of commercial outdoor tourism and recreation with a significant element of excitement …" (Buckley, 2010:4). These include a wide variety of outdoor recreation activities, including the "softer" or less risky activities such as hiking (Buckley, 2006:27).

Accreditation: Accreditation by an official body (or to accredit) is defined as the act of giving authority or sanction to (someone or something) when recognized standards have been met (Oxford University Press, 2014a). Tourism accreditation is defined by Marchoo *et al*. (2014:18) as a process by which tourism businesses obtain certification from a third party on the condition that their responsible operations are meeting the benchmarks set by the accreditation authority.

Brand: A brand is "… a mechanism for achieving competitive advantage for firms, through differentiation (purpose). The attributes that differentiate a brand provide the customer with satisfaction and benefits for which they are willing to pay (mechanism) …" (Wood, 2000:666).

Certification: An aggregated definition in a tourism context for certification is stated as a "… voluntary procedure that assesses, audits and gives assurance that a business, facility, product, process, service or management system meets specific standards. It awards a marketable logo to those that meet or exceed baseline standards …" (Pina, 2004:11).

Classification: The process of placing something into a specific class or category (Oxford University Press, 2014b).

Consumer behaviour: Consumer behaviour outlines a multitude of psychological and physical processes involved with consumer decision-making. It is concerned with all the

actions of consumers and purchasers of products throughout the purchase lifecycle, from pre-purchase to post-purchase (Erasmus, 2013:12).

Consumer decision making: A consumer decision is better described as a process of decision making, involving different stages and influenced by various factors that determine the outcome of consumer satisfaction (Erasmus, 2013:16-24).

Day walks: A walk along a footpath ranging in duration from 30 minutes to a full day (Olivier, 2010:17).

Ecolabel: Ecolabels are the graphic, and sometimes easily recognisable, emblems displayed by certified companies in order to translate and share their level of environmental performance to stakeholders such as consumers, public entities and other interested parties (Leonard, 2011:10).

Grading: To arrange in or allocate to grades; classify or sort (Oxford University Press, 2015).

Hiking (or to hike): The act of walking along trails or footpaths carrying a rug sack, backpack or daypack containing one's supplies and equipment (Adapted from Hugo, 1999a:140-141 and Olivier, 2010:17).

Marketing: A set of practices and procedures for producing, conveying, providing, and exchanging offerings that have value for customers, clients, partners, and the general public (American Marketing Association, 2013).

Sustainable tourism: Sustainable tourism development is concerned with the following three principles: The optimal use of environmental assets while safeguarding biodiversity conservation and natural heritage; respecting and conserving the socio-cultural authenticity of local communities; and ensuring long term economic viability and providing socio-economic benefits to all stakeholders (UNEP & UNWTO, 2005:11-12).

Trail: A pathway or a track with a rough beaten or dirt or stone surface used for travel, in this case, hiking (Wikimedia Foundation, 2014a).

Wilderness area: An area that is mainly biologically unspoiled, is free of modern, industrial infrastructure, and has been set aside so that humans may continue to have a relationship with uncivilised nature (Dudley, Kormos, Locke & Martin, 2012:9).

Wilderness trail: Supervised by a trails ranger in natural and uncivilised areas such as national parks and game reserves (Olivier, 2010:17).

Table 1 provides a summary of abbreviations and their meanings often referred to in this proposal.

Table 1: Abbreviations used in this document

Abbreviation	Meaning
ATTA	Adventure Tourism Travel Trade Association
DEA	Department of Environmental Affairs
FTTSA	Fair Trade in Tourism South Africa
Green Flag	Green Flag Accreditation System
HOSA	Hiking Organisation of Southern Africa
ISO	International Organization for Standardization
NDT	National Department of Tourism
NTSS	National Tourism Sector Strategy
SADC	Southern African Development Community
SANParks	South African National Parks
SATOUR	South African Tourism Board
SAT	South African Tourism or SA Tourism
SATSA	Southern African Tourism Services Association
SIT	Special interest tourism
TGCSA	Tourism Grading Council of South Africa
TAMS	Travel Activities and Motivation Survey
TREES	Tourism Research in Economic Environs & Society
UNWTO	United Nations World Tourism Organisation
WTN	World Trails Network

1.8 DISSERTATION OUTLINE

In the review of literature, made up of chapters 2, 3 and 4 of this dissertation, emphasis is placed on the two key concepts explored in the study namely consumer behaviour and accreditation systems in a tourism context. The literature review starts off with an introductory section (chapter 2) looking at the definition, placement and health of hiking within the tourism industry, creating a backdrop for the state of hiking globally and in South Africa. In the chapter on consumer behaviour (chapter 3), literature that provides insight into factors influencing consumer behaviour and decision making is reviewed, from an adventure and nature-based tourism perspective as well as a broader tourism context. The section dealing with accreditation systems (chapter 4) discusses literature addressing ways in which tourism development has been impacted by accreditation or certification systems, with emphasis on the benefits of competitive advantage and differentiation to tourism providers. A short overview is provided of the most prevalent types of accreditation or certification systems in use today in tourism before looking at systems dealing with hiking trails specifically. At the end of chapter 4, a comprehensive description is given of Green Flag and its key strengths and attributes. The literature review concludes with a summary of literature available on the key concepts.

Chapter 5 provides a detailed account of the research methodology used in this study, including the sampling, data collection and analysis techniques used. This is followed by an all-inclusive discussion of the results obtained from the empirical study, in chapter 6, discussed in the context of Objectives 4 to 8. The study concludes with chapter 7, which summarises the key research findings based on the results and the literature review and provides recommendations to management for the future development of hiking tourism. Chapter 7 concludes with suggestions for future research on the topic.

CHAPTER 2: HIKING TOURISM AS A DESTINATION PRODUCT

2.1 INTRODUCTION

This chapter describes the current state of the hiking tourism industry globally and locally and links to Objective 1 of the study. In determining the relevance of hiking tourism as a destination product, literature is explored to firstly define the concept of hiking tourism and determine its standing within the larger tourism sphere. The review then goes on to give an account of the attractiveness of hiking tourism globally based on participation levels in various countries across the globe. The chapter makes mention of South Africa's standing in the adventure tourism arena and concludes with a description of the current state of hiking tourism in South Africa from both a supply and demand side perspective.

2.2 DEFINING THE CONCEPT

The tourism offering commonly referred to as hiking is also known by various other names; often used synonymously and sometimes interchangeably in countries across the globe. These include but are not limited to: walking, bushwalking, outdoor walking, rambling, tramping, backpacking, trailing and long distance trailing, trekking and hill walking. Simply put, the word hike as a verb is described as "… to walk for a long distance, especially across country …" (Oxford University Press, 2014c). Another definition of hiking includes that of Buckley (2010:287), referring to hiking as "… travelling on foot through the backcountry carrying all one's own supplies and equipment …".

South African authors Levy (1982 and 1993) and Steyn (1982) in earlier publications refer to hiking as well as backpacking, mountaineering and trailing. However, with growing use of the term backpacking referring to a low-cost travel method globally (Hampton, 2013:26; Hannam & Ateljevic, 2007:1) and in South Africa (Brand South Africa, 2014b; South African Youth Travel Confederation, 2010), the term has been used less in the context of hiking in recent years. In more recent publications, authors such as Hartwright (2014), Olivier (2010) and Lundy (2012) uses hiking, walking and climbing to describe the activity.

In the US, Canada and South Africa, hiking is the preferred term used to describe the tourism activity (American Hiking Society, 2014; Parks Canada, 2014; Hiking Organisation of Southern Africa, 2014). While no official definition for hiking exists, in the South African industry, the term is generally understood as the act of walking along trails or footpaths carrying a ruck sack, backpack or daypack containing one's supplies and equipment (Brand South Africa, 2014a; SA Tourism, 2014b, 2014d & 2014e; Hugo, 1999a:140-141; Olivier, 2010:17). While neither this definition nor that of Buckley's (2010:287) specifically mention more recently developed forms of hiking such as slack packing or luxury hiking, it is the researcher's intention to include these for the purposes of this study. Luxury hiking or slack packing is the term used to describe the offering where a hiker is provided meals and accommodation by the service provider, eliminating the need for the hiker to transport his own supplies and equipment. Hiking trail offerings such as slack packing as well as facilities such as porter services lessen the physical exertion of the hike, but it is still regarded as a hiking product by local adventure tourism p (Active Escapes, 2014; Eco Adventures, 2014; Slackpacker SA, 2014) and the national destination marketing organisation, South African Tourism (SAT) (SA Tourism, 2014c).

Understanding hiking tourism as a destination product first requires one to establish the position of hiking tourism in the broader tourism industry. Hiking tourism has been allocated to various tourism subsectors by different authors, most often the subsectors of adventure tourism, nature-based tourism and even sport tourism. Adventure tourism is defined as encompassing "… all types of commercial outdoor tourism and recreation with a significant element of excitement …" (Buckley, 2010:4). These include a wide variety of outdoor recreation activities, including the "softer" or less risky activities such as hiking (Buckley, 2006:27; UNWTO, 2014:6). Sport tourism, as a subset of overall tourism, involves the travelling to a destination away from one's principal residence for the means of taking part in a sport activity on a competitive or recreational level. It includes the travel to sport attractions such as water parks as well as the travel to observe sports of different levels of professionalism (Gibson, Attle & Yiannakis, 1998:53). Five main sport tourism categories are suggested in Ritchie and Adair (2002:2), of which sport adventure tourism is one. Hiking is specifically named as one of the sport tourism activities. Nature-based tourism is described as tourism that appears in regions rich in natural attractions as well as activities coupled with natural settings (Lundmark & Müller, 2010:381). It is therefore easy to

comprehend why numerous authors (such as Chhetria *et al.*, 2004:31; Fredman, Wall-Reinius & Grundén, 2012:297; Tyrväinen, Uusitalo, Silvennoinen & Hasu, 2014:1) would associate hiking tourism with this subsector.

One of the key differentiators of adventure tourism however, is the presence of at least some element of risk or challenge, be it intellectual, physical or emotional (Swarbrooke, Beard, Leckie & Pomfret, 2003:16). Although academics differ in their categorisation of hiking tourism within the context of other tourism subsectors (as there are many overlapping qualities between adventure, nature-based, eco- and even sport tourism), for the purposes of this study, the focus will be on adventure tourism. It is the view of the researcher that hiking tourism is ideally suited to the subsector of adventure tourism due to the following specific commonalities with other adventure tourism products (Swarbrooke *et al.*, 2003:9; Mlozi & Pesämaa, 2013:91):

- physically challenging in nature,
- an uncertain outcome often experienced in terrain and destinations that are unfamiliar to the tourist,
- impacted by other unknown risks such as weather changes, limited provisions, animal encounters,
- a leisure activity in a remote or wilderness destination,
- one of contrasting emotions,
- includes exploration and discovery, and
- the notion of escapism.

In describing different tourism consumer markets in South African, George (2004:158) lists adventure tourism as part of the special interest tourism (SIT) market along with other sectors such as eco/wildlife tourism. Although the author does not specifically list hiking tourism as a subsector of adventure tourism, the association can be made based on the similarities described above.

Adventure tourism products can generally be categorised into soft or hard adventures, with hiking considered as one of the softer or less risky products (Rogerson, 2007:230; Terblanche, 2012:4). In examining the standing of adventure tourism in the larger tourism

context, Buckley (2010:4) and Swarbrooke *et al*. (2003:4) agree that the activities and settings typically linked with adventure tourism form part of the niche tourism sectors such as nature-based tourism and activity tourism, offering the very opportunities for adventure in the first place (Swarbrooke *et al*., 2003:4). The authors point out that the availability of natural surroundings for example is an important element in most adventures. A more comprehensive approach for adventure tourism is favoured by Swarbrooke *et al*. (2003:26) where some products in almost any niche sector of tourism can be viewed as adventure tourism. Destination plays a key role in most forms of adventure tourism activities as it brings a distinctive flavour to the experience (Swarbrooke *et al*., 2003:122). George (2004:334) defines a destination as "… a place, including a physical or perceived location, consisting of primary and secondary attractions and supporting amenities that entice people to visit".

Academic interest in the concept and management of adventure tourism has been growing in the last decade both locally and abroad as the sector enjoys increased participation through the commercialisation of outdoor recreational opportunities (Beedie, 2013:19-32; Cater, 2006:317; Fletcher, 2010:6-33; McKay, 2013:30-62; Pomfret, 2006:113-123; Rogerson, 2007:228-244; Terblanche, 2012:1-142; Urry, 2013:47-60). The United Nations World Tourism Organisation (UNWTO) concedes that adventure tourism creates enormous opportunities for growth through job creation and increased earnings, particularly in local communities (UNWTO, 2014:6).

2.3 THE STATE OF HIKING TOURISM GLOBALLY

The Adventure Tourism Travel Trade Association (ATTA) provides learning, networking and partnering services to assist its more than 1 000 members globally in the sustainable development of the adventure tourism market. The association regularly publishes key data on the industry in four flagship reports. The Adventure Tourism Market Report contains valuable market insights into three regions, namely Europe, North America and South America. In its latest Industry Snapshot, published in 2014, the association surveyed over 600 adventure tour operators in 69 different countries in order to uncover traveller trends, changes in marketing spend, financial results and general demographics (ATTA, 2014). In the same year, the UNWTO released its Global Adventure Tourism Report, a joint

publication with the ATTA. In the report, UNWTO acknowledges adventure tourism's contribution towards a responsible tourism industry (UNWTO, 2014:6).

Hiking, backpacking and trekking tourists often spend more nights at a destination, therefore increasing overall spend, although average spend per day is less than some of the other tourism categories. Spending often filters through to local communities so that the benefits of tourism are shared amongst a broader society (UNWTO, 2014:24). Participation in walking, hiking or trekking tourism have increased globally amongst youth travellers during recent years from 18.7% in 2007 to 48% in 2013 (WYSE Travel Confederation in UNWTO, 2014:25).

The World Trails Network (WTN), launched in 2012 at the World Trails Conference, aims at supporting the culture of trails around the world by becoming a platform for research, communication and networking regarding trails. One of the network's key objectives is to support sustainable and quality trail development. According to its Chairman, the health of the industry is improving after it saw an upswing in trail development during the period 2004 – 2007 globally and most notably in multi-day long distance trails (Saintz, 2015).

The availability of data on participation and growth in hiking tourism specifically and from a consumer perspective differs country by country. It is therefore of value to the study to include a brief discussion on the uptake of hiking tourism globally.

The Nordic countries are renowned for their outdoor recreation opportunities. Data from Statistics Sweden show that, for the last 40 years, the proportion of the population who reported hiking in a forest at least once a year has consistently been within the 70 – 80% range (Fredman, Lindhagen & Nordström, 2012:80-81). In other European countries such as Germany, the numbers are also encouraging, with 56% (roughly 39.8 million Germans) of the population regarding themselves as active hikers (German Federal Ministry of Economics and Technology, 2010). The German Hiking Association, an umbrella organization of 58 German mountain and hiking clubs claims to have around 600 000 members (German Hiking Association Service GmbH, 2015).

Each year, The Outdoor Foundation, a non-profit established by the US Outdoor Industry Association, publishes the results from a nationwide survey, relaying key data and statistics on the US population's participation in outdoor recreational activities. In 2014, 12% of the US population (or 34.4 million people) say they participated in the activity of hiking, making hiking the fifth most popular outdoor activity amongst all Americans (The Outdoor Foundation, 2014:13). Amongst young American adults aged between 18 and 24 years of age, hiking was the fourth most popular outdoor activity with the average young adult partaking in 21 outings per year (The Outdoor Foundation, 2014:27).

The Travel Activities and Motivation Survey (TAMS), sponsored by the Ontario Ministry of Tourism amongst others, and conducted by Statistics Canada in 2006 contains valuable information on the demographical and regional trends of hikers, climbers and paddlers engaging in the respective activities throughout Canada and the US. Data from the survey indicated that 25.4% of Canadians participated in hiking, climbing or paddling in the past two years while on an out-of-town, overnight trip of one or more nights. Hiking was ranked the most popular activity as a same day outing by 18.1% of the population (Canadian Tourism Commission, 2007:1). It does however not appear as though the survey is conducted regularly with data from 2006 being the latest available.

Tourism New Zealand's annual Visitor Experience Monitor Report containing data produced by Statistics New Zealand, monitors interest, participation and satisfaction levels of international visitors in a variety of park and non-park based activities, including tramping and scenic bush walks (Tourism New Zealand, 2013:9). The New Zealand's Department of Conservation uses data from this report to publish its Visitor Trends Report which contains data on the demand for hiking or tramping from overseas markets (Harbrow, 2013:11). German visitors show the greatest levels of interest and participation in scenic bush walks (96% and 65% of visitors respectively) and tramping (95% and 80% respectively). Another survey, conducted by New Zealand's Department of Conservation (DOC) every year since 2011, investigates New Zealanders views of, appreciation for and participation in conservation activities (Nielsen Research, 2014:17-48). More New Zealanders in 2014 said they visited at least one recreation area during the last 12 months than in 2013. Walking, hiking and tramping was cited as one of the main reasons for the increased use of DOC recreational areas.

According to the UNWTO, backpacking, trekking and hiking is a "… low-impact segment that will continue to grow and can be lucrative if destinations position the offering correctly …" (UNWTO, 2014:24). The next section describes the state of hiking tourism in the local context.

2.4 THE SOUTH AFRICAN PERSPECTIVE

South Africa, along with Zambia and Tanzania, are the most popular destinations for adventure tourism in Africa (Rogerson, 2007:229). South Africa's offerings in adventure tourism and hiking tourism are employed by SAT as key marketing messages in luring both international and domestic tourists (SA Tourism, 2014a). A comparison of the internet footprint of adventure tourism activities amongst SADC (Southern African Developing Community) countries, McKay (2013:49-51) found South Africa, along with Swaziland and Namibia, compared favourably in terms of the maturity of both the range of offerings and the marketing thereof. Although this method has some limitations, it does reflect the fact that South Africa's adventure tourism industry is far more developed than most other SADC countries.

While South Africa is not considered by some as one of the top 10 adventure tourism destinations globally (ATTA, 2014), international travel marketers agree that South Africa offers some of the most spectacular hiking tourism opportunities in the world (Lonely Planet, 2015; Placestoseeinyourlifetime.com, 2014; Walkopedia, 2015; hellawella.com, 2015; BuzzFeed, Inc., 2015). Hiking trails such as the North Drakensberg Traverse in South Africa ranks amongst the world's best (National Geographic Society, 2014). It is estimated that South Africa has around 10 224 km of footpath with the Western Cape possessing the highest amount, or roughly 25% of footpath (Groenhof & Saintz, N.d.:2). When investigating the number of trails on offer in the country, opinions vary widely. Estimations along the line of 400 – 600 trails are provided by authors who have recently attempted to record and publish key information on hiking trails on offer (Hartwright, 2015; Olivier, 2010:16), while other researchers and adventurers place the number much higher at around 1 000 or more (Groenhof & Saintz, N.d.:4). It should be noted that many of these are short walks of less than an hour or under a day in duration.

South Africa offers a range of different types of hiking tourism products. While formal definitions are often lacking for the various categories, there is consensus amongst most practitioners on the general understanding of what the main hiking tourism products or services typically entail. The most pertinent exception is the case of wilderness trails. A wilderness area is defined as an area that is mainly biologically unspoiled, is free of modern, industrial infrastructure, and has been set aside so that humans may continue to have a relationship with uncivilised nature (Dudley *et al.*, 2012:9). A wilderness trail is described by some as a primitive experience where a bare minimum amount of equipment is provided and special measures are used (such as using water from springs or rivers for drinking and cooking, sleeping in the open, bathing in the river) to ensure minimal impact on the environment (Ezemvelo KZN Wildlife, N.d.). The phrase is however often used to refer to overnight hikes taking place in protected areas regarded as wilderness areas (Olivier, 2010:17), regardless of whether the participants are self-sustainable or offered services such as catering and portage (SANParks, 2015a).

The main offerings and distinctive characteristics associated with various hiking tourism products and services are listed in Table 2.

Table 2: Types of hiking tourism products and services on offer in South Africa

Type of product or service	Distinctive characteristics	References
Backpacking trail	A backpacking trail usually does not occur along a designated footpath so the backpacker has freedom to roam the area or region. No accommodation is provided and sleeping happens in the open, or in caves or in a tent carried by the backpacker.	Olivier (2010:17)
	The term backpacking is often referred to as a low cost travel method globally (Hampton, 2013:26; Hannam & Ateljevic, 2007:1) *and in South Africa* (Brand South Africa, 2014b; South African Youth Travel Confederation, 2010).	
Day walk	Generally short in duration, ranging from 30 minutes to a full day of walking. Easily accessible and requires no special travel planning. Often provided by municipalities and other local governmental bodies.	Groenhof & Saintz (N.d.); Hartwright (2015); Olivier (2010:17)
Day hike	Short in duration, between one hour and a full day. Requires a bit more planning than a day walk.	Hartwright (2015)
Guided walk	Similar to a day walk. Often conducted in national or provincial parks and nature reserves where hikers are accompanied by a field guide or ranger.	Example of SANParks (2015b)
Slack packing / luxury hiking / serviced trail	Includes services ranging from catering to portage and luxury accommodation. A hiker is provided meals and accommodation by the service provider, eliminating the need for the hiker to carry his/her own supplies and equipment.	Groenhof & Saintz (N.d.:4)
Traditional trail – overnight hike	Overnight accommodation usually consists of huts or equivalent that can accommodate groups of hikers.	Groenhof & Saintz (N.d.:4)
Long distance trail	Marked, or identified on a map, and typically be at least 50 km long.	Wikimedia Foundation (2014b)
Wilderness trail	The hiker is entirely self-sustainable and takes everything including a tent.	Groenhof & Saintz (N.d.:4)
	Supervised by a trails guide in areas such as national parks and game reserves. The main objective is to instil in hikers an appreciation and understanding of nature.	Olivier (2010:17)

Hiking tourism products in South Africa are generally provided and marketed through:

- large state-owned conservation authorities such as South African National Parks (SANParks, 2014) who control all national parks in the country;
- regional and provincial conservation agencies such as the KwaZulu-Natal Nature Conservation Board with its operational body Ezemvelo KZN Wildlife (Ezemvelo KZN

Wildlife, 2014); CapeNature (CapeNature, 2014) mandated by the Western Cape Nature Conservation Board; and Pilanesberg Game Reserve (Pilanesberg Game Reserve, 2014) governed by the North West Parks and Tourism Board;

- commercial forestry and timber companies such as Komatiland Forests (Komatiland Forests, 2014) (a subsidiary of SAFCOL), MTO Forestry (MTO Forestry, 2014) and Cape Pine (Cape Pine, 2014);
- local governments or municipalities such as West Coast District Municipality's (2014), Boschberg Hiking Trail (Somerset East Tourism, 2014);
- agents such as Jacana Travel Marketing and Reservations (2015) who manages the marketing and booking of around 150 trails;
- adventure tourism companies such as Active Escapes (2014) and Anvie Adventures (2014);
- private game reserves and game farms such as Mateke (2014); and
- private land owners and farmers.

Trails are also marketed directly or indirectly through various local and international third party websites, social media channels and print media such as SAT (SA Tourism, 2014b-f), Lonely Planet (2015), hiking clubs, adventure bloggers (sofar, 2015) and adventure guides such as Dirty Boots (2015). The booking of trails can be done in a number of ways: Making use of travel agents, tour operators or marketing or booking agents who act as third parties and earn a fee for handling the administrative tasks on behalf of the trail owner; booking through adventure tourism companies who offer hiking tourism products (self-owned or managed on behalf of owners); booking directly with trail owners, conservation organisations, provincial or municipal authorities directly to reserve a trail; relying on club representatives or friends who manage bookings on the group's behalf.

The Hiking Organisation of Southern Africa (HOSA), the umbrella body for hiking in the region, has recently been selected to represent the World Trails Network by becoming the hub for Southern Africa. Simply put, HOSA will further the WTN's five focus areas:

- Knowledge and resource sharing.
- Sustainable and quality trail development.
- Cultural and biodiversity conservation of trails or related to trails.

- Cross-marketing: promoting friendship trails, coordinating volunteer opportunities.
- Promotion of local hiking and walking.

HOSA highlights some challenges that are of great concern to the future of hiking tourism in South Africa. Amongst these include the deterioration in the conditions of trails due to poor planning of trails, insufficient knowledge surrounding sustainable development and lack of general maintenance. HOSA estimates that 60% of hiking trails in South Africa no longer comply with normal hiking requirements due to challenges such as poor accommodation, safety issues, poor or no maintenance, environmental degradation, and inadequate water supply (Bossert, 2013a). Other challenges identified by Tourism KwaZulu-Natal's Research Manager include the lack of signage on trails, poor mapping skills and polluted water sources (all pointing to a lack of maintenance or planning by trail owners) as well as crime-related incidences (Kohler, 2015).

The industry has witnessed the closure of many existing trails in recent years, such as The Brook hiking trail near Oshoek in Mpumalanga, Weiland Bush Trails outside Brits in the North West province, Skaapplaas Hiking Trail between Oudtshoorn and Mossel Bay in the Western Cape, Sycamore Hiking Trail near Waterval Boven in Mpumalanga and Tigershoek Hiking Trail near Steelpoort in Mpumalanga to name but a few (Hugo, 2013). The amount of the trail closures and general lack of management of trails is significant; evident from a 2010 study on socio-economic benefits of hiking trails to conservation areas in the Cape Floristic Region. The study involved initial desktop search in order to compile a comprehensive list of trails operating in the Region. Of the 216 trails identified, roughly 38% of trails either (a) no longer existed or (b) were short walks, managed by municipalities where no particular individual was responsible for the management thereof (Groenhof & Saintz, N.d.:5).

While new trails are being developed on a regular basis, the uptake of these has been low for a variety of reasons; one being the fact that hikers are reluctant to venture on new trails due to a lack of trusted information around key trail attributes such as the difficulty grading and facilities available (Hugo, 2013).

Hikers and hiking club numbers have also declined over the last two decades (Bossert, 2013b). Attempts at quantifying the number of hikers in South Africa are, at best, estimations based on personal perceptions. No recent literature exploring the size of the market could be found. An interview with Mr. T. Hartwright, author of *Gauteng Hikes and Walks*, owner of Jacana Marketing and Reservations and chairman of the Footprint Hiking Club, provided one such estimate, placing the current number of hikers in South Africa around the 70 000 mark (Hartwright, 2015).

A study on the adventure activity preferences of future South African National Parks (SANParks) markets, examined the current participation in sport and adventure activities amongst potential adventure tourists to parks in South Africa. The results indicated hiking, along with Warrior Race and mountain biking as the top activities amongst respondents who already participated in adventure activities (TREES, 2015:9). A series of visitor surveys conducted in some of the national parks also shed some light on the role that hiking plays as a motivator for visitation to the parks and the relative importance of hiking in relation to other activities on offer. Overnight visitors to the Mapungubwe National Park indicated hiking as the third most important soft adventure activity after bird watching and night drives (TREES, 2014a:16). Hiking was ranked as an important activity, second only to whale watching, amongst visitors to the Table Mountain National Park (TREES, 2014b:19). In West Coast National Park, visitors regarded hiking to be a very important adventure activity, rated second after game viewing (TREES, 2014c:10). It was interesting to note that in all three of the parks mentioned, hiking was rated as a more important need than guided walks. An overwhelming majority (86%) of participants in wilderness trails indicated very strongly that this type of product (although niche) is relevant and appropriate and should continue to be offered in national parks (TREES, 2014d:18), with 91% of respondents saying they would complete another trail.

Tourism KwaZulu-Natal has noticed changes in the behaviour of individuals who participated in mountain-related activities over the last couple of years. Younger individuals who traditionally headed for the mountains in their spare time are now opting for climbing walls or gyms with similar facilities instead, mostly due to time constraints. There continues to be a strong interest in mountain activities from those whose main aim is hiking, however. Hiking

continues to be extremely popular in KwaZulu-Natal as it is "…very much a participative and experiential activity …" (Kohler, 2015).

The latest Tourism Satellite Account (TSA) published by Statistics South Africa (StatsSA, 2014) provides data on tourism expenditure by product type for the years 2010, 2011 and 2012. Hiking is assumed to have been included in the category for sports and recreational services product category, with no further breakdown or details available.

2.5 CONCLUSION

Hiking tourism has an important role to play both within the adventure and nature-based tourism sectors. The steady consumption of hiking tourism products in the key North American and European countries mentioned above supports the fact that in the global arena, hiking tourism seems to be flourishing. The availability of publications describing the state of hiking tourism globally is in stark contrast to the data available on hiking tourism in South Africa. Locally, current literature gives no recent account of the overall health of hiking tourism in South Africa, nor does it provide any data or insight into the historical growth or future prospects for the sector. Quantitative data on the participation in outdoor recreational and more specifically, hiking activities undertaken in South Africa is limited to publications by provincial tourism agencies and visitor surveys of national and regional parks, providing but a baseline assessment of tourists' motivations for travelling. Judging by the quality, types and number of hiking tourism products available to tourists, it can be concluded that South Africa has the potential to meaningfully grow this tourism subsector if it can overcome the challenges of a relative lack of interest by policy decision makers, a stagnating market uptake and the deterioration in product quality.

In order to determine the key demand factors for hiking tourism, it is necessary to explore the underlying concepts at play in the behaviour of consumers of adventure tourism products. The following chapter aims to do this by reviewing the availability of literature on the key elements of consumer behaviour in hiking tourism.

Note that, while the focus of the study is largely on adventure tourism, for the purposes of chapters 3 and 4, literature from the nature-based tourism field is also included to ensure the viewpoints of key contributors to the areas of consumer behaviour and accreditation systems in nature-based tourism are incorporated since many scholars have allocated hiking tourism to this subsector of tourism.

CHAPTER 3: CONSUMER BEHAVIOUR IN ADVENTURE AND NATURE-BASED TOURISM

3.1 INTRODUCTION

Consumer behaviour outlines a multitude of psychological and physical processes involved in consumer decision-making. It is concerned with all the actions of consumers and purchasers of products throughout the purchase lifecycle, from pre-purchase to post-purchase (Erasmus, 2013:12). A consumer decision is better described as a process of decision making, involving different stages and influenced by various factors that determine the outcome of consumer satisfaction (Erasmus, 2013:16-24). To explain the key determinants of consumer behaviour in hiking tourism (Objective 2 of the study), this section firstly introduces the generic concepts around consumer behaviour and consumer decision making in tourism before further exploring literature that has investigated this area in the context of adventure and nature-based tourism offerings.

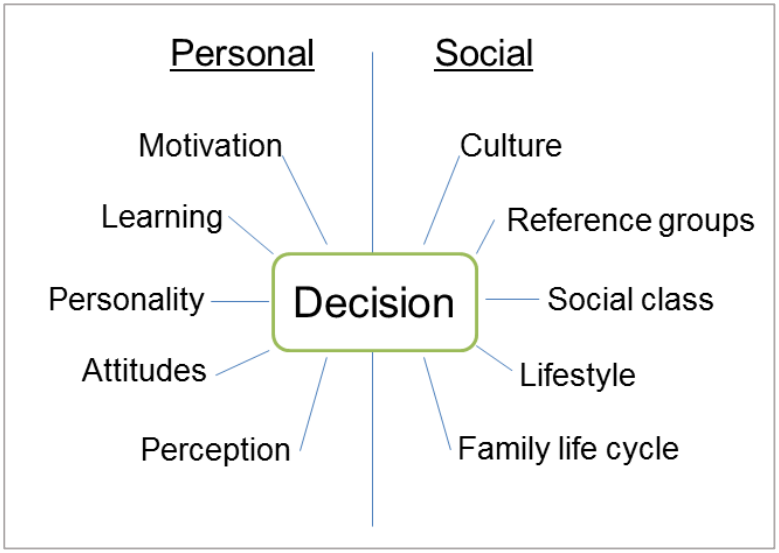
3.2 KEY CONCEPTS OF CONSUMER BEHAVIOUR AND DECISION MAKING IN TOURISM

An assortment of elements needs to be considered when examining the factors that influence consumer behaviour in tourism. An understanding is needed of the consumer's perception of variables such as destinations, travel modes, travel distances and travel marketing; how consumers acquire the skills of travel; how decisions are made regarding travel and how the character and nature of a consumer affects his/her decisions. Further to that, the motives and stimuli affecting travel decisions need to be analysed along with how perceptions and beliefs are formed and the effect of various groups (Moutinho, Ballantyne & Rate, 2011:83-85).

The main factors impacting on the tourism consumer's purchase decisions (seen in Figure 1), are based on two broad categories of factors: personal and social. There are many

individual factors playing a role in consumer behaviour and that the choice eventually made is a meshing of multiple social and personal factors George (2004:146-152).

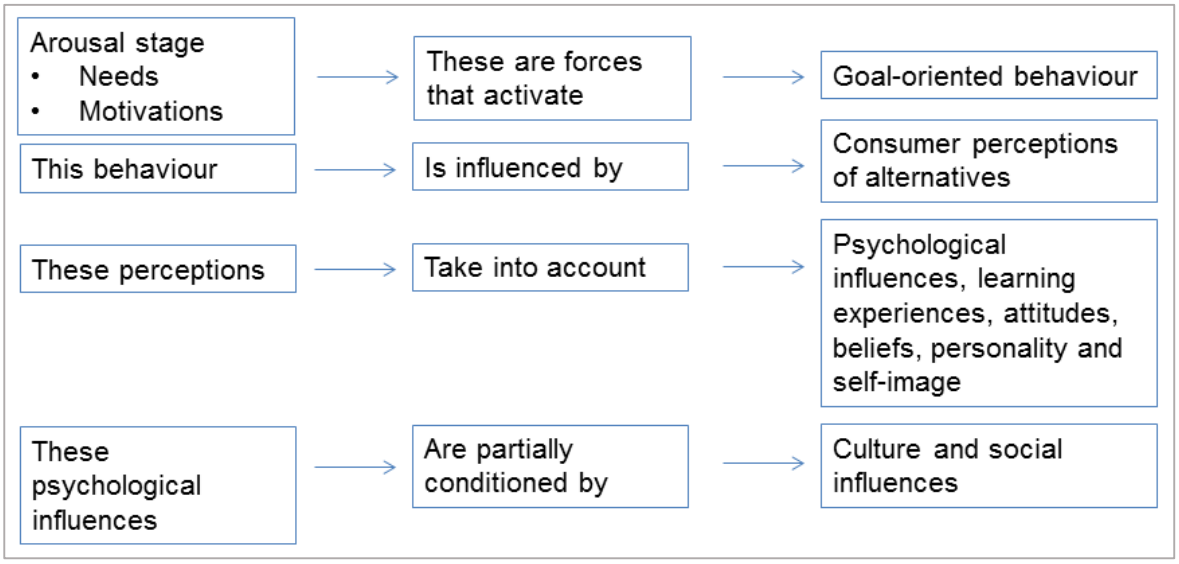
Figure 1: Factors affecting consumer behaviour



Source: George (2004:146)

To fully comprehend purchasing behaviour, an inspection of the complicated interactions between the many elements existing at different stages, from needs arousal to decision making, as well as from purchase to post-experience is needed (Moutinho *et al.*, 2011:84). The interaction of elements that are involved in consumer behaviour as set out by Moutinho *et al.* (2011:85) can be seen in Figure 2.

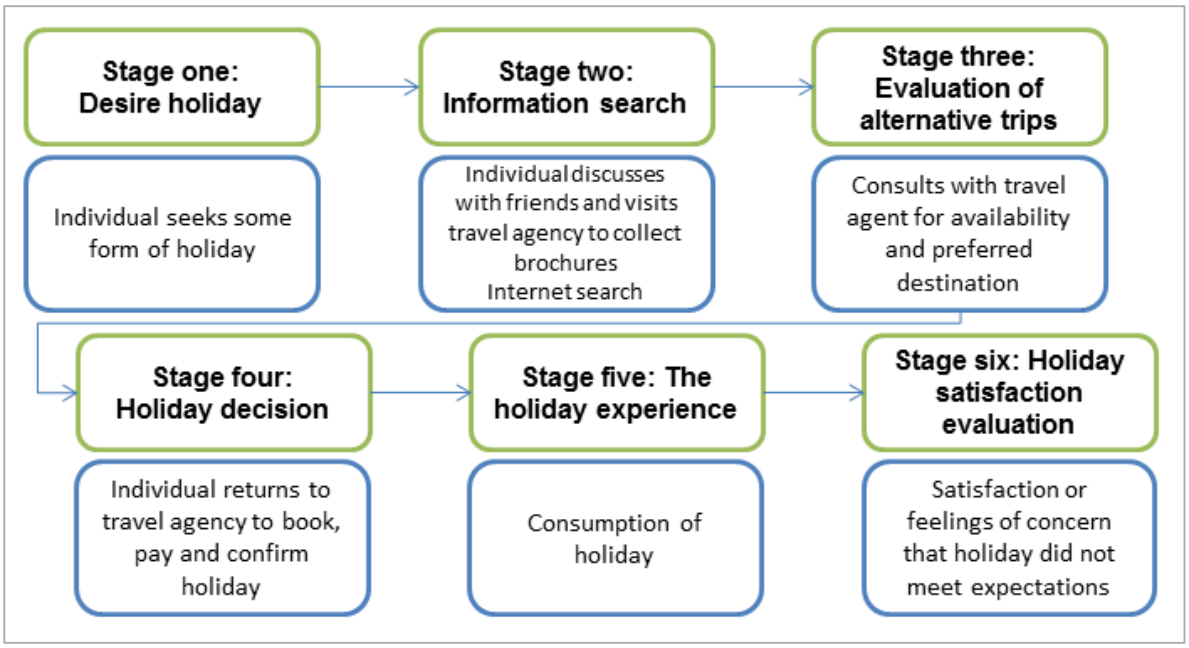
Figure 2: Interaction of psychographic elements influencing consumer behaviour



Source: Moutinho *et al.* (2011:85)

While describing the buying process for the tourism consumer, George (2004:152-154) examined the stages involved before the choice is made, based on the assumption that the consumer moves through a cycle of push and pull factors prior to and after making the purchase, as demonstrated in Figure 3.

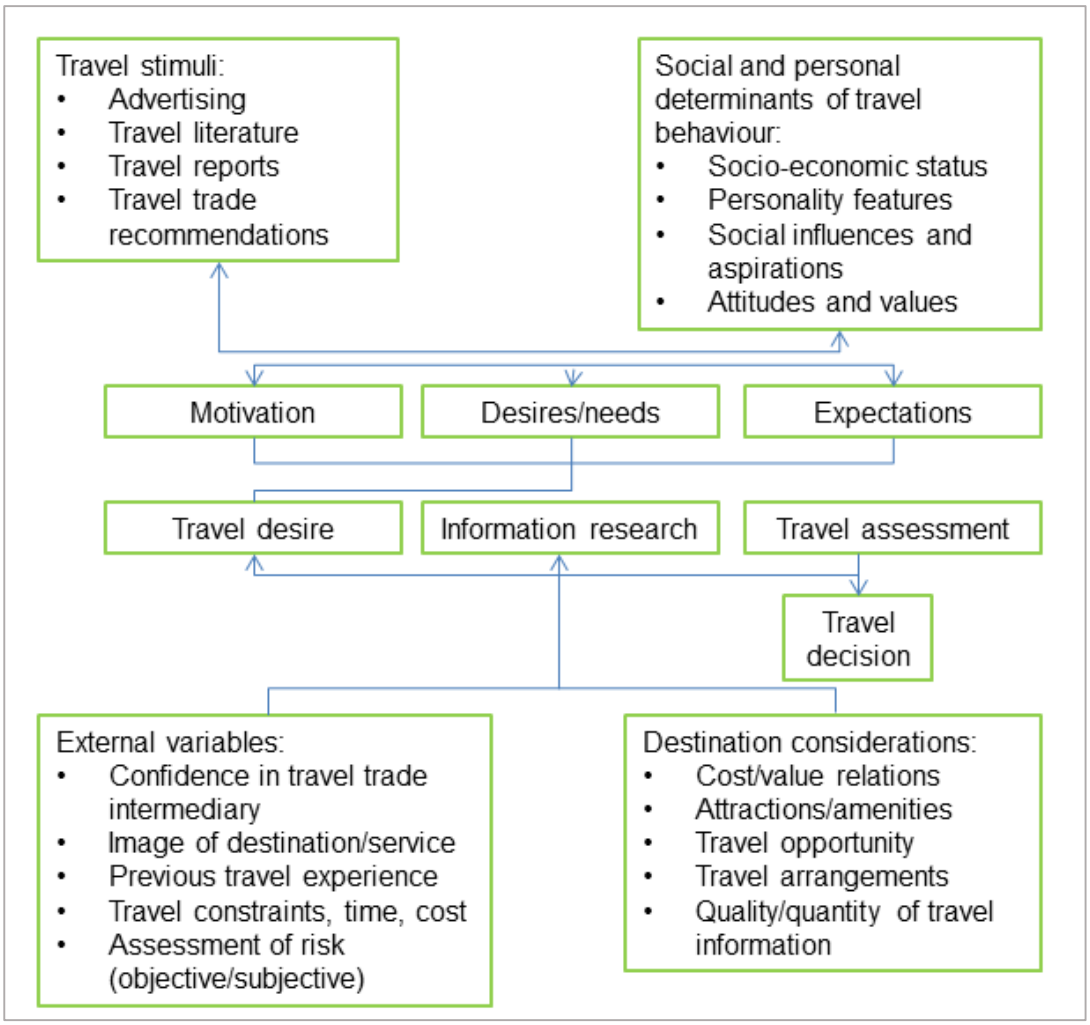
Figure 3: The buying process for the tourism consumer



Source: Lumsdon (1997 adapted in George, 2004)

As tourism is an intangible product which cannot be experienced or touched prior to purchasing, the external information sources involved in decision making play a critical role in consumer behaviour. Related to this are the experiential processes such as imaging, daydreams and emotions influencing the purchase behaviour of tourists (Moutinho *et al*., 2011:103-105). The travel decision model as suggested by Moutinho *et al. (*2011:99) (refer to Figure 4) is based on motivations, needs and desires of the consumer as well as his or her expectations.

Figure 4: Travel decision model



Source: Moutinho *et al*., (2011:99)

The way in which consumers gather and dispense information between themselves and organisations is influenced by recent trends such as the digital revolution bringing about mass adoption of the Internet (including social media) and tremendous advances in

communication technologies. Other influences include the impact of rising energy costs and changes in family living arrangements and family sizes. Travel decisions are thus highly affected by external forces, including the sway of other people, categorised as social influences (Moutinho *et al.*, 2011:84).

The consumer's perceived risk plays a particularly interesting role in the decision process. Uncertainties challenging the consumer may include deep-rooted uncertainty in the product itself, doubt about the place and mode of purchase, the extent of monetary and psychosocial consequences involved and the subjective uncertainty experienced by the tourist. The relationship between a tourist's past experiences and lessons learnt from them, intrapersonal attributes, awareness of the risks, information sources at his or her disposal prior to and post purchase as well as evaluation of product attributes need to be examined in order to determine a tourist's risk profile (Moutinho *et al.,* 2011:97). This is particularly relevant in the context of adventure tourism where an element of risk is usually involved (Swarbrooke *et al.*, 2003:16).

Tourism consumer markets and consumer typologies describe who the consumer is making the purchasing decision (George, 2004:155-162) while market segmentation provides a way for the marketer to determine which groups of buyers have the best buying potential (George, 2004:125). Consumers are clustered based on sharing similar characteristics which cause them to have similar tourism offering needs. There exists many different ways in which a particular market can be divided, the most common being geographic, psychographic and demographic segmentation. Geographic segmentation is concerned with where the consumer originates from, be it a particular region, country, province, city or neighbourhood (George, 2004:126). Psychographic segmentation is based on the notion that tourists with common attributes such as personality, social class, and lifestyle will make similar buying decisions. Personality type plays a big role in a consumer's decision to partake in an adventure trip (Swarbrooke *et al.*, 2003:161). Consumers can also be characterised by variables such as age, gender, language, line of work, earnings, educational background, family life cycle stage, creating a demographic profile.

The next section explores literature that has examined some of these elements mentioned above from an adventure and nature-based tourism context.

3.3 CONSUMER BEHAVIOUR IN THE CONTEXT OF ADVENTURE AND NATURE-BASED TOURISM

The next section introduces a number of key factors related to consumer decision making as identified in section 3.2, with particular attention paid to the application thereof in adventure and nature-based tourism. They are: Consumer profiling and consumer preferences, motivators and constraints, consumer perceptions and attitudes, information needs and purchase behaviour. The list of factors aim to shed light on the question of which aspects potentially affect decision making and consumer behaviour in hiking tourism. Literature on each of the key factors in the context of adventure and nature-based tourism are briefly discussed in order to establish if and how previous studies on consumer behaviour can be applied to hiking tourism. The majority of the research reviewed below addresses a particular geographic region or place of interest which makes the application to hiking tourism in South Africa challenging and in many instances inappropriate. While the work by SAT on the topic of consumer segmentation is an exception, it still only scrapes the surface of consumer behaviour in hiking tourism.

3.3.1 CONSUMER PROFILING AND CONSUMER PREFERENCES

There are many ways in which adventure, nature and hiking tourists can be segmented with typologies playing a significant role in hikers' decisions regarding hiking tourism products (as shown by Andereck, 2009:490; Boller *et al.,* 2010:326-327; George, 2004:155-162; Kastenholz & Rodriques, 2007:5; Patterson & Pan, 2007:26-53; Taczanowska *et al.*, 2014:27-29; Wall-Reinius & Bäck, 2011:38-53).

Locally, in an investigation into the relevance of wilderness trails on offer in various National Parks, the researchers profiled wilderness trail participants according to the socio-demographic characteristics of age, province of residence, education and income. The study further explored the key determinants of importance to hikers when on a wilderness trail. Wilderness trails such as these are however niche products in hiking tourism (TREES, 2014a:18), regarded as leisure hiking by many and does not represent the demographics or views of the larger hiking population in South Africa.

Studies that have looked at adventure tourists from a spend behaviour point of view indicate that adventure tourists will spend a considerable amount of money chasing after adventure and are usually educated individuals (Christiansen, 1990; Swarbrooke *et al*., 2003; Tsui, 2000; in Williams & Soutar, 2009:415). Kastenholz and Rodriques (2007:12-16) differentiated between three groups of hikers in different natural areas in Portugal based on the amount of money spent per day. Mountainous and forest terrains were found to be more likely to attract the "biggest spenders" than other scenic sites. This target market preferred an uncrowded experience in nature.

From a preferences point of view, visitors to remote areas in the Swiss Alps were segmented as ''purists,'' ''neutralists,'' and ''nonpurists'', based on the ''purism scale'' originally developed by Hendee, Catton, Marlow and Brockman (1968) and Stankey (1973) (in Boller *et al.,* 2010:326). The majority of hikers dislike encountering more than 10 persons on a given hike. It was found that "purists" oppose certain tourism developments in rural areas (such as cellular phone coverage, better accommodation, new trails and new guided tours) while these are welcomed by other categories of visitors.

A study on hikers visiting protected areas in northern Sweden compared the results from two visitor surveys in order to uncover changes and similarities in visitor demographics and preferences over time. Several differences were identified between respondents from the 1980 survey and those of the 2003 study. Table 3 represents a summary of the variables that had experienced significant differences in importance over time and those that remained stable.

Table 3: Summary of stability and change variables over time

Stability / Change	Variable
Stability	Importance of experiencing nature and scenic views
	High share of return visitors
	Geographical origin of visitors
	Socio-economic factors (level of education and type of occupation)
Change	Reduction in length of stay
	Increased age among visitors
	More are hiking alone
	Not as important as before to meet as few hikers as possible
	Increased importance of: • adventure and perils • accommodation, services, marked hiking trails, accessibility • accepting infrastructure to a greater extent

Source: Wall-Reinius and Bäck (2011:47)

The importance of the following variables appears to have increased over time: Experiencing adventure and perils, provision of services, marked hiking trails and accessibility. The majority of hikers from the 1980 survey said that to experience perils and adventure was of no importance, while in 2003, this variable was of great importance. The results also revealed significant differences amongst age groups. The availability of marked hiking trails were valued more by younger age groups in the 1980 study. Over time, the importance of this variable has increased amongst older respondents. Some visitors felt the increased availability of services, transportation and facilities had heightened the lure of the mountains while others regarded the infrastructure developments and overcrowding as undesirable. The researchers concluded that the differences in tourist needs may cause clashes between those who want more extreme, perilous and socially oriented forms of activities and those who yearned for tranquillity, privacy, and personal renewal (Wall-Reinius & Bäck, 2011:42-48).

Several other scholars have proposed typologies for nature-based tourists based on, amongst others, visitors' motivations and their inclination towards nature preservation. Respondents from a study by Andereck (2009:496) who regarded nature-based activities as important were concluded to be heterogeneous in nature since the clusters under review

showed differences with respect to motives, activities and trip characteristics and demographics. Arnegger, Woltering and Job (2010:915-916) point out that the development of tourist typologies that consider the complexity of today's tourism system has become an arduous task. The researchers suggest the use of product-based typologies by way of applying a two-dimensional matrix comprising of four travel motivations and four types of tourism products. Figure 5 depicts the proposed classification system with the horizontal axis representing consumers' motivations for travel as it relates to the relevance of nature as a point of attraction. The vertical axis serve as tourists' utilisation habits in terms of service arrangements purchased.

Figure 5: Classification for nature-based tourism

High "nature as point of attraction"** Low

"individuality"* (High → Low)

Service arrangements \ Travel motivations	Nature protection	Nature experience	Sports and adventure	Hedonistic
Independent	Scientific/professional expedition	Birdwatching	Classic alpinism	Backpacker visiting protected areas and nearby cultural attractions
Á la carte	Excursions provided by authorities for visiting professional s	Snorkeling tour booked on-site	Whitewater rafting booked on-site	Combined culture/nature daytrip booked at a local agency
Customized	Volunteer work in protected areas for NGOs	Birding holiday with professional guide	Guided fly-fishing trips for small-sized groups	Cultural/natural circuit tour often in small groups and over several weeks
Fully standardized	"Packaged" volunteer work in protected areas, often provided by commercial intermediaries	Standardized daytrips to protected areas included in or booked as an add-on to all-inclusive 3s holidays	Scuba diving holiday package	Standardized circuit tour organized in larger groups

Note: *The extent to which service arrangements are booked individually decreases.
**Relevance of nature for the product decreases.

Source: Arnegger *et al.* (2010:923)

On the motivational axis, hiking tourists would be classified in the third motivation group, namely sports and adventure nature-based tourists. For this group of consumers, the natural environment firstly sets the scene for their activities.

A segmentation of markets by SA Tourism (SA Tourism quoted by Tourism KwaZulu-Natal, 2013:9-11) revealed a number of key global and domestic segments of importance. The relative market potential of eleven tourist activities or motivators was identified for each of the key segments. The segments that showed the best potential for hiking tourism included the UK Wanderlusters, the US NSSA (Next Stop South Africa) and the "Kenya All" segments. Other segments showing significant opportunities for hiking include the UK NSSA, US Wanderlusters, French Wanderlusters and the Domestic Well-Off Homely Couples. SA Tourism describes the typical 'Wanderluster' as a young urban professional between 25 and 40 years of age, single or in a relationship but generally with no children. The 'Next Stop South Africa' individual is wealthier, older (typically between 40 and 60 years of age) either without children or with children who have left home. Natural beauty and genuine cultural experiences are on the top of his or her list of priorities while safety plays an important role in his or her choice of a new destination. Since the 2006 segmentation, SA Tourism has refreshed the segmentation with a total of 31 focus segments (SA Tourism, 2010:3-41); however the activity categories (such as hiking) have not been profiled to determine market potential and characteristics.

Previous studies have segmented nature, adventure and hiking tourists on the basis of spend profiles, age and other demographical variables, preferences, motivations, expectations, activities, environmental values, market potential and trip characteristics. The work by Andereck (2009:496) and Wall-Reinius and Bäck (2011:50) places the relevancy of the application of this type of profiling to hiking tourism into question as it was shown that nature-based tourists are heterogeneous in nature and that demographics, preferences and purchase decisions of hikers may change over time. Apart from that, typologies and preferences also vary greatly amongst studies focussed on a selected destination or geography and therefore it would be irrelevant to attempt to profile adventure, nature or hiking tourists based on the literature reviewed.

3.3.2 MOTIVATORS AND CONSTRAINTS

Advancements in technology and other modern day developments have changed the frequency of and the manner in which people interact with nature, and in some ways have disconnected humans from their natural heritage. In order to return to nature, human beings need to distance themselves from the present-day pressures they are faced with in pursuit of tranquillity and equilibrium. This process involves the establishment of several habits, ranging from the way one works and sleeps to the way recreation activities is carried out. The quest for unconventional experiences has become a definitive factor in taking part in adventure tourism (Carnicelli-Filho, Schwartz & Tahara, 2010:953). Tourists seeking adventure will often travel to some of the world's most dangerous and faraway destinations in order to experience extreme emotions, take risks and encounter novelty (Williams & Soutar, 2009:415).

At least 14 different motives for involvement in adventure tourism have been identified in 50 previous studies worldwide. Based on these studies, a summary of motivations for adventure activities was constructed by Buckley (2012:961-962), shown in Table 4. The author grouped motivations into three main categories: 1) Internal, performance of activity, 2) internal/external, place in nature and 3) external, social position.

Table 4: Summary of motivations for adventure activities

Motivational factor	Description
Internal, performance of activity	
Thrill	Adrenalin, excitement
Fear	Overcoming fear
Control	Maintain physical and mental control of one's body
Skills	Using expertise to perform very difficult tasks
Achieve	Overcoming challenges to reach difficult goals
Fitness	Activity simply as a way to keep physically fit
[Risk]	[Danger as a direct motivation]
Internal/external, place in nature	
Nature	Appreciation of beauty
Art	Perception of activity as artistic
Spirit	Activity as spiritual experience
External, social position	
Friends	Enjoyment in sharing an activity with others
Image	Enhancing how one is perceived by others
Escape	A change from routine of home or work
Compete	[Competition against others

Note: for those items shown in square brackets [ ], some studies did identify these factors as motivations, but others specifically excluded them that is, participants explicitly denied that they were motivated by risk or competition respectively.

Source: Buckley (2012:962)

A study on Brazilian adventure tourists has reinforced fear as an indispensable emotion when participating in adventure activities (Carnicelli-Filho *et al*., 2010:955-956) while Buckley (2012:967-968) argues that it is rush presenting the appeal rather than the element of fear since rush is never guaranteed.

Looking at motivation from a benefits-oriented perspective, Driver (in Kil *et al*., 2014:16) found that those participating in nature-based recreation such as hiking, horseback riding and camping, do so to meet their internal recreational needs and obtain benefits. Benefits sought after include intangibles such as stress relief, environmental and cultural education, participation in environmentally responsible practices and personal or community identity (Kil *et al*., 2014:16).

Escape and relaxation was the most common reason for visitors to travel to the Magoebaskloof Adventures in the Limpopo Province (Terblanche, 2012:93). The study profiled adventure tourists and their travel motives over a period of nine months at the

adventure centre. Seven travel motives were identified and an investigation into general travel motives supported this finding. Apart from escape and relaxation, another strong motivator was group togetherness. Other factors included prestige and status; knowledge seeking; photography and attraction; enhancing relations and novelty. The study did not explore the influence of the seven travel motives across individual adventure tourism offerings at the company (such as hiking), but rather looked at the collective motivation and experience of the adventure tourist visiting the centre.

In the aforementioned study on the wilderness trails of SANParks (TREES, 2014a:12-13) travel motives of hikers were recorded as well as hikers' experience on the trails. The strongest motives for going on wilderness trails were:

- scenic beauty (98%)
- experience nature (96%)
- rare and unique experience (95%)
- explore a new trail, area or destination (92%)
- sense of adventure (88%)
- getting away from routine (86%)
- walk in a Big 5 area (86%)
- relaxation (84%)
- part of a lifestyle (81%) and
- for well-being (81%).

These findings correspond well with a study in Switzerland that found "landscape appreciation", "experiencing nature" and "being active" to be the three most important motivations amongst Swiss hikers (Rupf, Haider & Pröbstl, 2014:253-255). Novelty was shown to be an important motive for a group of high expenditure hikers in Portugal (Kastenholz and Rodrigues, 2007:14), creating a challenge to some destinations as it essentially meant that the target group would not visit the same destination frequently or even year after year.

Patterson and Pan (2007:26-53), looked at the motivations of older generations, the so-called baby boomers, in participating in adventure tourism activities. Underlying motivators

that play an important role in this market segment were found to be the sense of feeling young again, the sense of accomplishment and pleasure, group togetherness and the forming of new friendships as well as a break from isolation and monotony from their work or retirement. The small sample size and geographical context in which the study was executed however limits the application thereof to a larger market.

It is not possible to clearly distinguish what the motivational factors for hiking are from available literature as the examples mentioned above demonstrate that motives vary between different geographies, types of adventure tourism activities and demographic profiles. While differences between motivations for specific trails can be expected and should be measured at destination level, the main reasons or stimulus responsible for persuading an individual into embarking on his/her first hike is an important aspect to understand for role players longing to expand market participation.

Similar to the motivational factors, studies relating to the constraints to participation in tourism activities involve tourism products from different geographies, tourism segments and destinations (Nyaupane, Morais & Graefe, 2004:542). A few studies have focussed on inhibitors to adventure tourism (Bialeschki & Henderson, 1988:20-28; Gilbert & Hudson, 2000:906-925; Williams & Fidgeon, 2000:379-393). In examining the reasons that keep individuals from participating in three nature-based tourism activities, Nyaupane *et al*. (2004:552-553) found that the constraints prohibiting individuals from participation in rafting, canoeing and horseback riding were significantly different for each activity and suggests that providers should understand the challenges specific to each of those activities. Time, lack of information, financial constraints, health, and distance from home were the leading barriers to trail usage by residents in Wisconsin in the United States (Bialeschki & Henderson, 1988:24).

Literature on the motivations and constraints to hiking is confined to the work of a few scholars. While the subject is more widely discussed in the context of adventure tourism, it is questionable whether these can be directly applied to hiking tourism, often regarded as one of the softer adventures. More research is needed to either substantiate or disprove the usefulness of existing models in a hiking tourism context.

3.3.3 CONSUMER PERCEPTIONS AND ATTITUDES

Apart from an individual's motivations and inhibiting factors influencing decision making and behaviour, perceptions and attitudes are also important precursors. This section introduces three important factors in the context of this study, namely risk perception, service quality perception and attitudes toward the environment.

As discussed earlier in this chapter, a consumer's perceived risk plays an important role in the decision making and purchase behaviour of tourists. These involve perceptions about the product itself, doubts about the destination and mode of purchase, the extent of monetary and psychosocial consequences involved and the subjective uncertainty experienced by the tourist (Moutinho *et al*., 2011:97). The risks perceived by tourists may include physical, monetary, equipment or functional and health risks (Adam, 2015:99).

The relationship between the tourist's risk perception and his/her prior knowledge (subjective knowledge, objective knowledge, prior visitation and past international travel experience) was investigated by Sharifpour, Walters and Ritchie (2013:1). The results indicated subjective knowledge played the biggest role on tourist risk perceptions while objective knowledge did not significantly increase or decrease the risk associated with traveling to a new destination (in this case, the Middle East). The findings further revealed that tourists with extensive travelling experience hold a greater degree of subjective knowledge which reduces their perceived risk through higher self-confidence.
Consumer perceptions, attitudes and knowledge all play a role in the marketing of a destination (Mlozi & Pesämaa, 2013:91). One of the critical goals of marketing is the development of powerful relationships with consumers. This becomes even more important in the arena of nature-based tourism and adventure-based tourism where a strong perception of risk exists amongst customers. Many adventure activities are not practiced frequently (with some activities not frequently practiced at the same destination), leaving the tourist in a vulnerable position with regards to knowledge around the subject or skill to be engaged in (Zillifro & Morais, 2004:170). In the case of hiking, this can also be applied to risks specific to the destination in question. And since hikers explore various new destinations each year, this places an even greater emphasis on establishing a trust relationship between consumer and supplier. The supply of information can affect consumer

trust in a number of ways. Zillifro and Morais (2004:170) found that the more information is shared between tourists and providers (in a two way direction), the more likely tourists were to trust the provider. When this communication channel is lacking, information asymmetry usually occurs in which the tourist has deficient understanding about the provider or destination. This can lead to moral hazards, meaning that tourists feel their lack of knowledge has been taken advantage of, leading to mistrust. On the positive side, a provider can increase the transparency between itself and the tourist by providing information that gives a trustworthy account of the quality of the service of activity that can be expected, increasing consumer trust.

Consumers' perceptions of service quality is another factor affecting future buying intentions as well as their tendency to recommend the service to others (Williams & Soutar, 2009:420). This is important in the tourism context as word of mouth recommendations are viewed as more credible due to the experiential nature of services. The researchers found value-for-money, emotional value and novelty value to be significant predictors of satisfaction and future intentions (Williams & Soutar, 2009:430).

Furthermore, studies have investigated the role of environmental concern on motivations towards engaging in outdoor recreation with many finding a significant attitude – behaviour relationship (Luo & Deng, 2008:392; Kim, Borges, & Chon, 2006:957). Tourists' perceptions and attitudes towards the environment and their environmental responsibilities as well as the environmental practices of tourism providers have received a lot of attention in the academic realm (Andereck, 2009:489; Buta, Holland & Kaplanidou, 2014:1-10; Jurowski, Uysal, Williams & Nog,1995:73-86; Kil *et al*., 2014:16, Lacher, 2012:159). Attitudes in favour of the environment played a significant role in the environmentally responsible behaviours of hikers of the Florida National Scenic Trail in the US (Kil *et al*., 2014:16). The research further revealed that outdoor recreation participants who possessed strong environmental attitudes were more inclined towards participating in appreciative nature-based activities such as hiking (as supposed to consumptive activities) and also engaged more frequently in environmentally responsible practices (Thapa in Kil, *et al*., 2014:17). Other studies revealed that tourists with a stronger nature orientation regard environmentally responsible practices as more important and valuable than those who were not nature-oriented. (Andereck, 2009:497).

Three factors with regards to perceptions and attitudes were investigated in this section for their relevance to hiking tourism namely risk perception, service quality perception and attitudes toward the environment. Risk may be both a motivator and constraint to hiking with different forms of risk being present, as highlighted by the literature reviewed above. Value-for-money, emotional value and novelty value are significant influencers of perceptions about service quality. Since hikers are nature lovers, attitudes towards the environment are relevant and serves as a motivator to participation outdoor recreation. Prior knowledge as well as the supply of information also have an impact on consumer trust in the product and provider of the product or service. In the next section, the role of information in the reduction of risk is discussed in more detail.

3.3.4 INFORMATION NEEDS

The importance of information search as a stage in the tourist buying process and travel decision model has been emphasized by many (Chen & Gursoy, 2000:191; Fodness & Murray, 1997:503; George, 2004:152-154; Gursoy & Chen, 2000:583; Gursoy & McCleary, 2004:354; Gursoy & Umbreit, 2004:57; Kerstetter & Cho, 2004:961-963; Moutinho *et al*., 2011:99; Perdue, 1985:6-11; Snepenger, Meged, Snelling & Worrall, 1990:13-16). A considerable amount of research has also focussed on the factors influencing information search by tourists and the types of information they search for (Fodness & Murray, 1997:503-523; Raitz & Dakhil, 1989:45-49; Schmidt & Spreng, 1996:246-256; Schul & Crompton, 1983:25-31).

One of the main reasons tourists search for information prior to taking a trip is to improve decision making and reduce the risk associated with the uncertainty of outcomes (Hales & Shams, 1991:9; Maser & Weiermair, 1998:107). Information search may vary according to socio-demographic profiles of tourists (Schul & Crompton, 1983:25-31; Sharifpour *et al*. 2013:3), motives for taking a trip, types of tourism product classes in the pre-trip stage, as well as past travel experiences (Jun, Vogt & MacKay, 2007:266-274).

Perceived risk and the impact thereof on consumer behaviour in tourism has been researched extensively (Adam, 2015:99; Moutinho *et al*., 2011:97; Sharifpour *et al*., 2013:1)

and discussed briefly in section 3.3.1.3. The pursuit of information, initiated by the appearance of risk, whether perceived or real, emphasises the importance of the availability of trustworthy and accessible information sources. Destination-related risks have a noteworthy impact on tourists' decisions on whether to travel to that particular destination or not (Sharifpour *et al*., 2013:1).

It has been previously established that in adventure tourism, risk is part and parcel of the experience. The relationship between the availability of information and the perceived risk associated with the activity or destination is intricate as some adventure seekers prefer to equip themselves with more information while for others, uncertainty around the destination and the experience forms part of the appeal (Mura; Mura & Cohen; in Adam, 2015:99). For hikers, information search plays an important role in the decision making and trip planning process as well as providing relevant information for ensuring a safe and satisfactory experience whilst on the trip itself (such as maps and directions, safety information, information about weather changes, nearest exit routes in case of emergency).

About 5% of individuals from a survey on wilderness hiking areas in the western US reported having been placed in a dangerous situation previously as a result of inaccurate or lacking information. Examples included incorrect trail information resulting in some of the less physical hikers from a group unable to complete the trail due to the prolonged distance. Another hiker mentioned an example where guide books and websites said roads was traversable when they were not. Inadequate information can in extreme circumstances lead to life threatening situations (Ernest, Level & Culbertson, 2005:88).The same authors, seeking to find patterns in information seeking and information availability for these wilderness hiking areas, investigated how people search for, pinpoint, and utilise information before visiting. The study did not look into the categories of information needed by hikers pertaining to specific trails but rather focussed on the types of sources consulted prior to visiting the area. Three quarters of respondents searched for information in the pre-trip stage. Comments from friends and family, books, maps and brochures (all in hard copy), and internet sites for maps were the main sources of information used with most respondents making use of at least two of these sources. While two thirds of individuals felt that websites containing information about wilderness areas were more reliable than other sites, only 50% said they evaluated these sites.

A study comparing the preferences, motivations and trail behaviour of hikers and mountain bikers in Switzerland showed that hikers planned their tours in more detail than mountain bikers. Hikers were also found to make more use of traditional information media such as printed maps and tour guides in comparison with mountain bikers who consulted friends and web sites and preferred digital maps (Rupf *et al*., 2014:254). Another study examining information use and search behaviours in outdoor recreation is that of Thapa, Graefe and Absher (2002:89-107) who examined information use and search behaviours among National Forest visitors, notably among different racial groups and categories of visitors. The majority of visitors reported using Forest Service information for exploring the location's assets, such as activities, events and places to visit within the forest. Of similar importance to this type was information that empowered visitors to feel more secure in the forest. Instrumental uses, such as information about parking, permits and operating hours, were slightly less important than orientation needs. The importance of informative types of information, such as information associated with history, conservation, and natural resources of the forest, were similar to the instrumental needs. The research provides little insight into the pre-trip information needs of hikers.

Third-party information was shown to significantly affect destination choice in about a third of choice sets examined by Luthe and Schläpfer (2011:234). In decisions regarding sustainable tourism products, the authors discovered that advice from third parties such as environmental organisations and seasoned consumers were regarded as key types of information needed to discern between destination alternatives.

Although some researchers have touched on the information search behaviour of hikers, very few studies address the information needs of hikers in terms of categories of information in the pre-trip planning stage. No other literature addressing the information needs of hikers could be found.

3.3.5 GROUP BUYING BEHAVIOUR

Another consideration is how group buying behaviour within hiking tourism affects the individual hiker's choice to hike and which trails to hike. The planning and/or booking process

of a particular hike is rarely undertaken by individual hikers as the activity most often takes place in a group setting such as an organised hiking club or social/informal group. The buying decision however could sit with a particular individual or be part of a group decision or even be dictated in a yearly planning session by the chairman of the hiking club for example. The complexities of group buying behaviour in the wider tourism context is addressed by George (2004:166-182), followed by a description of the five typical major role players in the buying process as well as the stages of buying. It focuses on the business tourism market which may differ greatly from the dynamics in a non-corporate environment such as that of hiking clubs. The influence of family and friends and third parties such as booking agents, as well as the hiking social context of the consumer would need to be investigated before any conclusions could be drawn in a hiking tourism context. No literature could be found in this regard.

3.4 CONCLUSION

While many studies on adventure tourism have ignored the tourism consumption dimension altogether (Williams & Soutar, 2009:415), those that have taken this approach, focus largely on the areas of typologies and segmentation, preferences, motivations, risk perceptions and information search behaviours.

A knowledge gap exists concerning the unique components in the consumer behaviour and decision making of adventure tourists and more specifically, hiking tourists. More research is required to comprehend the nature of the buyers, how their perceptions and expectations of destinations influence their destination choice and what their pre-trip information needs are. The key determinants in their choice of destinations are unknown as current literature does not face up to key questions surrounding hiking consumer behaviour amongst different typologies within the hiking tourism market. Information needs may vary significantly within segments. For example those belonging to organised hiking clubs may place less importance on the availability of key information as they rely on the experience of the hike leader or organiser of the trip to feed important information to them. The novice casual hiker may need to establish trust first before booking a new trail.

What is also not known is how the decision making process for the purchase of hiking tourism products corresponds or differs from the generic models presented in the previous section. While it has been shown that third party information impacts on destination choice, there are no confirmatory studies in the context of hiking tourism.

The next section firstly explores the most common accreditation systems used in tourism and its contribution towards tourism development from the supplier's point of view before reviewing literature that have attempted to describe the impact of accreditation systems on consumer behaviour, including consumer decision making and willingness to pay (WTP).

CHAPTER 4: ACCREDITATION SYSTEMS IN TOURISM

4.1 INTRODUCTION

This chapter will demonstrate that accreditation has a role to play in the setting and upholding of quality and sustainability standards in tourism development, which, when applied to hiking tourism, could potentially have a significant impact on the future of hiking tourism and the way trails are managed and marketed, leading to perceptions of quality and credibility amongst consumers. To become accredited is regarded as the act of being given authority by an official body when recognised standards have been met (Oxford University Press, 2014a). Accreditation is closely related to certification, which is defined as the formal process by which a sanctioned individual or organisation evaluates and verifies "… the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards …" (WebFinance Inc., 2014). In short, to certify is to guarantee or endorse reliably (Dictionary.com, 2014). Tourism accreditation is defined by Marchoo *et al*. (2014:18) as a process by which tourism businesses obtain certification from a third party on the condition that their responsible operations are meeting the benchmarks set by the accreditation authority.

A variety of accreditation systems are in use in tourism today at global, regional, national and subnational levels (Butcher & Watkins, 2014:18). In this chapter, the areas within tourism where accreditation and certification systems are most visible are briefly introduced as a foundation to demonstrating the current bearing it has on the tourism supply side. Following that, the focus shifts to systems that are unique in the context of adventure and hiking tourism. The benefits provided by accreditation systems are discussed along the lines of competitive advantage and differentiation. This is followed by an analysis of literature that have probed the impact of accreditation systems on the behaviour of consumers in a tourism context. The chapter concludes with a detailed description of Africa's only trail accreditation system as a case study, namely the Green Flag Accreditation System (Green Flag).

4.2 TYPES OF ACCREDITATION OR CERTIFICATION SYSTEMS USED IN TOURISM

The list of accreditation and certification systems provided in this section is by no means exhaustive. Instead, it serves as background to the types of accreditation standards in practice today as well as the specific areas within tourism affected by it. In order to achieve the objectives to this study (Objective 3 in particular), focus has been placed on tourism dimensions related to hiking tourism such as: The supply of accommodation and services, sustainability practices, systems related to the safe and responsible management of trails, trail classification and trail grading.

4.2.1 ACCOMMODATION AND OTHER TOURISM SERVICES

There exist many different standards and accreditation schemes for tourism service providers globally.

Accreditation and classification systems for the grading of accommodation are used widely throughout the globe with criteria often differing from country to country. In Switzerland, it is the task of hotelleriesuisse to classify Swiss hotels in order to maintain and improve the Swiss hotel industry's international competitiveness (hotelleriesuisse, 2014). The rating systems of Forbes and AAA are regarded as the most dominant in the United States (Frehsee, 2011). The AAA also rates hotels in Canada, Mexico and the Caribbean (AAA, 2014). Throughout the British Isles, hotels and guest accommodation are graded according to the Common Quality Standards developed by the Automobile Association (AA) in cooperation with VisitEngland, VisitScotland and VisitWales (AA, 2014; Datar & Chowdhry, 2010). Australia's official accommodation accreditation program, the STAR Rating Scheme, is managed by Star Ratings Australia (a division of Australian Motoring Services). It assesses six different accommodation types (Star Ratings Australia, N.d.).

Aside from individual country grading systems, regional umbrella organisations have also been established to unite countries in their application of criteria for hotel classification. The Hotelstars Union, under the funding of HOTREC in Europe, is a good example of such an

effort. HOTREC – Hospitality Europe is the umbrella association of national trade associations representing the hotels, restaurants, cafés and similar establishments from 15 countries in Europe (HOTREC – Hospitality Europe, 2014).

Closer to home, the Southern African Tourism Services Association (SATSA) is a member-driven association advising buyers on their selections of service providers by promoting credibility amongst tourism service providers. Members of the association must closely follow a strict Code of Conduct that warrants high standards of service, good quality tourism services and products and a reliable accreditation with the association itself (SATSA, N.d.). The grading of accommodation in South Africa was an initiative started by the Hotel Board in 1965. In 1992, the responsibility of grading and classification was moved to the South African Tourism Board (SATOUR). It became the duty of the Department of Environmental Affairs and Tourism (DEAT) in 1999, who then commissioned the Tourism Grading Council of South Africa (TGCSA) as a Section 21 Company in August 2000. South Africa's national star grading scheme befittingly came into being in 2001 (Du Plessis & Saayman, 2011:131). TGCSA recently revised its grading criteria, following an expansive review process with key stakeholders. The star grading scheme currently differentiates between five categories of accommodation, each with its own set of criteria: Formal service accommodation (hotels and lodges), guest accommodation (Bed & Breakfast, country house and guest houses), self-catering accommodation, backpackers and hostel accommodation, caravan and camping accommodation and lastly venues catering for meetings, exhibitions and special events (Tourism Grading Council of South Africa, 2013).

These accreditation systems mentioned above predominantly address services related to the traditional forms of tourist accommodation with none of the existing systems acknowledging hiking accommodation and services in their criteria for grading. The camping and caravanning category presented by TGCSA is the closest to an accreditation of nature-based tourism accommodation, although the needs of hikers differ greatly from those of campers. Accommodation provided on luxury or slack packing trails may have facilities that are graded by TGCSA, however as previously mentioned, this market is niche and as such the relevancy of traditional accommodation grading systems to hiking may be irrelevant.
Studies have shown that nature-oriented tourists value environmentally responsible practices more so than other types of tourists (Andereck, 2009:497). Since nature-,

adventure-, and hiking tourism are all heavily reliant on the environment for the supply of products and services, it is therefore of value to investigate systems that examine sustainable tourism practices. The application of certification in tourism promotes sustainable tourism and coordinates the ideation of sustainable practice (Bowman, 2011:270).

4.2.2 SUSTAINABILITY

From a tourism sustainability point of view, there are a myriad of accreditations, standards and certifications in practice worldwide with topics ranging from supply chain management to climate change and natural and cultural heritage (ECOTRANS, 2012). These schemes vary in scope, target audiences and range from having international jurisdiction to local administration. Some of the accreditation systems include a broader scope such as including economic and community beneficiation criteria, while others are limited to environmental aspects only. Ecolabels are identifiable visual symbols representing an organisation's commitment to environmental performance and is usually displayed widely in order to inform tourists, the public, government authorities and other stakeholders of that commitment (Leonard, 2011:10).

A few of the most renowned global certification programmes include the Green Leaf Eco Standard, a sustainability and certification evaluation tool for the performance management of international organisations. Organisations wanting to become accredited are audited and verified by one of the scheme's Global Verification Agencies (GVAs) (Green Leaf™ Eco Standard, 2014). Similarly, through becoming certified by Green Globe, travel and tourism businesses are encouraged to conserve resources such as water and electricity, reduce operational costs and uplift local communities and their environment. Apart from certification, the movement also provides training and marketing services in 83 countries worldwide. (Green Globe, Ltd. and Green Globe International, 2014). The Global Sustainable Tourism Council (GSTC, 2014) is an international body managing global standards for sustainable travel and tourism. The GSTC makes use of two criteria in order to protect and sustain the world's natural and cultural heritage: The Destination criteria (GSTC-D) and its Hotel & Tour Operator Criteria (GSTC-H&TO).

Locally, South Africans are quite familiar with the Blue Flag scheme, a certification awarded by the Foundation for Environmental Education (FEE) to beaches, marinas, boats and whale-watching boats that meet the criteria for water quality, safety, environmental education and information, the provision of services and general environmental management criteria (Foundation for Environmental Education, 2013). Within Sub Saharan Africa, other certification systems associated with environmental and social concerns include Fair Trade in Tourism South Africa (FTTSA) Certification, Heritage Ecotourism Rating Scheme and the EcoRating Scheme in Kenya. FTTSA focusses on the transfer of benefits to local communities by rating companies against measurement such as wages offered, healthy working conditions and limitation of external leakages (Lacher, 2012:8).

While sustainable environmental management is key to ensuring the longevity of nature based tourism, in adventure, safety standards are critical to the survival of adventure tour operators. To ensure safety standards are upheld and the benefits thereof passed onto consumers, Williams and Soutar (2005:256) have argued for initiatives such as continuous accreditation of adventure tour operators. The next section briefly discusses standards in adventure tourism available today as background to accreditation systems focussing on managing risk.

4.2.3 STANDARDS IN THE ADVENTURE TOURISM SUB-SECTOR

The topic of safety standards in adventure tourism is a controversial one since it is generally accepted that risk is a key characteristic associated with adventure tourism and partly the reason why participants choose to embark in such activities in the first place. The range of tourism products in different geographical settings, together with the possible risks associated with each, further complicates the challenge of establishing safety standards in this sector. Some risks may be commonly encountered throughout the entire adventure tourism sector, while others may be specific to a location or particular activity. Both Buckley (2010:51-70) and Swartbrooke *et al.* (2003:169-184) dedicate a whole chapter to Risk Management but were unable to quote any formal standards and with good reason. Swartbrooke *et al.* (2003:176) noted that suppliers of adventure tourism need to maintain a balance between presenting opportunities for risk-taking and managing the risk in a

responsible manner. Academic literature on risk management has focussed primarily on the physical safety aspects of adventure activities (Buckley, 2010:53).

The adventure tourism industry only recently witnessed the development of an international standard by the International Organization for Standardization's (ISO) (UNWTO, 2014:68). The standards, ISO 21101, ISO/TR 21102 and ISO 21103, provide practical guidelines to operators for the planning, communication and supply of adventure tourism products in a responsible manner in order to eliminate risks for both consumers and suppliers. According to the ISO, ISO 21101 states how the adventure tourism provider manages its operations in terms of safety while ISO 21103 describes the minimum information provided to consumers prior to, during and after the activity to ensure safety. ISO/TR 21102 prescribes the minimum competence of adventure tourism activity leaders (ISO, 2015). An example of safety standards in adventure tourism is that of the government of New Zealand's compulsory registration scheme for the adventure tourism sector to address up-front and periodic external safety audits of operators' safety management provisions (New Zealand Department of Labour, N.d.). Further to ensuring the safety of participants, the use of accreditations as an indication of a provider's level of professionalism in an adventure tourism context was studied by Harris and Jago (2001:383-390). The research provided an overview on tourism-related accreditation schemes currently operating in Australia and the operational difficulties these programmes have encountered. A lack of support by the relevant tourism industry sectors and the consequent perceived lack of tangible value to individual members place the future of individual-based schemes in doubt. The authors also found similarities in the challenges faced by individual-based accreditation schemes and those experienced by organisation-based accreditation systems in the tourism sector.

As hiking is generally a group activity, in many instances, the group accepts responsibility for the majority of the risks the group may face (such as risks associated with weather changes, the presence of wild animals, health risks, limited food and water supply, equipment failure and inadequate accommodation facilities). Facilities such as porter services or guiding may reduce some of the unnecessary risks such as getting lost, consuming unsafe water resources and encounters with dangerous animals. It is not known to what extent the element of risk is a motivator or deterrent for hikers or what role the availability of reliable information regarding some of these risks play in both decision making

and the actual visitor experience. The next section looks at accreditation systems as a credible source of such information in hiking tourism as a sub-sector of adventure tourism.

4.2.4 TRAIL ACCREDITATION, CLASSIFICATION AND GRADING SYSTEMS

When investigating systems or schemes related to hiking tourism supply, one soon discovers a great number of classification and grading systems in use globally which aid hikers with decision making based on certain trail attributes. At this point, a distinction should be made between third party trail accreditation or certification systems and systems classifying or grading certain elements of trails, often performed by the provider itself. While classification systems deal with the process of placing something into a specific class or category (Oxford University Press, 2014b), accreditation systems on the other hand provide a certain level of authority or reliability when certain standards have been met (Oxford University Press, 2014a). Similarly, to grade something, is to classify or sort it according to a set criteria (Oxford University Press, 2015). Accreditation or certification schemes can however contain elements of grading, as seen from accommodation grading schemes used globally and in South Africa (see section 4.2.1). The outcomes of grading and classification systems may therefore provide a subset of information, feeding into the larger accreditation criteria. To this end, a review of classification and grading systems are included in this section to also assess the types of information provided to hiking tourists and the level of independence involved in the process of grading and/or classification of trails.

Arias (2007:8-35) presented an overview of classification systems used in countries perceived to be leaders in walking trails. In Australia, most walking trails were being built against the Australian Standard AS 2156.1. This particular standard was based predominantly on best practice of the development and maintenance of trails but fails to include aspects such as the degree of difficulty which might influence hikers' level of enjoyment or ability to complete the trail (Arias, 2007:2). Numerous other systems were shown to be in use throughout the country, used inconsistently, with different trail management groups applying different principles. Some land management agencies which had no systems in place whatsoever were also identified, the Falls Creek Alpine Resort in the Hume region in north-eastern Victoria, Australia.

The classification used by the Department of Conservation of New Zealand, distinguishes between six different categories of tracks, based on the grade of difficulty, standard of surface formation and gradient. They are: Easy access tracks, short walks, walking tracks, great walk or easy tramping tracks, tramping tracks and routes (Arias, 2007:27). Each category has some very distinctive characteristics. Descriptive information one each trail, including the time to completion is available for most trails. A map as well as list of available activities is also provided on the Department's website. Most recently, the Department also started providing more detailed information on the availability of facilities within the overnight huts such as mattresses, water and toilets. Cautionary information was added such as warnings against environmental hazards. The website also provides a customer feedback facility for evaluating and commenting on the conditions of trails and the associated facilities (Department of Conservation, New Zealand, 2015).

At least four different grading systems are in use by parks and governmental agencies in the United States. The National Recreation Trails Program is a joint effort by American Trails, the National Park Service, the USDA Forest Service, the Bureau of Land Management, the US Fish and Wildlife Service, and the U.S. Army Corps of Engineers to provide designated National Recreation Trails with numerous advantages, including marketing, technical assistance, networking and monetary support. The Program aims to encourage "… the use and care of existing trails and stimulate the development of new trails to create a national network of trails and realize the vision of Trails for All Americans…" (American Trails, 2014). The National Recreation Trails Database provides no difficulty level for the trails listed. A detailed description of each trail and the different uses thereof (such as fishing, hiking and inline skating) is available, along with the length of the trail and whether it is a loop trail or not. Additional information such as the elevation points, surface type and entry fees as well as seasonal information is also provided. Information on trails in Canada's national parks varies amongst parks with no uniform standard of grading or classification (Arias, 2007:24-25). Arias found that Gros Mourne National Park was the only park using a classification system of easy, moderate and strenuous to distinguish different levels of difficulty. Most other parks, including Gros Mourne National Park, Cape Breton Highlands National Park, Riding Mountain National Park and Banff National Park provide information around the distance, length (or time to complete), elevation as well as a short description of the walk. A quick investigation into the latest information available on the websites indicated

quite a few of the parks have in the meantime added a difficulty grading to their trails (such as Bruce Peninsula National Park, Riding Mountain National Park and Jasper National Park), however it seems each park still uses its own system. Trail condition reports are available for the following parks: Banff National Park, Fundy National Park, Glacier National Park, Jasper National Park, Kootenay National Park, Kouchibouguac National Park, Mount Revelstoke National Park, Riding Mountain National Park, Waterton Lakes National Park and Yoho National Park. These reports serve as additional warnings to hikers to accommodate for changing seasonal conditions. Most of the information on trails in Canada's National Parks presents a good overview of the trails, though not very detailed (Parks Canada, 2014).

In the United Kingdom, the British Walking Federation uses a three point scale grading system for its permanent trails. Most of its trails however are walking rather than hiking trails with many of the trails designed to include viewing of popular heritage and cultural sights in some of the smaller towns (British Walking Federation, 2014). Walkhighlands, with its mission of promoting walking in remote areas of Scotland, uses a four point grading system and provides the length and duration of each walk. For most walks, a bog factor is also provided which gives the walker an idea of the degree of wet muddy ground or swamplands that can be expected (most appropriate given the types of terrain encountered in Scotland). On top of that, an ascent profile is available for each walk as well as a map with GPS waypoints. Walks can also be downloaded to Google Earth. The organisation seems to make an effort in creating a social network of walkers in Scotland. Users of the website are encouraged to write and submit walk reports as well as leave a rating of the walk, based on a scale of one to five stars (Walkhighlands, 2014).

Germany's „Qualitätsweg Wanderbares Deutschland" is a quality seal for hosts of hiking trails, developed by the Deutsche Wanderverband (DWV), also known as the German Hiking Association in conjunction with the German Tourism Association (German Hiking Association Service GmbH, 2015). Apart from the development of a set of criteria by which hosts can be objectively assessed, the DWV, together with its German Hiking Service GmbH, also provide guidelines to hosts for the proper marking of trails, as well as other trail and hiking related information. According to the website, the „Qualitätsweg Wanderbares Deutschland" provides a competitive advantage to quality hosts whereby they could

differentiate themselves as a quality brand (German Hiking Association Service GmbH, 2015).

Numerous other grading and classification systems are in use around the world including the New Zealand mountaineering system and the Norwegian Trekking System (Hugo & Hugo, N.d.). On the subject of trail management, Ólafsdóttir and Runnström (2013:60-61) used a condition classification system to assess trail conditions and determine the level of environmental damage inflicted to hiking paths due to hikers' impact. According to the authors, condition class systems are regularly used in assessing hiking trail deterioration.

Many of the systems mentioned above did not provide basic information on the trail facilities such as the type of accommodation, availability of water, guiding and catering services. Information on the definitions behind each level of grading is also often lacking or vaguely stated. Also, none of the classification systems addressed the sustainability factor of trail development. From the review of systems, it appears as if there is a lack of agreed standards, not just globally but within countries. Such inconsistency creates confusion as to what an accredited trail represents, the level of information it should be providing to hikers and the format in which it should be presented. This finding corresponds with that of Arias (2007:36), who concluded that the information provided by trail classification systems to consumers is inconsistent; along with the way in which this information is presented. The author further states that the difficulty grading is perceived to be a crucial piece of information to hikers (Arias, 2007:35), ensuring hikers do not attempt to embark on trails for which they are not appropriately skilled or physically prepared for. It also contributes to a more enjoyable experience for the hiker as staying within reasonable limits of his or her abilities helps reduce incidences of hikers becoming discouraged to such an extent that he or she abandons the trail. A hiker in trouble becomes a concern for the whole group as getting the hiker to safety becomes priority number one, often leading to the termination of the trip for the entire party (Hugo & Hugo, N.d.).

In an attempt to provide a standardised approach to the grading of trails to their members, many of the hiking clubs in South Africa have taken the task into their own hands by either developing their own grading systems or adapting existing grading systems to suit their needs. Each trail hiked by the club's members would be assessed with the outcome

(sometimes in the form of a full trip report) fed back to the club for future consideration (Meridian Hiking Club, 2015; Stellenbosch Hiking Club, 2015). In the case of Meridian Hiking Club (Figure 6), the grading systems combines the three elements of length (in kilometres per day), gradient and effort.

Figure 6: Meridian Hiking Club trail grading system

Length: (per day)
1 - short: *up to 6 kms*
2 - short to medium: *6 to 10 kms*
3 - medium: *10 to 14 kms*
4 - long: *14 to 18 kms*
5 - very long: *over 18 kms*
Gradient:
A - flat/undulating: *beach/contour*
B - medium: *Lion's Head*
C - steep: *Skeleton Gorge*
D - steep with easy scrambling: *Devil's Peak via Knife Edge*
E - more difficult scrambling: *Kloof Corner*
Effort:
a - easy
b - moderately easy
c - moderately fit
d - fit
e - very fit

Source: Meridian Hiking Club (2015)

Some guidebooks offer similar aid to hikers (Hartwright, 2014), which poses a problem for the industry as the degree of difficulty is based entirely on subjective measures, regardless of the evaluator's skills or level of experience, according to Hugo and Hugo (N.d.). Many attempts have been made to solve this problem with no agreement in literature on the subject of grading system comparisons.

This need for consistency and reliability in the quality of hiking tourism products led to the development of the Green Flag Accreditation System (Green Flag) in 2006. Green Flag is currently Africa's only accreditation system for trails through which an independent on-site

review is done. A detailed description of the system is provided in section 4.5 to present Green Flag as a case study of an accreditation system for trails. To better understand the motivational factors for adoption of tourism accreditation schemes, a brief exploration of the benefits of independent accreditation to tourism providers is provided in the next section.

4.3 THE BENEFITS OF ACCREDITATION SYSTEMS TO TOURISM SUPPLY

A set of seven management issues in the development of adventure tourism within the Southern African Development Community (SADC) countries was identified by McKay (2013:36-48). These included issues related to risk and safety; risk management; the role of lifestyle entrepreneurs; identity and adventure; packaging, marketing and branding; environmental impacts and their management for sustainability, and maximising local developmental impacts, including pro-poor benefits. In this section, literature is presented to show that accreditation and certification schemes can provide multiple benefits to tourism suppliers, assisting in at least five of the management challenges identified by McKay (2013:36-48).

Accreditation and certification systems and schemes influence the tourism sector on multiple levels. Benefits experienced by tourism operators as a result of accreditation programs are related to minimising environmental impacts, experiencing financial benefits, increased marketing and branding, improved public relations, to name but a few (Jarvis, Weeden, & Simcock, 2010:83). In business, certification schemes are universally applied to encourage implementation of standards, to recognise the achievement of certain specifications, and to enable consumers to identify operations that comply with applicable standards (Toth, 2002:74).

4.3.1 COMPETITIVE ADVANTAGE

Branding is a vehicle through which organisations can obtain a competitive advantage by providing consumers with products or services that are of acceptable standard, for which they are willing to pay (Wood, 2000:666). Both the brand and the reputation of an

organisation may act as a signature for quality and are stored in tourists' memory to be recalled later (Moutinho *et al*., 2011:116-117). South Africa's National Department of Tourism (NDT), in its NTSS, recognises a strong destination brand as well as an innovative marketing strategy as critical success factors for sustainable competitiveness in the tourism sector. It further acknowledges the need for a heightened effort in the areas of marketing and branding of South Africa as an international, domestic and regional tourist destination as one of its key strategic focus areas (National Department of Tourism, 2011:24-28). Accreditation schemes such as the Green Globe has established itself as a reputable brand through demonstrating a meticulous auditing process, external accreditation and partnerships with established organisations (Leonard, 2011:31). Increased marketing exposure, such as the use of logos or labels, has been put forward as one of the main motivations for tourism businesses to become accredited (Marchoo *et al*., 2014:19). Numerous other authors have explored the effectiveness of tourism ecolabelling, environmental certification and certification for sustainable tourism to advance marketing and branding efforts for those that become certified (Andereck, 2009:497; Bowman, 2011:272; Buckley, 2002:183; Esparon *et al.,* 2013:74; Font, 2002:197; Font & Wood, 2007:147-161; Jarvis, Weeden & Simcock, 2010:83; Leonard, 2011:3; Mihalič, 2002:65).

There is conflicting evidence whether certification or accreditation poses bona fida benefits for marketing of ecotourism products. Respondents from seven hospitality and tourism enterprises in the West of England revealed a number of benefits experienced from the organisations' associations with the Green Tourism Business Scheme (GTBS) (Jarvis *et al*., 2010:87-90). These included cross-marketing opportunities, financial savings, differentiation and increased competitiveness as well as being part of a recognised and respected scheme. However, not all respondents were convinced that the brand's profile and consequently the benefits experienced from a brand image point of view made a significant impact in the market, citing reasons such as the brand not being nationally known well enough. An earlier survey conducted in 2006 of GTBS-certified hospitality and tourism businesses in the United Kingdom found that more than 60% of organisations regarded marketing as a motivation for joining (Jarvis *et al*., 2010:85). In contrast to this, a study in New Zealand involving ecotourism providers found that businesses did not necessarily feel a sustainable tourism certification scheme such as GG21 provided them with a marketing advantage over competitors, even though it improved its market image (Jarvis *et al*., 2010:85).

One particular problem inducing this mismatch between the accredited entity's expectations of marketing benefits and the actual realisation thereof is the fact that certification providers often have limited or no marketing power to start off with (Jarvis *et al.*, 2010:85). This challenge may be less pertinent amongst publicly created and financed accreditation schemes, who, through a transparent process, award the top achievers in the industry and in doing so also create public awareness. Private schemes on the other hand needs to be run profitably and may want to protect their intellectual property, meaning that the specific criteria applied may not be as visible. Private schemes would therefore need to invest even more in order to create awareness amongst consumers on a significant scale (Leonard, 2011:31). Earlier evidence has suggested that, due to the lack of consumer interest and the lack of understanding by consumers, the argument for certification aiding market entry for businesses around the world is implausible (Font & Wood, 2007:147-163). The authors concluded that marketing efforts for sustainable tourism are more probable to succeed when a more subjective, experience-orientated approach is undertaken rather than an objective, standards-orientated approach.

A competitive advantage can also be achieved by accredited nature-based tourism providers when the natural environments in which their products are offered (such as hiking, horseback riding and camping) is managed in an ecologically, socio-culturally and economically responsible manner (Kil *et al.*, 2014:16; Font & Harris, 2004:987). The usefulness of environmental management practices in destination management and competitiveness was studied by Mihalič (2000:65-78) using the management element from the Calgary tourism competitiveness model. Accreditation schemes by internationally recognised ecolabels and eco-quality labels were included as one of the management practices studied. Research by Font and Harris (2004:986) analysed the successes and challenges of five tourism certification programmes in as a tool for reducing environmental impacts and gaining a competitive advantage. Others such as Pina (2004:3) attempted to disprove certification's effectiveness as a source of competitive advantage for tourism companies by considering it within the framework of competitive strategy theory.

Widely held perceptions that it is costly to run a business in a more sustainable manner were challenged as many actually realised cost savings through the process (Leonard, 2011:13).

Much of the cost savings achieved through accreditation was a result of effective management being brought about by the accreditation process.

The question is whether businesses in their pre-accreditation state possessed the know-how to implement best practices to effectively manage nature and adventure tourism destinations. In the case of trail management, there exists a general lack of knowledge, resources and skills amongst trail owners. The deterioration of hiking trails due to overuse is a problem worldwide. Symptoms from overuse include path widening and deepening, multiple tramp formations, soil erosion and root damage and exposure. A holistic understanding of conditions of hiking trails is required in order for trail owners to effectively and responsibly manage trails, especially in environmentally vulnerable areas, such as the Icelandic highlands (Ólafsdóttir & Runnström, 2013:60-61). In practice though, very view trail owners will possess this type of knowledge. Suppliers' access to the skills and knowledge of field experts involved in the accreditation or certification process can provide them with a competitive advantage to ensure sustainability of the environment.

Last but not least, competitive advantage for tourism providers can also be achieved by the use of quality systems and ecolabels, for the purposes of benchmarking. Accreditation, grading and classification schemes contribute to a destination's competitiveness by acting as a facilitator to help organisations improve current products and services as well as developed new ones (Kozak & Nield, 2004:138).

4.3.2 DIFFERENTIATION

Along with offering the possibility of a competitive advantage, branding further provides the benefit of differentiation by establishing a scheme as a brand representing quality products and services. Tourism offerings with brand names are more recognisable and offer a method for differentiation (George, 2004:192). Destination branding is a critical tool for adventure tourism countries wanting to compete internationally. The use of brand names, logos and symbols is "… an investment that governments and tourism promotion agencies have to make in the tourism sector …" (Morgan & Pritchard in McKay, 2013:45. Leonard (2011:24) concluded that it is the quality management aspect of the Green Globe scheme that creates

a perception of credibility amongst members of the public. Branding also allows for the setting of price premiums for products and services (McKay, 2013:45). Data from the Certification for Sustainable Tourism (CST) program, an elective scheme aimed at encouraging beyond-compliance environmental achievement by hotels operating in Costa Rica, was studied by Rivera and De Leon (2005:123). The researchers claim that an enhanced "green" reputation, generated by superior certified beyond-compliance environmental performance, could create differentiation for hotels in terms of price premiums and higher profit margins hotels. Likewise, grading systems in the accommodation sector has been found to be associated with quality on which customers can rely (Danziger, Israeli & Bekerman, 2006:141; Israeli, 2002:419). According to the website of Germany's „Qualitätsweg Wanderbares Deutschland", a quality seal for hosts of hiking trails, the accreditation scheme provides a competitive advantage to quality hosts whereby they could differentiate themselves as a quality brand (German Hiking Association Service GmbH, 2015).

Tourism suppliers also differentiate themselves through showing commitment to environmental protection by way of implementing sustainable tourism practices. Environmental attitudes and behaviours are becoming increasingly more important with the rise in threats posed to the environment such as climate change and increasing population rates (Kil *et al*., 2014:17). The tourism industry's role in establishing and upholding environmental standards through measures such as accreditation, environmental guidelines, best practices and policy implementation has been studied by many scholars (Andereck, 2009:489).

Accreditation can, through the principles of effective management and the introduction of acceptable standards, help reduce risk to consumers and providers in adventure tourism by for example executing audits on a regular basis and ensuring qualified instructors are accredited continuously (Williams & Soutar, 2005:256). Adventure tourists tend to be attracted towards activities associated with risk. This consumer group also prefers more underdeveloped destinations from an infrastructure or training point of view (UNWTO, 2014). Repeated events affecting the safety of tourists may lead to the perceived risk of engagement, resulting in tourists avoiding products or discontinuing activities with devastating results for the adventure tour operator (Glaesser, 2003 cited in Page *et al*., 2005:381). The biggest risk for injury is associated with a client falling or tripping with

adverse weather playing a significant role in unexpected outcomes (McKay, 2013:37), while a significant portion of the responsibility of risk management in adventure tourism is transferred to the provider (Cater, 2006:318). The UNWTO together with the ATTA examined the types of risks present in adventure tourism today and presented best practices for managing those risks. Their report mentions two case study countries that have demonstrated proactive risk management. The implementation of safety standards in reducing risk for tourists and suppliers is a differentiator at this point in time as formal international safety standards in adventure tourism have only recently been developed by the International Organization for Standardization's (ISO) (UNWTO, 2014:68). The standard, ISO/TR 21102 and ISO 21103 as it is known, provide practical guidelines to providers for the planning, communication and supply of adventure tourism products in such a manner as to avoid detrimental consequences posed by the risks involved for both consumers and suppliers.

An area that remains largely unexplored is how accreditation systems can contribute to rural beneficiation initiatives. A key objective of the NTSS (National Department of Tourism, 2011:7) is the improvement in levels of involvement of rural communities. Adventure tourism products provide an ideal means to achieve this objective. Several studies have been conducted in the Sub-Saharan African region in the last decade exploring the impact of adventure tourism on rural development, rural community involvement, pro-poor development or local economic development (Hill, Nel & Trotter, 2006:163; Mazibuko, 2010:1; Mitchell, Keane & Laidlaw, 2009:2; Mogajane, 2005:4; Morgan, 2003:1; Ndabeni & Rogerson, 2005:130; Ndlovu & Rogerson, 2003:124; Ntshona & Lahiff, 2003:1; Ntuli, 2010:iii). Rural community's beneficiation as a direct result of the implementation of accreditation or grading systems in an adventure tourism context (including the hiking tourism context) has not been studied to date.

In conclusion, the benefits posed by accreditation systems support further growth and sustainability in the tourism industry by creating a competitive advantage to accredited organisations through increased marketing and branding, the ability to be benchmarked as well as cost savings realised through more effective management practices as a result of becoming accredited. Another dimension is that of differentiation through quality assurance,

environmental management standards, reduction of risk through safety standards and the beneficiation of rural communities.

While this section focussed largely on how the supply side of tourism is affected by accreditation systems, the next section explores the impact thereof on consumer decision making and purchase behaviour and consumers perceptions of quality. The level of awareness amongst consumers and consumer demand for such systems is also discussed.

4.4 IMPACT OF ACCREDITATION SYSTEMS ON CONSUMER BEHAVIOUR

During the past couple of years, consumer behaviour has increasingly been influenced by considerations towards environmental concerns. Awareness of environmental challenges such as climate change have led to the phenomenon of green consumerism in the tourism industry (Bergin-Seers & Mair, 2009:109). Andereck (2009:496) considered the perceptions tourists have of environmentally sustainable practices and found that tourists placed a reasonably high level of importance on the implementation of these types of practices by tourism businesses. The author further suggests that nature tourists (those with strong nature-oriented trip motives) placed a higher importance on environmentally sustainable business practices than other types of tourists. This theory is also backed up by earlier studies indicating that tourists who participated in “appreciative” outdoor recreation activities such as hiking had more positive environmental attitudes than those participating in “consumptive” or mechanised activities such as hunting and snowmobiling (Jackson, 1987:235).

It comes as no surprise that much of the available literature concerning accreditation systems in tourism is focussed on the use of ecolabels and sustainable certifications and the influence (or lack) thereof on consumer behaviour. While the use of ecolabels has become more common in tourism (Puhakka & Siikamäki, 2012:57), previous studies have not been conclusive on the subject of consumer response (Lacher, 2012:120-122; Leonard, 2011:35; Puhakka & Siikamäki, 2012:57). The myriad of ecolabels available today has left the consumer perplexed (Leonard, 2011:35).

4.4.1 CONSUMER AWARENESS, DEMAND AND WILLINGNESS TO PAY

The manifestation of consumer demand of an accreditation or certification system is dependent on the acceptance of the system by a reasonable size of the market. Many suppliers, however, will not adopt such schemes before evidence of consumer demand cannot be presented. To ensure sustainability of the accreditation or certification scheme, a critical mass of at least 3% to 10% of the market is needed. The scheme would also need to be widely recognised amongst consumers to be effective (Lacher, 2012:5). Without such recognition, the case for a competitive advantage to suppliers would be difficult to prove (Leonard, 2011:8). Literature to suggest that a significant number of consumers proactively seek sustainable tourism certification is inadequate (Leonard, 2011:13; Lacher, 2012:10), indicating towards disparate results when it comes to tourist response to more sustainable and socially responsible practices (Chia-Jung & Chun, 2014:937). In his investigation of the advancements made by a variety of governmental, private and non-profit organisations in establishing environmental standards in tourism, Font (2002:197) found the rapid increase in the number of environmental brands and endorsements has confused consumers to the extent of preferring to ignore these green messages. Earlier studies concluded the demand for change in the provision of products are not coming from tourists themselves, however tourists will not return to destinations who do not take environmental quality into account (Miller, 2003:35).

These findings stand somewhat in contrast with results from Marchoo *et al.* (2014:16) who noted an increasing awareness and consideration towards corporate social responsibility (CSR) related activities, including that of accreditation by potential travellers. It also contradicts many studies showing consumers' willingness to pay more for environmentally concerned products (Chan, 2014:915). A few studies have confirmed tourists' approval and recognition of accreditation systems such as that of the Green Globe 21 (Marchoo *et al.*, 2014:19).

In terms of consumer awareness, authors such as Fairweather *et al*. (2005:82) and Lübbert (2001:71) found only moderate to low levels of awareness amongst visitors to New Zealand and Germany respectively. While the awareness of ecolabels was considerably low, more tourists expressed the value of such schemes and in the case of Lubbert's study, 50% of

respondents said they would take it into account in future travel decisions. Consumers' willingness to pay more for ecolabelled tourism products has been investigated by authors such as Bergin-Seers and Mair (2009:109), Chan (2014:915), Fairweather *et al.* (2005:87), Lacher (2012:70), Luthe and Schläpfer (2011:245), Miller (2003:35) and Puhakka and Siikamäki (2012:64). Almost 80% of visitors to Oulanka National Park located in north-eastern Finland for example, reported a willingness to pay more for ecolabelled tourism products. Those that were members of an environmental institution showed even stronger attitudes towards support for ecolabels with 96% of respondents willing to pay more (Puhakka & Siikamäki, 2012:64). Lacher (2012:70) analysed consumer demand for sustainable tourism by applying a stated preference choice modelling (SPCM) method, presenting the consumer with hypothetical choice sets in order to uncover consumers' preferences for different types of sustainable tourism certifications. Willingness to pay (WTP) was measured to determine the value of these certifications. WTP for different certification attributes ranged between $26 and $54 dollars. Results from the study revealed that tourists visiting Tanzania prefer certifications centred on environmental protection which could be linked to Tanzania's tourism industry being built mainly on wildlife attractions. Tourists from destinations other than the United States were more likely to prefer certified trips. Interestingly, consumers do not necessarily receive more value when certifications were applied more rigidly.

While market penetration is low (Leonard, 2011:3), Puhakka and Siikamäki (2012:64) suggests this could be due to the limited visibility of ecolabels. Most local schemes do not have the resources and regulatory backing needed to reach its objectives of becoming the standard in industry. Marketing has been one of the areas in which most certification schemes have been falling short due to the lack of internal marketing or communications specialists.

The International Ecotourism Society (Font in Leonard, 2011:23) concludes that consumer demand takes time to develop – sometimes even as long as 20 years. The Society further concludes that "… successful certification programs have almost never been created because of existing consumer demand for certification …". Font's solution to the lack of demand was for local environmental labels to unite under an umbrella accreditation systems

as few labels will ever achieve critical mass to the point of being influential nationally or internationally (Font, 2002:203).

Whether consumer willingness to pay translates into actual changes in consumer buying behaviour is another important aspect that needs to be taken into consideration. Research detecting a tendency for consumers to answer in a socially acceptable way when confronted with environmental issues suggests that attitudes do not translate into behaviour (Leonard, 2011:15). This finding was supported by Mansfeld (in Miller, 2003:19) who states "… real world choice behaviour … might differ substantially from the way in which he would ideally desire to act". The next section explores how decision making and actual purchase behaviour is influenced by the accreditation of tourism products or services.

4.4.2 PURCHASE DECISIONS

The impact of tourism accreditation on individual tourists' buying behaviour remains largely undiscovered (Buckley, 2002:183) with only a few researchers exploring the topic (Marchoo *et al.*, 2014:16). While a few studies, mentioned in the previous section, investigated consumer attitudes and awareness towards accreditation systems, very little has been done to determine the impact of accreditation on consumer evaluations of tourism companies. In Australia, a survey of 155 tourists was performed by Foster (2003:1) to establish whether tourists attach any meaning to tourism accreditation and whether it has influenced their purchase decisions. He concluded that consumers do not pursue a product or service based on whether an operator is accredited. However, a significant percentage of consumers responded that they would make use of an accredited service provider if they were aware of its existence. Likewise, an exploratory study by Bergin and Jago (1999:223) found the accreditation of adventure tour operators, although positively received by consumers of adventure tourism products, would not necessarily result in consumers preferring an accredited product above a non-accredited one. In examining the use of ecolabels in tourism, Buckley (2002:183) acknowledges that the extent to which it influences decision making amongst consumers and corporate environmental performance has not been adequately measured. The author adds that it could be a valuable environmental instrument, if ecolabels were to contribute to helping the consumer make an informed choice. However

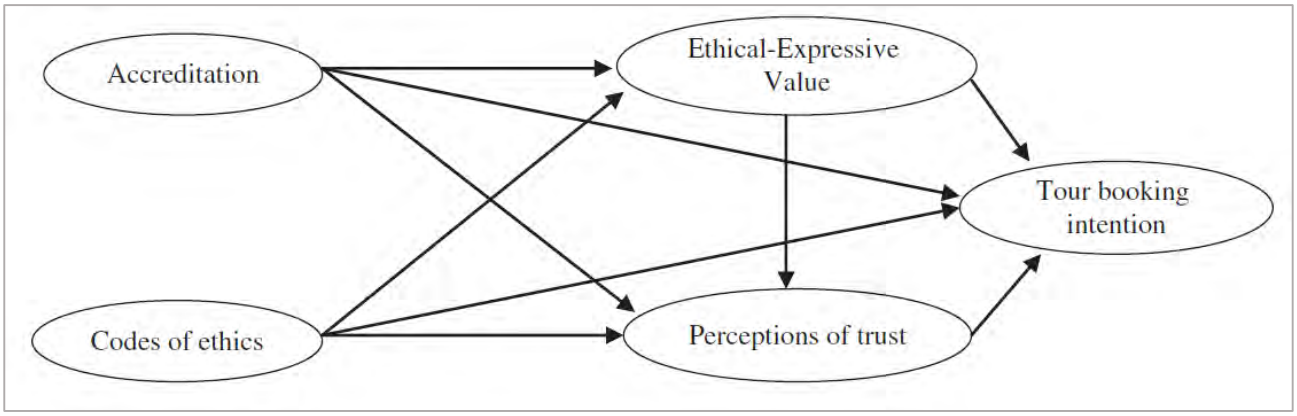
this can only happen under the following conditions: The ecolabel should enjoy broad exposure in applicable market sectors, entry criteria and auditing should be clear and properly stipulated and non-compliance penalised. The label needs to be acknowledged throughout the target market for optimum effectiveness.

Another study indicates tourists make their decision based on the environmental quality of the destination as a whole rather than on the practices implemented at the hotel in question. Other 'green' destination qualities such as scenic beauty, tranquillity and quality of water, beaches or national parks were more important selection criteria to tourists (Puhakka & Siikamäki, 2012:59). Lacher (2012:149-150) applied a serious tourism framework in order to ascertain whether travel enthusiasts with a high level of devotion to travel are more likely to support sustainable tourism certifications, but failed to establish a correlation. Miller's (2003:17) survey amongst UK consumers revealed that many are already basing their decisions for day-to-day consumer products on environmental qualities and would be keen to transfer these habits to the purchase of tourism products. Almost 80% of respondents reported they sometimes or always look up environmental information of the destination with the majority claiming they did so prior to making the booking. A hotel's 'green' reputation has proven to play an important role in consumer's choice of destinations (Chan, 2014:915). On the local front however, Pina (2004:44) presents evidence from a local tourist survey suggesting certification was insignificant in tourists' decision making.

Evidence does exist for the fact that accreditation is a successful strategy to build consumer trust in the case of non-tourism products such as organic food and fair-trade labelled products. Research to demonstrate this link within tourism is however lacking. Some contend that accreditation systems such as ecolabels provide consumers with information that allow alternative choices (Buckley, 2002:185). A recent contribution to the subject is that of Marchoo *et al*. (2014:29) who has shown that accreditation has significant impacts on perceived tour value, trust, and tour booking intention. Tourists may regard accreditation systems as a sign of quality in their quest for satisfaction, however consumer attitude is not a reliable predictor of future buying behaviour (Leonard, 2011:15). An overview of the relationships between the concepts of price, perceived quality and perceived value is presented by Moutinho *et al.* (2011:115-116). According to this model, both intrinsic and extrinsic elements may condition both the quality and the perceived value. The researchers

further demonstrate the relationships between reputation, perceived monetary price, abstract dimensions and perceived quality. In determining to answer the question of whether accreditation can raise perceived value, Marchoo *et al*. (2014:20-23) demonstrated the impact of two ethical CSR initiatives, namely tourism accreditation and codes of ethics on tour booking intention, ethical-expressive value and trust (refer to Figure 7). Trust between the tourist and the tour operator has been shown to be an important consideration in the decision making process with the value perception created from marketing information leading the tourist's booking behaviour.

Figure 7: Conceptual framework illustrating the relationship between accreditation, code of ethics, tour booking intention, ethical-expressive value and trust.



Source: Marchoo *et al*., 2014:20.

Results from the study demonstrated that purchase intentions were significantly affected by information enclosed in an online tour brochure on either an accreditation program or code of ethics. Also, "… tourists' perceptions of ethical expressive value and trust were found to be significantly influenced by these CSR initiatives …" (Marchoo *et al*. 2014:28). This is support by the findings by Danziger *et al*. (2006:141) and Israeli (2002:419), showing that the grading system used by managers for accommodation is a good indicator of price, and it is assumed to be one of quality on which customers still rely.

In the area of environmental standards, Font (2002:203) questions the acceptance of accreditation systems by the market as a quality symbol with the power to materially impact purchasing behaviour, even for the most recognisable schemes. The researcher concedes that some schemes that have experienced success, such as the Blue Flag scheme, have

indeed managed to influence destination choice, although this could also be ascribed to its topical nature such as addressing health and safety concerns. More evidence of the influence on consumer behaviour is presented in the case of the Scottish-based Green Tourism Business Scheme, who reported a 10% higher occupation rate from certified organisations (Font, 2002:203). Schemes such as the Green Globe has, through a meticulous auditing process, external accreditation and partnerships with well-respected organisations, established itself as a credible brand through the perception of quality management (Leonard, 2011:24). Visitors rated the performance of ECO certified operators in and around the Wet Tropics World Heritage Area in Australia as superior to their non-ECO certified counterparts in a study involving over 600 visitors and 48 tourism operators. The ECO-certified operators rated significantly better on the dimensions of Nature, Interpretation, Culture and Marketing (Esparon *et al.*, 2013:74). If consumers feel they have received value for money, it increases the likelihood of satisfaction with their experience (Williams & Soutar, 2009:418). Research has also shown that a positive connection between customers' perceptions of service quality, their repurchase intentions and willingness to recommend exists (Williams & Soutar, 2009:420). This is a significant finding for the tourism industry since word-of-mouth is a key channel of marketing for new tourism business.

Coming back to grading systems in use in hiking, Arias (2007:35) concluded that the degree of difficulty to complete a trail has been perceived as one of the influencing factors for decision making when choosing a trail.

As seen through the literature, accreditation schemes potentially hold benefits for both the industry and consumers, leading to a greater purchasing intention directed by trust and through managing perceptions. The next section introduces the case study of this dissertation, namely the Green Flag Accreditation System (Green Flag) as one such a system that has great potential for further deployment as an aid in the development of hiking tourism in South Africa.

4.5 GREEN FLAG TRAILS ACCREDITATION SYSTEM

The Green Flag Trails Accreditation System (Green Flag), developed in 2006 by a team of researchers under the counsel of Prof M.L. Hugo from the University of Pretoria in South Africa, is the only accreditation system for hiking trails in Africa. Green Flag was a natural outcome of earlier research conducted by Hugo (Hugo, 1999a; Hugo, 1999b, Hugo, 1974). Hugo (1999a) developed a comprehensive trail planning model that included a scientific description of a trail in terms of the environment, accommodation, trail facilities and the degree of difficulty. The model proposed by Hugo aimed to ensure that eco-trail development takes place in an organised and controlled way.

According to Hugo (2013), a Green Flag Trail is considered to be a trail under responsible management, implying that:

- it is a trail that is safe to hike with well-kept trail markers and a reliable map;
- it has a trustworthy description of the trail environment (pristine or rural) and an accurate list of accommodation facilities;
- it has an objective difficulty grading (on a scale of 1 to 10); and
- it has a sound environmental maintenance record.

A trail is assessed by a trained auditor based on the following areas (Green Flag Trails, 2015):

A. Administration and management of the trail (Service delivery)
    a. Booking process efficiency and general facility standards (safe parking, reliable maps)
B. Accommodation facilities
    a. Classified according to a checklist of standards. The auditor determines whether minimum facilities, as advertised in the trail's marketing brochures are in fact present and in acceptable condition or quality.
C. Layout and planning of the trail
    a. Accuracy of the difficulty grading.

b. Effectiveness of the utilisation of the environmental resources. The auditor comments on whether the trail has been positioned appropriately in relation to the landscape.
c. Determining the type of environment through which the trail runs (classified as pristine, natural or rural), again testing it against the marketing collateral.

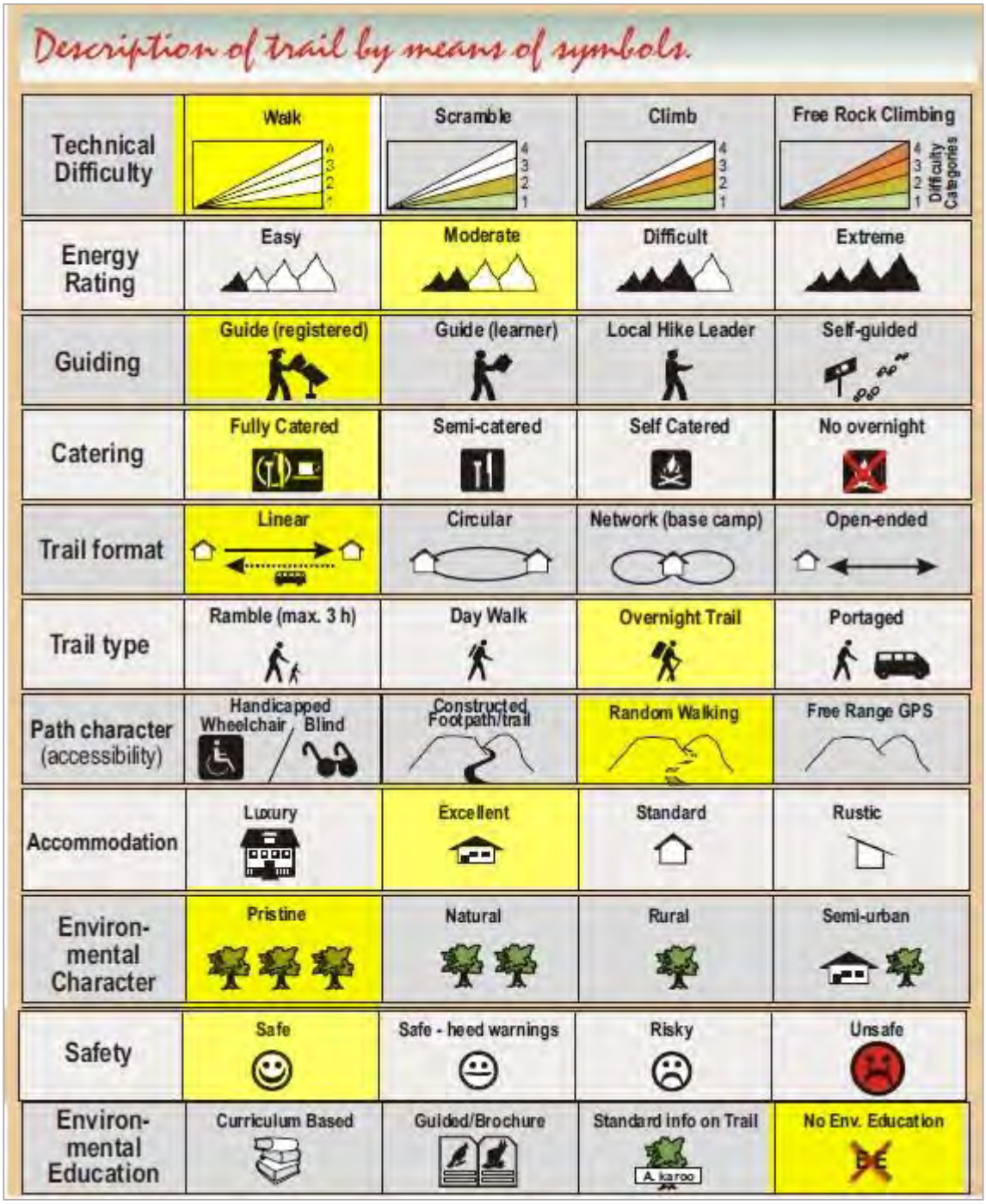
D. Impact of the trail on the environment
   a. Assessment of the ecological impact of hikers on the environment surrounding the trail. Detailed investigation of the quality of the trail surface as well as associated facilities such as bridges, ladders and steps.
   b. Measuring the environmental conditions affecting the hiker's experience such as noise, hazardous sections.
   c. Bio-physical impact of hikers at the accommodation site.
   d. Subjective assessment of the accommodation environment.

In order for a trail to retain its Green Flag status, it is subjected to an audit process every two years. Evaluation forms are made available to consumers to provide feedback of any issues as a temporary solution. A summary of the trail's main attributes is made available post accreditation to hikers by way of a visual representation on the Green Flag Trails website. An example of this can be viewed in Figure 8.

More information is provided in a downloadable brochure containing the following information:

- Topographical profile as well as difficulty grading of the trail broken down per day (if a multiday hike).
- Detailed information on the accommodation facilities such as the quality of the shelter, the type of beds and mattresses available, ablution facilities, whether firewood is available, kitchen and kitchenware as well as cooking facilities, lighting and heating.
- Safety information.
- Other general information such as booking facilities, access roads, availability of water, facilities for disabled consumers and so forth.

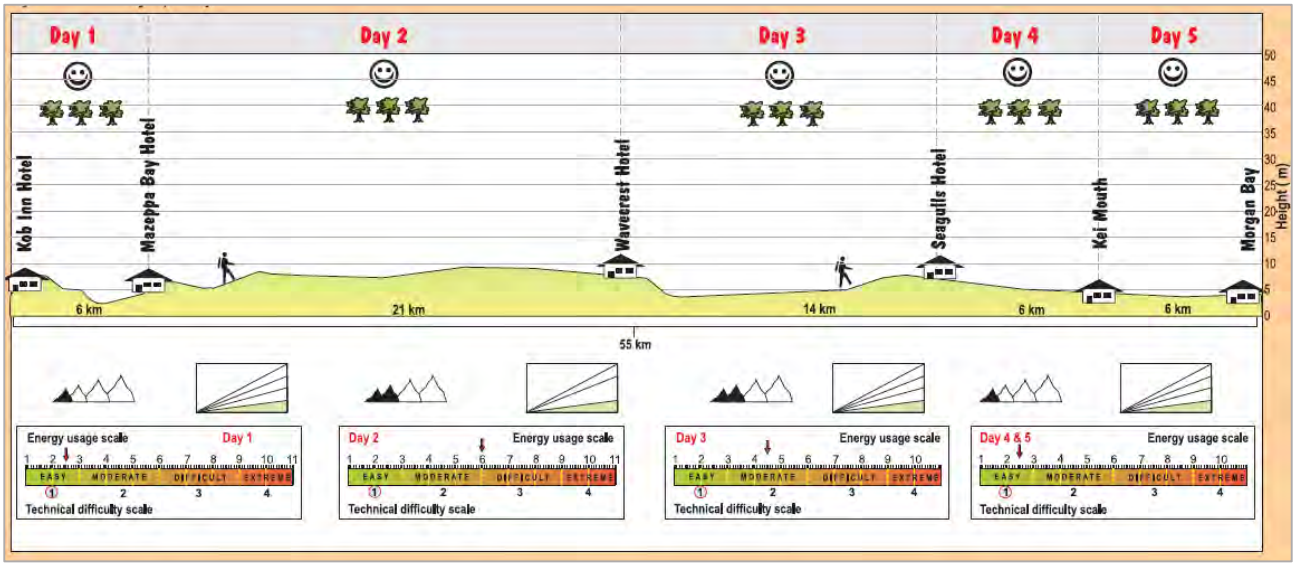
Figure 8: Green Flag summary of trail attributes



Source: Green Flag Trails (2015)

A detailed account of the trail's key points of interest and other highlights on the trail is also included. Each day section of a trail is evaluated and scored individually (as shown in Figure 9); since some trails might have a very easy first day followed by an extremely difficult next day (Hugo & Hugo, N.d.).

Figure 9: Green Flag assessment of day to day trail features



Source: Green Flag Trails (2015)

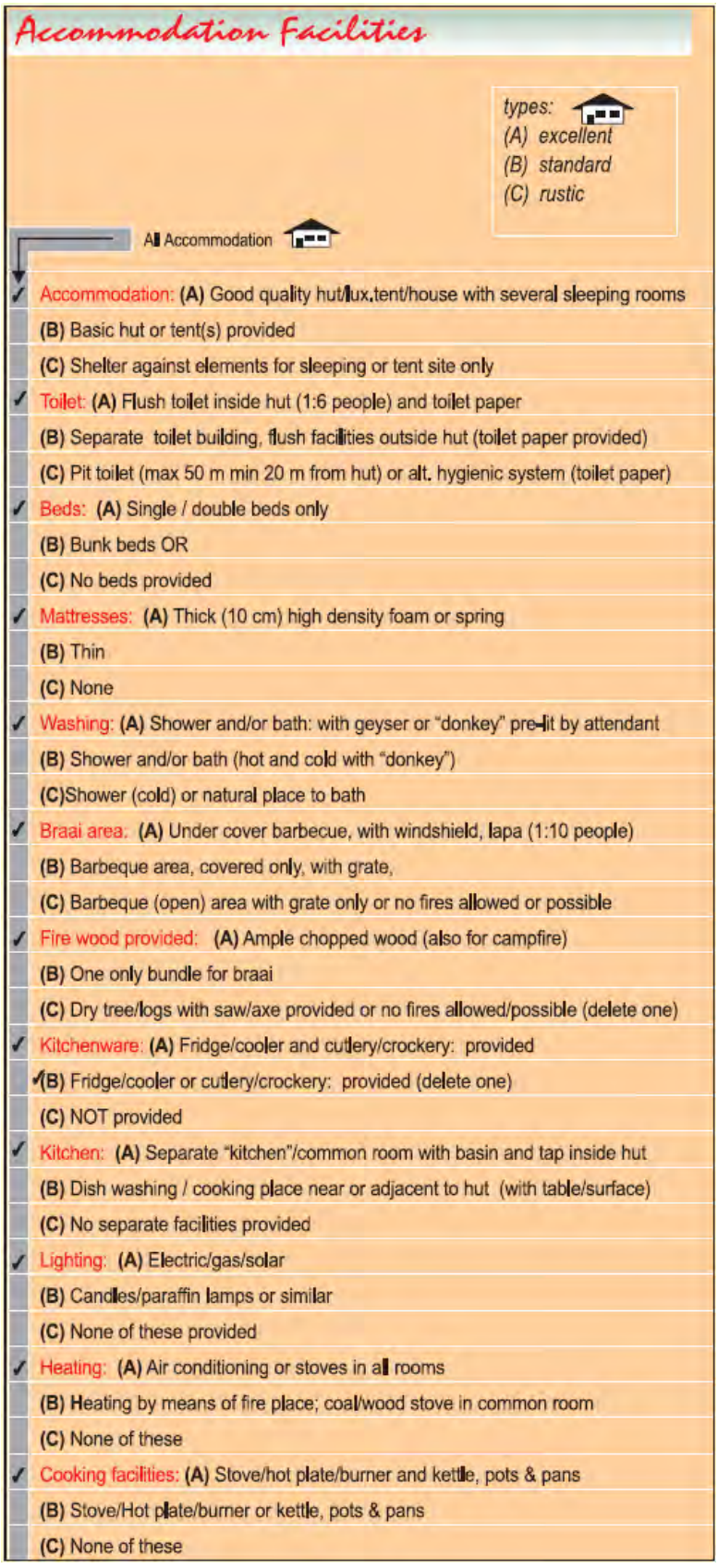
Features are represented by symbols for easy visual reference wherever possible (see Figure 10).

Each individual attribute with regards to the accommodation facilities is rated as either (A) excellent, (B) standard or (C) rustic with a description of each scale associated with that attribute (see Figure 11). Elements rated include overall shelter type, toilet facilities, beds, mattresses, washing, braai facilities, provision of firewood, kitchenware and cooking equipment, lighting and heating. These are tested against what was promoted in the provider's own marketing collateral.

Figure 10: Key to symbols used in Green Flag

Source: Green Flag Trails (2015)

Figure 11: Green Flag description of accommodation facilities of a trail



Accommodation Facilities

types:
(A) excellent
(B) standard
(C) rustic

All Accommodation

✓	Accommodation: **(A)** Good quality hut/lux.tent/house with several sleeping rooms
	(B) Basic hut or tent(s) provided
	(C) Shelter against elements for sleeping or tent site only
✓	Toilet: **(A)** Flush toilet inside hut (1:6 people) and toilet paper
	(B) Separate toilet building, flush facilities outside hut (toilet paper provided)
	(C) Pit toilet (max 50 m min 20 m from hut) or alt. hygienic system (toilet paper)
✓	Beds: **(A)** Single / double beds only
	(B) Bunk beds OR
	(C) No beds provided
✓	Mattresses: **(A)** Thick (10 cm) high density foam or spring
	(B) Thin
	(C) None
✓	Washing: **(A)** Shower and/or bath: with geyser or "donkey" pre-lit by attendant
	(B) Shower and/or bath (hot and cold with "donkey")
	(C) Shower (cold) or natural place to bath
✓	Braai area: **(A)** Under cover barbecue, with windshield, lapa (1:10 people)
	(B) Barbeque area, covered only, with grate,
	(C) Barbeque (open) area with grate only or no fires allowed or possible
✓	Fire wood provided: **(A)** Ample chopped wood (also for campfire)
	(B) One only bundle for braai
	(C) Dry tree/logs with saw/axe provided or no fires allowed/possible (delete one)
✓	Kitchenware: **(A)** Fridge/cooler and cutlery/crockery: provided
✓	**(B)** Fridge/cooler or cutlery/crockery: provided (delete one)
	(C) NOT provided
✓	Kitchen: **(A)** Separate "kitchen"/common room with basin and tap inside hut
	(B) Dish washing / cooking place near or adjacent to hut (with table/surface)
	(C) No separate facilities provided
✓	Lighting: **(A)** Electric/gas/solar
	(B) Candles/paraffin lamps or similar
	(C) None of these provided
✓	Heating: **(A)** Air conditioning or stoves in all rooms
	(B) Heating by means of fire place; coal/wood stove in common room
	(C) None of these
✓	Cooking facilities: **(A)** Stove/hot plate/burner and kettle, pots & pans
	(B) Stove/Hot plate/burner or kettle, pots & pans
	(C) None of these

Source: Green Flag Trails (2015)

The issue of hiker safety presents itself on various levels. Common queries from hikers embarking on new trails include whether the parking area is safe for hikers' vehicles for the duration of the trail, whether the route is clearly marked, whether the available water is safe to consume, whether hikers would be safe against crimes such as muggings or other forms of theft, whether structures along the route (natural or man-made) are safe to scramble over or under and whether there are dangerous crossings to be expected. Green Flag assesses safety against these (demonstrated in Figure 12) and provide a breakdown in order to inform the hiker of major risks to be aware of at the particular destination, as perceived by the auditor during the evaluation process.

Figure 12: Green Flag description of trail facilities and safety attributes

Trail Facilities & Safety

Facilities:
Booking facilities and information: E-mail, fax & phone
Reception office: Yes
Road signs to start of trail: Clear
Access road to start: Tarred
Trail Format: Linear
Map/guide: Colour with no contours
Facilities for handicapped: None
Brochure/guide: Guided
Water availability for swim/drink: No water for drinking. Swim in sea
Environmental education: Guided
Safety:
Parking: Safe
Accommodation: Safe
Safety on Trail:
Markers: No markers/guided
Warning signs: Guided
Water potability: No water
Hikers' general safety (mugging): Safe
Other: (bridges, ladders, stiles, etc): Safe
Crossings (road/rivers): Safe at low tide
Emergency:
Escape routes: Yes
Telephone/cell: Partial
Medical aid/evacuation system: Limited

Source: Green Flag Trails (2015)

Last but not least, the contact, booking and website information (if available) for the trail is stated. As seen in the aforementioned representations, Green Flag considerably lightens the hiker's task of planning for the trip. It also reduces risks to both the hiker and the trail owner by giving a reliable account of the trail attributes and significantly reduces the likelihood of a hiker being disappointed with the product. No accreditation system can guarantee a positive outcome for the client, as the outcome of a hiking experience is dependent on various intangible factors such as weather conditions, the hikers' affinity towards the specific environmental character (preference toward desert, forest, coastal or bushveld areas), mental state of the hiker, travel party the hiker is with and so forth. However, with such a detailed description at hand, a hiker will know exactly what equipment to pack and how to properly prepare for the unique conditions of the trail and broadly what to expect with regards to the route layout[1].

Green Flag was accepted as the official accreditation system of HOSA (Hiking Organization of Southern Africa) and receives backing by SAHTOA (SA Hiking Trail Owners' Association). Green Flag is supported by the major industry role players in South Africa including SANParks, Cape Nature, Komatiland Forest (KLF), MTO (SAPine) and KZN Ezemvelo (Hugo, 2013) as well as many of the regional, provincial and local authorities. It is also mentioned on SA Tourism's website where an explanation of Green Flag is given in the section about responsible hiking trails in SA. A link is also provided to the websites of both Green Flag and HOSA (SA Tourism, 2014f). Aside from the support it receives from large local suppliers of hiking tourism products, interest in the system from a global perspective is on the rise. It has been implemented internationally on the Inca trail in Peru and some trails in Mozambique. The World Trails Network and members of the European Ramblers Association (with its 5 million members) has already shown interest in joining South Africa's Green Flag movement. The chairman of the World Trails Network, Galeo Saintz, "… has accepted it as a method to facilitate international exchange of hikers and should thus be applied on a world wide scale… " (Hugo, 2013).

[1] An example of a complete brochure of a trail, in this case the Wild Coast Meander, can be viewed in Appendix A.

To date, approximately 60 trails have been accredited with 30 currently holding Green Flag Trail status while another 30 is due for re-audit (Hugo, 2015). These include some of the prime trails throughout South Africa such as the Otter and Wild Coast Meander trails in the Eastern Cape, the Whale, Tsitsikamma and Outeniqua trails in the Western Cape, Giants Cup in the province of KwaZulu-Natal, Magoebaskloof in Limpopo and Suikerboschfontein in Mpumalanga. A number of trails have also been accredited outside the borders of South Africa, such as the Inca trail in Peru and other trails in neighbouring countries Mozambique, Namibia, Swaziland and Saint Helena (Green Flag Trails, 2015; Hugo, 2015).

In summary, the goal of the audit process of the Green Flag Accreditation System is to recognise and reward responsible tourism practices through reliable and trustworthy management and marketing of trails, on which the sustainability of the hiking tourism industry depends. Comparing Green Flag against other trail accreditation, classification and grading systems such as the ones mentioned earlier in this chapter (see section 4.2.5), it can be concluded that no other independent scheme or system provides the same level of detail on trails as that of Green Flag. Some providers such as New Zealand's Department of Conservation issue a comprehensive description of their trails which is better than most, however the attributes of the trails do not seem to have been tested by an independent evaluator. The Green Flag Accreditation System is neither an ecolabel, an accommodation grading scheme, a trail classification system nor a difficulty grading system. Instead, it combines elements of all of these in one comprehensive scheme, serving as a trusted advisor to the hiker ensuring credibility and standardisation in the hiking tourism industry.

4.6 CONCLUSION

In this chapter, a distinction was made between systems tasked with the grading or classification of tourism products and third parties whose purpose it is to award a status or certification to a supplier based on the meeting of certain standards in the responsible management of tourism practices. Current accreditation systems, although widely used in tourism accommodation, services and sustainability practices, relates primarily to the traditional market of tourism with very few systems customised to suit the needs of the adventure tourism and nature-based tourism markets. Within adventure tourism, the aspect

of safety standards recently received a boost with the introduction of an international standard by the International Organization for Standardization (ISO) in order to reduce risks to consumers and suppliers. Despite this, there exists a lack of uniform standards in the supply and management of hiking trail products globally. Existing classification and grading schemes do not offer independently assessed, uniform standards with criteria often unclear and based on subjective measures.

The case for accreditation in tourism in general is solid as the benefits cited are vast: Minimising of environmental impacts, cost savings due to effective management, setting of price premiums, reduction of risk, increased marketing and branding, improved public relations, introduction of standards leading to better quality products and services, implementation of environmental management practices, access to skills and resources and destination branding. An additional value-add of accreditation in the case of hiking tourism is not in the grading or rating of a particular trail above its peers, but rather in delivering credible information in a consistent manner so hikers with different needs or requirements can make an informed choice (Hugo, 2013; Arias, 2007:36-37). Current literature is however not in agreement with each other as to whether accreditation can influence consumer buying behaviour since a general lack of consumer awareness exists on the one hand while on the other, clear evidence is presented of consumer's willingness to pay for environmentally concerned products. Some researchers however suggests that consumer demand for environmental brands takes decades to develop while others are of the opinion that the variety of ecolabels available today has left the consumer confused and have led to consumers becoming indifferent towards ecolabels. Current research investigating the impact of accreditation on consumer decision making is insufficient.

From the review of literature in chapters 2, 3 and 4, it is apparent that hiking tourism has been one of the step children of academic literature with knowledge gaps particularly observable in the areas of consumer behaviour and consumer decision making, certification and accreditation standards and its impact on consumer behaviour as well as on the industry. Of the few studies directly related to hiking tourism, most have concentrated on a specific geographical region or national park and are lacking in knowledge of accreditation or certification systems. This void in research is even more noticeable in the South African market where few have attempted to even describe the current state of this tourism

subsector. Hiking tourism is a unique product with market participation that is difficult to classify, categorise and quantify and deserves a research focus of its own. Despite the fact that the Green Flag Accreditation System has enjoyed support from major industry role players such as South African National Parks (SANParks), Cape Nature, Komatiland Forest, MTO (SAPine) and KZN Ezemvelo (Hugo, 2013), very little knowledge has been gathered on the impact of the implementation thereof on hiking tourism in South Africa. The impact of an accreditation system amongst current and potential consumers of hiking tourism products was explored in this study through empirical research. The research approach taken to achieve this is explained in the next chapter.

CHAPTER 5: RESEARCH DESIGN AND METHODS

This chapter provides a detailed account of the research methodology chosen by the researcher to achieve Objectives 4 to 8 of the study. It describes the research philosophy driving the approach as well as the broad research design and description of inquiry strategy. The sampling plan used is delineated before a description of the data collection methods is given. The statistical analysis techniques used is explained in the section on data analysis followed by a motivation for quality and rigour and ethical considerations.

5.1 RESEARCH PHILOSOPHY

A research philosophy is concerned with our assumptions about human nature and our interactions with our milieu (Saunders, Lewis & Thornhill, 2012:128). Certain frameworks guide a researcher's methods, beliefs and interpretations. A research philosophy can therefore be viewed as a set of underlying assumptions, guidelines or standards that determine the way we do research. The epistemological nature of this researcher's philosophy propels the internal belief of the researcher that acceptable knowledge should be the driving factor in formulating and addressing the research problem of this study. For example, when considering that one of the objectives of the study is to examine the role of accreditation in decision making in hiking tourism, the researcher is concerned with finding out what is known and not known, and in doing so, finding what is reality in the most objective way. This determines the researcher's view on what would be acceptable levels of knowledge in the context of accreditation of trails and hiking consumer behaviour.

The research paradigm that guides this study is therefore that of a positivist approach as the researcher adopted the position of a natural scientist, collecting measurable observations allowing for the formulation of hypothesis and subsequent statistical analysis (Saunders *et al.*, 2012:134-135). A positivist approach in the context of this study implies that the researcher remained separate from the participants and that the data is therefore objective and not in any way influenced by the researcher's interests. The study examined existing theory related to the context of accreditation systems as well as hiking tourism to develop its hypotheses and research design. The positivist approach further implies that the

researcher viewed respondents' statements as facts that could be measured. The research design of this study, described in this chapter, was strongly driven by the researcher's positivist philosophy.

5.2 DESCRIPTION OF INQUIRY STRATEGY AND BROAD RESEARCH DESIGN

The broad research design for this study is described in this section and is led by the Research Objectives as set out in section 1.4 of this dissertation. A positivist approach is concerned with the assessment of the level of knowledge currently available as well as the acquisition of new knowledge. When examining the Research Objectives of this study, it becomes evident that this researcher's main intention is to achieve an acceptable level of knowledge, since Objectives 1-3 addresses current knowledge while Objectives 4-8 is concerned with acquiring new knowledge. The literature review of this study has determined that little or no secondary data was available to achieve Objectives 4-8. The next natural step in the research process of this study, following a positivist approach, was to acquire knowledge by means of an empirical research strategy to generate and analyse primary data. The inquiry of strategy for the study is therefore one of an empirical nature, based on the following specific Research Objectives of the study:

Objective 4: To explore purchase behaviour in hiking tourism along the lines of activity levels, club memberships and booking channels used in South Africa.

Objective 5: To describe the key factors influencing consumer behaviour in South African hiking tourism. More specifically

- Determining motivations, constraints and perceptions of hiking
- Determining pre-trip information needs
- Exploring the potential influence of key information areas on consumer behaviour

Objective 6: To measure the importance of an accreditation system in decision making of consumers in the context of hiking tourism and to determine if this is influenced by

- Perceptions about the safety of hiking conditions
- The perceived importance of information in decision making

Objective 7: To explore the potential impact of an accreditation system on future buying behaviour of consumers in the context of hiking tourism and determine if this is influenced by

- Perceptions about the safety of hiking conditions
- The perceived importance of information in decision making

Objective 8: To measure consumer awareness of the Green Flag Accreditation System

The research aimed to determine the key factors influencing buying behaviour and decision making in hiking tourism which classifies it as a descriptive study (Saunders *et al.*, 2012:171-172). Key to this investigation was the answering of the following questions:

1. What are the key attributes or influences that act as determinants in hiking buying behaviour and decision making?
2. Does the presence of an accreditation system influence hiking buying behaviour and decision making?
3. Can an accreditation system influence non-hikers' decision regarding hiking?
4. What is the current level of awareness of the Green Flag Accreditation System amongst consumers?

The study is also of an explanatory nature as relationships between some of the determinants and consumer buying behaviour were revealed. A quantitative approach was followed, using a survey research strategy to collect data to develop relationships between variables (Leedy & Ormrod, 2014:162-163). Although numeric data was primarily collected, the researcher made provision for open ended answers in some instances (known as descriptive data), to cater for answer options outside of the researcher's opinions, beliefs and perceptions. The use of descriptive data in this way does not necessarily qualify the research design as a mixed-methods approach. Instead, Saunders *et al*. (2012:161-162) recommend that one considers the association between research methodologies and their philosophical assumptions and further state that quantitative research is normally linked with positivism. In the case of this study, data collection techniques were highly structured and the descriptive data was analysed in a quantitative manner. Furthermore, the survey research strategy of this study further supports the association with a quantitative research design (Saunders *et al*., 2012:162).

For achieving Objectives 4 through 8, staying true to a positivist approach, primary data was collected by means of a structured questionnaire which prevented the researcher from being intricately involved in the generation and collection of data. The deductive approach of survey strategies fits the Objectives of the study, allowing for quantitative analysis using descriptive and inferential statistics. Other advantages of a survey strategy are that it is cost-effective and comparatively easy to explain (Saunders e*t al.*, 2012:176-178). The variables generated in Objectives 4-8 represent data and opinions that were measured at a particular point in time and are therefore classified as cross-sectional (Saunders *et al.*, 2012:190).

The sampling and data collection plans for Objectives 4-8 are outlined in the next section.

5.3 SAMPLING

For the majority of quantitative studies conducted via a survey strategy, it is not possible to collect data from the entire population, due to impracticalities such as limited time and budgets as well as difficulties associated with access to populations. Instead, a sample representing the full set of cases in a meaningful way is chosen (Saunders *et al.*, 2012:260). The approach taken in selecting a sample from both the hiker and non-hiker populations is set out below and is described along the lines of the target populations, methods and techniques used to select respondents as well as the entities that provided access to respondents. The section concludes with a summary of the sample sizes that was achieved.

5.3.1 TARGET POPULATIONS

Two distinct consumer populations form part of Research Objectives 4 to 8, namely a population of hikers and a population of non-hikers.

Hiker population

The hiker population, as the name suggests, is defined as all individuals participating in hiking activities on trails within the borders of South Africa. The sample was not limited to South African residents, but foreigners hiking within South Africa were also included. These include those enjoying different forms of hiking (day walks, overnight hiking, long distance

hiking and slack packing or luxury hiking). This population consists of hikers belonging to hiking clubs and as well as those who do not. For ethical reasons, no respondents under the age of 18 were included as no reliable parental authorisation could be obtained through the chosen sampling methods.

Non-hiker population

The non-hiker population consists of individuals who do not regard themselves hikers, but who display a strong interest in participation in at least one of the following activities offered within the borders of South Africa: nature-based tourism or outdoor recreational activities. Non-hikers residing in countries other than South Africa, who qualified based on this criteria, were allowed to participate. The rationale in the criteria is based on the researcher's assumption that individuals who are nature-oriented or who enjoy spending time in the outdoors may be more likely to become interested in hiking activities in the future and therefore represent a future market for hiking tourism. This population could also include individuals that have previously enjoyed hiking activities but that have discontinued the activity for whatever reason. Again, no individuals under the age of 18 were included in the sample as no reliable parental consent could be obtained through the chosen sampling methods.

5.3.2 SAMPLING TECHNIQUE

Probability or representative sampling is usually undertaken in survey research in order to make statistical inferences from the sample (Saunders *et al.*, 2012:262). As the researcher needed to determine the impact of key factors influencing the buying behaviour of hikers, probability sampling would be required; however in this case there were some challenges in adopting this approach:

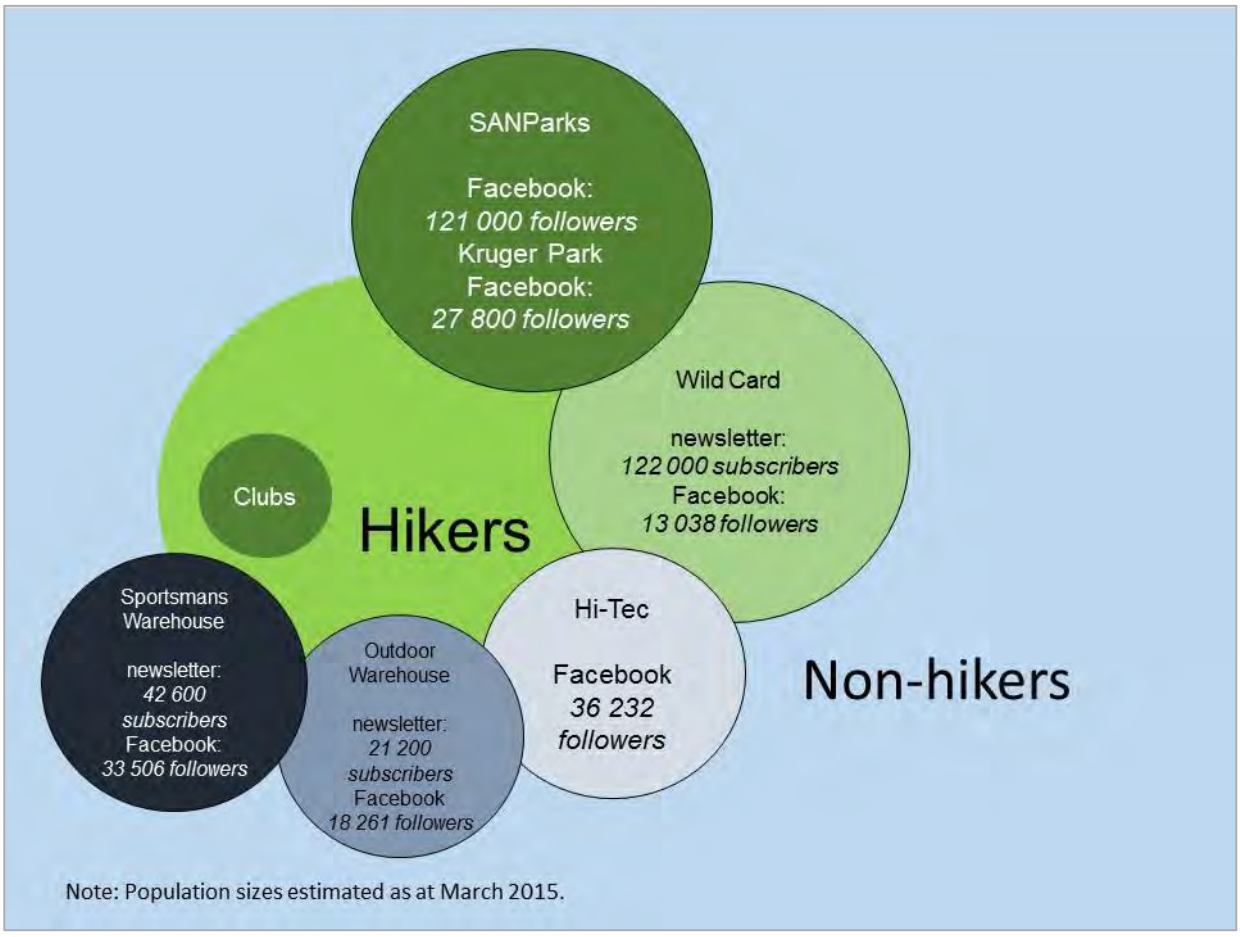
- no reliable databases of the hiking population existed which made defining a sampling frame problematic; and
- the size of the population was unknown.

As an alternative, the researcher resorted to the non-probability sampling technique of self-selection, a form of volunteer sampling where cases are invited to participate through

advertising the study through suitable media types and data collected from those who respond (Saunders *et al.*, 2012:289). Cases that self-select, do so mainly because of their interest in the research question(s) or objectives.

A researcher's success in collecting primary data relies heavily on the access granted to appropriate sources of data. The type of access gained by this study can be categorised as internet-mediated access, since information technologies such as email, websites and social media were used to gain virtual access to individuals for the administering of questionnaires (Saunders *et al.*, 2012:210). The gatekeepers through which access was granted to both populations, can best be described by use of an illustration. Figure 13 shows the different sources used to gain access to consumers from both populations. The illustration should be viewed together with the description of each source, database or channel used in the process.

Figure 13: Sources providing access to the hiker and non-hiker populations



Sources who provided access to the hiker and non-hiker populations were:

1. Hiking clubs

In the absence of existing databases of hiking clubs in South Africa, the researcher opted to construct such database by following a serious of steps:

1. The Hiking Organisation of Southern Africa (HOSA) supplied the researcher with an initial list of members of the organisation as well as a list of hiking clubs the organisation were aware of. This included two historical lists with contact details of almost 300 hiking clubs collectively.
2. The list of hiking clubs from HOSA was inspected and unfortunately found to be obsolete since about two thirds of the clubs listed have since either ceased to exist or were not contactable due to only postal addresses being supplied.
3. In an effort to find contact details (either email addresses or websites) for listed clubs who may still be in operation, the researcher performed a serious of internet searches using different versions of the club name as search terms entered into search engines and social media pages. This proved to be a tremendously time-consuming exercise which did not yield any success.
4. Finally, the list was then supplemented with names and contact details of additional hiking clubs, obtained through another serious of internet searches. The final list contained 103 contactable hiking clubs.

Population size: Unknown

Sampling method: Volunteer sampling

Type of access: Emailed to club members and in some cases, advertised in the club's e-newsletter and on the club's social media sites.

2. SANParks

The South African National Parks is a major role player in the nature-based tourism industry in South Africa, being the largest state run tourism provider and enjoying high visitation through various services and activities (SANParks, 2013).

Population size: The organisation respectively had an estimated 121 000 and 27 800 followers in total on two of its Facebook pages (as at March 2015).

Sampling method: Volunteer sampling.

Type of access: Advertised on the organisations website and two of its Facebook pages.

3. Wild Card

The Wild Card Programme by the South African National Parks (SANParks) is a membership programme providing a range of benefits to SANParks' loyal customers. Unlimited access to Wild conservation partner parks, reserves and resorts are provided to members on an annual basis. Partner parks were not restricted to the national parks and included the likes of Cape Nature, Ezemvelo KZN Wildlife, Msinisi Resorts & Game Reserves, and the Big Game Parks of Swaziland. The Wild Card Programme has enjoyed immense growth over the last couple of years and, in terms of member numbers, experienced an 8.4% year-on-year (y-o-y) increase in 2014. In January 2015, the Programme had 66 203 active memberships (Grobler, 2015). However, at the time of data collection, the Wild Card Programme's subscribers to its monthly e-newsletter was at approximately 122 000. It should be noted that not all subscribers to the e-newsletter were individuals with active memberships, but certainly individuals who display tremendous passion towards wildlife, nature conservation and nature-based tourism. The rationale for choosing this database was based on the researcher's assumption that individuals who regularly visit conservation areas in order to experience nature and wildlife would be more likely to engage in the activity of hiking.

The likelihood of a positive response from the Wild Card management team was increased by implementing the following strategies (based on guidelines from Saunders *et al.*, 2012:216-226):

- Arranging face-to-face explanatory meetings with the parties involved
- Instilling confidence by furnishing the decision makers with a detailed account of the objectives and data requirements
- Accounting for the fact that the approval process might be lengthy as numerous levels of authority will have to be consulted
- Illustrating the benefits to the organisation for granting access.

Population size: Approximately 122 000 subscribers to the e-newsletter and 13 038 followers on Facebook (as at March 2015).

Sampling method: Volunteer sampling.

Incentive offered: An incentive in the form of a guide book on hiking trails was offered to the non-hiking population to increase participation. Approval from the ethics committee was obtained.
Type of access: Advertised via the programme's e-newsletter as well as its Facebook page.

4. Hi-Tec South Africa

Hi-Tec South Africa is the local arm of the global sports company that designs, manufactures and sells outdoor footwear, apparel and accessories in various countries across the world (Hi-Tec, 2015). Hi-Tec is probably best known in South Africa for its brand of hiking boots.
Population size: Approximately 36 232 followers on Facebook (as at March 2015).
Sampling method: Volunteer sampling.
Incentive offered: Respondents were offered a chance to win one of two pairs of hiking boot, sponsored by Hi-Tec South Africa, to increase participation. Approval from the ethics committee was obtained.
Type of access: Advertised on its Facebook page.

5. Outdoor Warehouse

Outdoor Warehouse is a retail company in South Africa focused on the selling of camping, hiking, off-road and general open-air recreational equipment, apparel and gear (Outdoor Warehouse, 2013).
Population size: Approximately 21 200 e-newsletter subscribers; 18 261 Facebook followers and 958 Twitter followers.
Sampling method: Volunteer sampling.
Type of access: Advertised in the company's monthly e-newsletter as well as Facebook and Twitter sites.

6. Sportsmans Warehouse

Sportsmans Warehouse is a retail chain stocking a range of sports gear and outdoor equipment, sports clothing, outdoor clothing and footwear in South Africa and Namibia (Sportsmans Warehouse, 2015).
Population size: Approximately 42 640 e-newsletter subscribers; 33 505 Facebook followers and 4 555 Twitter followers.
Sampling method: Volunteer sampling.

Type of access: Advertised in the company's monthly e-newsletter as well as Facebook and Twitter sites.

5.3.3 SAMPLE SIZES ACHIEVED

A total of 1 421 responses was received, however after data clean-up, 1 174 questionnaires were deemed usable. The final sample sizes, categorised by source and population, are summarised in Table 5.

Table 5: Sample sizes achieved by source

Sources	Hikers N	Non-hikers N
Hiking clubs	414	12
SANParks	34	17
Wild Card	107	80
Hi-Tec South Africa	301	127
Outdoor Warehouse and Sportsmans Warehouse	70	12
Total	**926**	**248**

According to Leedy & Ormrod (2014:222), an appropriate sample size for large populations (N>5 000) is 400. As seen from the number of responses from hikers in Table 5, this far exceeds the recommended sample size. This number was however hard to achieve in the case of non-hikers as motivating non-hikers to participate in the study proved challenging. Even though multiple messages tailored towards attracting non-hikers to the survey were posted onto social media sites such as that of the Wild Card Magazine, the total sample size only reached 248 after weeks of collection. The main reason for this was the lack of interest from non-hikers in participation in a survey about hiking.

5.4 DATA COLLECTION

The approach taken in the collection of data is depicted in this section, including a description of the methods and techniques used, a short description on the questionnaire

design and timeframes in which data was collected. A detailed outline of the specific forms of data as well as the specific attributes of respondents that were measured, is provided in section 5.4.4.

5.4.1 APPROACH, METHOD, INSTRUMENT AND TECHNIQUES USED IN COLLECTION

The following approach, based on the guidelines from Saunders *et al.*, (2012:454) was followed when making contact with hiking club representatives and individual respondents via email:

1. Pre-survey contact was established in which the club representative was advised of the survey and a questionnaire to follow. (Examples of three club representatives providing permission via email can be viewed in Appendix B).
2. A few days later, a hyperlink was emailed with a covering letter, explaining the purpose of the research.
3. A follow-up email was sent approximately one week after the initial email containing the link to the questionnaire, thanking those that have already completed it and reminding those that have not, to answer.

A great deal of time was spent communicating and responding to the hiking club representatives. In some cases, hiking club representatives requested the researcher to directly communicate to members, however the preferred method for most clubs was for an email to be sent from the club representative's mailbox encouraging members to participate. A number of clubs also agreed to share the link to the questionnaire on their websites, social media pages and e-newsletters. This approach was followed up with the following steps to ensure further access to hikers and non-hikers was achieved:

4. Contact was made with organisations and membership programmes selling products or services related to nature-based tourism and outdoor recreational activities such as SANParks, Wild Card, Hi-Tec, Outdoor Warehouse and Sportsmans Warehouse.
5. After agreements were reached with the various stakeholders, the study was further advertised via the sources' e-newsletters, websites and social media pages again by

providing the hyperlink to the web-based survey. An example of the message included in Outdoor Warehouse's April newsletter is displayed in Figure 14.

6. To encourage further participation from non-hikers, a series of messages, tailored to nature-lovers who are not hiking, was posted within a time frame of one week on the Wild Card Magazine's Facebook page. An example of one of the messages posted can be seen in Figure 15.

Figure 14: Insert in the Outdoor Warehouse April 2015 e-newsletter

Source: Outdoor Warehouse e-newsletter, emailed to subscribers on 9 April 2015.

The self-completed questionnaire required all respondents to indicate informed consent prior to answering any questions (refer to Appendix C for a copy of the consent form). The questionnaire was hosted and data collected by using the services of SurveyMonkey®. Questionnaires as an instrument generally has lower return rates compared to face-to-face or telephonic interviews but can still produce useful data if properly designed and administered (Leedy & Ormrod, 2014:197).

Figure 15: Message posted on Wild Card Magazine's Facebook page

Source: Wild Card Magazine Facebook post on 23 April 2015.

The benefits of following an internet-mediated approach included (Saunders *et al.;* 2012:421):

- When distributing questionnaires (or links to questionnaires) via email, a high confidence existed that the right individual would in fact respond.
- Time spent on data collection was less than with other methods such as in-depth interviews and posted questionnaires.
- This method is one of the most cost efficient ways of collecting data.

5.4.2 QUESTIONNAIRE DESIGN

The design of the questionnaire was largely based on the researcher's positivist belief that data should be collected to acquire new knowledge and in doing so, address the Research Objectives of the study. The researcher studied existing literature from various sources with

an emphasis on the following key concepts to determine which specific areas should be investigated during the data collection process:

- The South African perspective of hiking tourism as a destination product (section 2.4)
- Consumer behaviour in adventure and nature-based tourism (chapter 3)
- Trail accreditation, classification and grading systems (section 4.2.4 and section 4.5)
- The impact of accreditation systems on consumer behaviour (section 4.4)

The selection of questions regarding trail accreditation was informed by the case study accreditation system, Green Flag, as well as knowledge from other classification and grading systems (Arias, 2007:8-35; Green Flag, 2015; Parks Canada, 2014).

Appendix D provides an overview of the specific forms of data collected with reference to the theoretical frameworks and constructs on which the key concepts measured are based (where applicable) as well as reference to any best practice in terms of survey design (data type and scales used). The process of designing individual questions for this study consisted of the adopting and adapting of questions used in previous studies combined with the researcher's own development efforts.

The questionnaire was populated using the software supplied by SurveyMonkey® for collecting data from both the hiker and non-hiker populations. Skip logic or branching (Peytchev, Couper, McCabe & Crawford, 2006:597) was applied to direct respondents to different sections depending on their response to question 1 (whether they are active hikers or not). Hikers were directed to Section B of the questionnaire while non-hikers answered Section A. All respondents answered Section C which dealt primarily with demographical attributes of respondents. During the process of the designing of questions, each question was considered individually and the potential response formats assessed against the intention of the question to determine the best possible way for the researcher to collect data. As the intentions of the majority of questions were not to capture an in depth understanding of the topic, most questions were closed or forced-choice questions which provided opportunities for comparison and made it easier for the respondent to answer (Fink, 2009; deVaus in Saunders et al., 2012:432).). The various options were based on literature as indicated in Appendix D. Opportunity was also provided for open answers in cases where

additional information was of importance to the Research Objectives. This also helped to eliminate researcher bias, as researchers often disregard observations that fall outside of their own subjective views (Bradburn, 2004:155). The final version of the structured questionnaire is included in Appendix C. Hikers were required to answer a total of 21 questions, while non-hikers qualified to answer 14 questions.

Respondents were required to be computer-literate and have access to email and the internet. As the SurveyMonkey® software is considered to be very user-friendly, no special skills are required by the respondents to answer the questions. Data entered by the respondents was automatically captured by the web-based software hosted by SurveyMonkey®.

A pilot phase was executed involving 10 respondents to test the reliability and suitability of the questions and smooth out any problems (Saunders *et al.*, 2012:451-452). The results from the pilot study highlighted the following concerns:

- The software technical setup of the two ranking questions (Q4 in the case of non-hikers and Q11 in the case of hikers), created confusion amongst some of the respondents. In the case of Q4, respondents were asked to rank main reasons for not going hiking. Q11 was concerned with hikers' main motivations for going hiking. Once a respondent assigned a ranking number to the first reason, the software would automatically move other reasons up or down the ladder to create either a lower or higher ranking, whichever was applicable. Not all respondents noticed this change and this created a wrongful perception amongst some that the software did not "save" their choices. This problem was addressed by inserting an additional message to respondents to clearly explain what the software's role is versus the respondent's role in answering the ranking question.
- In the definition of hiking provided to respondents, the spelling was changed from *rug sack* to *rucksack*, which is the more commonly used wording to describe a backpack or day pack used in hiking. Adjustments were made and the questionnaire was finalised..

5.4.3 TIME FRAMES IN WHICH DATA WAS COLLECTED

The data collection phase of the study took a total of 12 weeks to complete from start to finish. Collecting data from club members took the longest to complete (eight weeks in total), however also produced the largest sample size (see Table 5 in section 5.3.3). An outline of the time frames for collecting data from each of the sources is provided in Table 6.

Table 6: Data collection time frames

Source	Duration	Data collection period
Pilot phase	4 days	12 Febr 2015 – 16 Febr 2015
Hiking clubs	8 weeks	18 Febr 2015 – 14 Apr 2015
SANParks	1 week	7 May 2015 – 16 May 2015
Wild Card	4 weeks	16 Apr 2015 – 16 May 2015
Hi-Tec South Africa	4 weeks	31 March 2015 – 27 Apr 2015
Outdoor and Sportsmans Warehouse	3 weeks	9 Apr 2015 – 27 Apr 2015
Total data collection start to finish	**12 weeks**	**18 Febr 2015 – 16 May 2015**

The general guideline from Saunders *et al.* (2012:421) is a time frame of 2 to 6 weeks for web-based questionnaires. With the exception of the hiking clubs, data from all other sources were collected within the recommended time frame.

5.4.4 SPECIFIC FORMS OF DATA COLLECTED AND RESPONDENT ATTRIBUTES INVESTIGATED

Different types of data and measurements were recorded throughout the structured questionnaire. These are summarised in Appendix D and combine the variables from the questions posed to hikers and to non-hikers. The specific attributes and characteristics of respondents that were measured through the questions, as well as the literature that formed the basis of design of the questions are also listed in Appendix D.

Hikers' opinions on the state of hiking tourism products and experiences and their perceptions on the conditions necessary to equip them to make informed decisions and ensure successful outcomes were measured using rating questions with a five-point Likert-

scale (Saunders *et al.,* 2012:436). In case of the perceptions of hiking conditions in South Africa, a neutral value was provided in the scale as middle point to avoid a forced perception regarding hiking conditions in South Africa (Q25). Perception variables such as these are classified as opinion variables that are concerned with recording respondents' reasoning, beliefs, feelings or point of view (Dillman in Saunders *et al.,* 2012:425). Hikers' motivation(s) for purchasing hiking tourism products and non-hikers' reasons for not hiking or discontinuation of hiking are also classified as opinion variables, however these were measured using ranking questions (Saunders *et al*., 2012:434). The strength of respondents' attitudes towards accreditation as well as the importance of information aspects in decision making was measured by allowing the middle value to default to "important" with the stronger end leaning towards "very important" and "extremely important" while the lower end of the scale provided "of little importance" and "not important at all" as answer options. Another type of data collected, called behavioural variables, records respondents' actions (past or present). Behavioural variables from the questionnaire include respondents participation in hiking tourism activities, hiking social behaviour (for example, if they belong to a hiking club), how they approach the booking process, how their buying behaviour will change in the presence of certain conditions. A combination of rating, ranking, list, quantity, category and open questions was applied (Saunders *et al.,* 2012:432-440). Variables recorded by rating questions were measured with a five point Likert scale. In the case of measuring behavioural intentions towards accreditation (Q6, Q7, Q15 and Q16), likelihood questions were constructed and a neutral middle point provided to not artificially force respondents to take leaning they do not have or might not be sure about (Bradburn, Sudman & Wansink, 2004:129-142). When measuring behavioural intentions, Bradburn *et al*. (2004:131) concedes there is another common way to ask whether a respondent is likely to act in a certain manner in future. Yes-no answers were constructed for questions dealing with the measurement of willingness to pay as this method forces respondents to choose either a positive or negative response. These questions were used for screening to assess whether respondents were in fact serious about accreditation by testing their willingness to sacrifice disposable income towards trails that exhibited certain attributes. Characteristics or features of respondents were recorded by attribute variables. Attribute variables that were measured by category questions included age, gender, population group and province of residence (also classified as demographical information). The categories used to describe population

groups were based on the categories used by Statistics South Africa (2012) in its Census 2011 survey.

The characteristics of the sample of hikers that were investigated were centred on their buying behaviour (information requirements and booking channels) and the factors influencing their buying decisions and spending patterns. Buying behaviour influencers, based on literature by Moutinho *et al*. (2011:84) and George (2004:146), that were measured included social attributes such as their social setup within the hiking fraternity (member of hiking club); personal attributes such as age group and psychological factors such as motivations for, attitudes towards and perceptions of hiking.

For the sample of non-hikers, a similar profile was recorded that included demographic attributes and behaviours with the focus placed on the reasons for not hiking or reasons for discontinuing hiking activities. An important measure regarding decision making that was tested was a respondent's likelihood of changing his/her decision to hike, directly attributable to certain conditions proposed such as availability of reliable information as well as the presence of an fully implemented accreditation system.

5.5 DATA ANALYSIS

In order to prepare the data for analysis, data was collected and temporarily stored on the site of the web survey development provider SurveyMonkey®. Data was automatically coded by the software provided by SurveyMonkey® into numerical codes. Survey results were downloaded in Excel format for use in the spreadsheet software program Excel.

The first step in data analysis was to examine the data by the use of visual representations which guided the researcher in her choice of methods in further analysis.

5.5.1 EXPLORATORY DATA ANALYSIS APPROACH

The exploratory data analysis approach (Tukey, 1977 cited in Saunders *et al.*, 2012:487-488) was used to discover additional relationships in the data that required further analysis

by using diagrams and tables. While the SurveyMonkey® software provided functionalities for the summarising and visual representation of response data in an electronic format (SurveyMonkey®, 2014), the researcher used her own discretion to decide which variables to include, based on the data contributing to the Research Objectives (4 through 8). This technique of exploring and presenting data was executed by following the guidelines provided by Saunders *et al.* (2012:488-502) for the exploring, displaying and comparison of variables. One advantage of exploratory data analysis is that it provides a researcher with the freedom to roam through data in order to uncover any additional relationships which may not have been formulated in the research design. One such question that appeared during exploratory data analysis was whether the importance of accreditation was influenced by 1) hikers' perceptions of safety conditions and 2) hikers' information needs.

In the case of information needs, the question involved (Q14), produced a large set of variables due to the range of statements supplied to respondents. Consequently, the researcher decided to execute a data reduction technique, called exploratory factor analysis. The purpose of this was to identify underlying factors which could help group variables according to how much variance they have in common (Blaikie, 2003:220), simplifying further data analysis such as significance testing.

Answers to the open questions were analysed quantitatively using content analysis by which categories are established and the number of instances are recorded for each category (Silverman, 2001:122-124).

5.5.2 EXPLORATORY FACTOR ANALYSIS

Factor analytic methods have been used in many published tourism research studies before as pointed out by Turner and Vu (2012:183. In the case of Q14, which describes the importance of individual information items in hiking tourism decision making, exploratory factor analysis was performed using the maximum likelihood method (ML) (Fabrigar & Wegener, 2011:98) to group variables of information needs with similar underlying structures into factors. ML was executed using oblimin rotation with Kaiser Normalisation. This procedure was followed by the calculation of Cronbach's alpha to test for scale reliability.

The higher the Cronbach alpha value, the higher the level of consistency amongst items within a scale. An additional measure of individual items' reliability within a scale is also the method of removing an item and checking to see whether the value improves, which can mean that an item was unreliable (Blaikie, 2003:219). The minimum criterion for reliability is generally a value of 0.70 (Blaikie, 2003:228).

5.5.3 EXAMINING RELATIONSHIPS AND DIFFERENCES

The researcher examined a series of relationships between key variables. The majority of these were concerned with (attribute, behaviour and opinion) variables impacting on hiking consumer behaviour and decision making. Hypotheses were formulated to test whether significant differences or relationships between variables existed (Saunders *et al*., 2012:672). The five basic steps suggested by Blaikie (2003:182-183) was followed for this process which essentially involved:

1. Stating the null and alternative hypotheses
2. Setting a confidence level by deciding on the level of significance to be tested
3. Establishing what the appropriate test statistic should be
4. Calculating the test statistic's value
5. Deciding whether to reject the null hypothesis or not.

It was decided to adopt a 5% level of significance for all significance testing, since it is widely accepted as custom and tradition in social science (Sirkin, 1999:215).

Six different statistical tests were used in the significance testing.

Non-parametric tests

1. In the case of categorical data, to examine the likelihood of two variables being related, the Chi-Square (indicated by χ^2) test for contingency, also known as just the Chi-Square test (Sirkin,1999:385), is suggested by Saunders *et al*. (2012:509) and Blaikie (2003:96-99). The Chi-Square test is most often used to identify whether meaningful relationship exist between the observed and expected frequencies of two variables when presented in a cross-tabulation (Saunders *et al*. 2012:666). In this study, Chi-Square tests were performed to examine whether meaningful relationships existed between the following variables, grouped as categorical data:

a. non-hikers safety concerns and their consideration towards hiking if trustworthy information was available on the safety of trails (H_{14})
b. hiking activity levels and the level of importance of accreditation (H_{16})
c. the level of importance of accreditation and club membership (H_{18})
d. the level of importance of accreditation and the choice of booking channels (H_{19})
e. the level of awareness of the Green Flag Accreditation System and hiking activity levels (H_{28})
f. the level of awareness of the Green Flag Accreditation System and whether an individual is a hiker or not (H_{29}).

2. In order to compare the means of one variable for two categories of another variable within a sample, the non-parametric Mann-Whitney U test is suggested to be performed for ordinal-level data. It is regarded as the most robust of all non-parametric tests (Blaikie, 2003:192, 197-200). The purpose of the test is to determine the probability that the values of a variable between two groups are different (Saunders *et al*., 2012:674). This test was performed to test for differences between:
    a. frequent and infrequent hikers when it comes to the level of agreement to the statement that trail conditions have deteriorated in South Africa (H_1)
    b. frequent and infrequent hikers with regards to the importance of safety information (H_4)
    c. frequent and infrequent hikers with regards to the importance of the trail difficulty level information (H_5).
3. The Kruskal-Wallis test is used to compare three or more group medians in the case of ordinal data (Leedy & Ormrod, 2014:313). Kruskal-Wallis was performed in this study to compare the group medians of:
    a. hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to their willingness to increase their activity levels if trustworthy information was available on the safety of trails (H_{10})
    b. hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to the level of importance of accreditation (H_{17}).
4. The Binomial test is an exact probability test and is used to test the difference between a sample proportion and a given proportion in the case of one sample tests (Lewis-Beck, Bryman & Liao, 2003:68-69). In this study, Binomial tests were

performed to test whether the differences in sample proportions were more than half (or 50%) in the cases of H_2, H_3, H_{7-9}, H_{11-13}, H_{15}, H_{21}, H_{23-27} (see Table 7).

Parametric tests

5. When testing for significant differences between two means of independent groups, an *independent-samples t*-test is recommended (Leedy & Ormrod, 2014:313). *T*-tests are categorised as parametric tests used in the case of numerical data (Saunders *et al*., 2012:517).In the case of H_6, *t*-tests were performed in conjunction with the robust Levene's test for equality of variances. *T*-tests were deemed appropriate since the researcher needed to test for significant differences between the means of frequent and infrequent hikers with regards to the importance of the five information factors (H_6).
6. When testing for significant differences between three or more means of independent groups, the technique of oneway analysis of variance or oneway ANOVA is applied (Saunders *et al*. 2012:520). Once a null hypothesis has been rejected, a follow-up procedure is performed since ANOVA tests all sample means simultaneously. The post hoc of multiple comparisons procedure involves a further exploration for differences between each of the pairs of means (Sirkin,1999:309). ANOVA and Scheffe post hoc tests were executed in the case of H_{20} and H_{22}. These hypotheses examined the differences:
    a. between hiker groups with differing views of the importance of accreditation when it comes to the importance of each of the five information factors (H_{20}).
    b. between hiker groups with differing views of the importance of accreditation when it comes to their willingness to increase hiking activity if all trails are accredited (H_{22}).

The lScheffe post hoc test was chosen due to its flexibility and robustness (Sirkin, 199:332).

Table 7 summarises the list of hypotheses statements formulated for significance testing, the Research Objectives they served as well as the statistical analysis techniques used for the actual testing:

Table 7: Hypotheses formulated for achieving Objectives 5 – 8

H_0	Statement	Test statistic
	Perceptions of hiking conditions (Objective 5)	
H_1	There is no difference between frequent and infrequent hikers when it comes to the level of agreement to the statement that trail conditions have deteriorated in South Africa.	Mann-Whitney U test
H_2	The proportion of hikers who do not agree with the statement that feedback mechanisms are in place is 50%.	Binomial test
	Importance of information (Objective 5)	
H_3	The proportion of hikers rating safety information as either very important or extremely important is 50%.	Binomial test
H_4	There is no difference between frequent and infrequent hikers with regards to the importance of safety information.	Mann-Whitney U test
H_5	There is no difference between frequent and infrequent hikers with regards to the importance of the trail difficulty level information.	Mann-Whitney U test
H_6	There is no difference between frequent and infrequent hikers with regards to the importance of the five information factors.	*Independent sample t*-tests combined with Levene's test for equality of variances
	Influence of trustworthy information on hiker activity levels (Objective5)	
H_7	The proportion of hikers willing to hike more if trustworthy information on the facilities was available is 50%.	Binomial test
H_8	The proportion of hikers willing to hike more if trustworthy information on the safety of trails was available is 50%.	Binomial test
H_9	The proportion of hikers willing to hike more if trustworthy information on the difficulty level of trails was available is 50%.	Binomial test
H_{10}	There is no difference between hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to their willingness to increase their activity levels if trustworthy information was available on the safety of trails.	Kruskal-Wallis
	Influence of trustworthy information on non-hikers decisions (Objective 5)	
H_{11}	The proportion of non-hikers willing to consider hiking if trustworthy information on the facilities was available is 50%.	Binomial test
H_{12}	The proportion of non-hikers willing to consider hiking if trustworthy information on the safety of trails was available is 50%.	Binomial test
H_{13}	The proportion of non-hikers willing to consider hiking if trustworthy information on the difficulty level of trails was available is 50%.	Binomial test
H_{14}	There is an association between non-hikers safety concerns and their consideration towards hiking if trustworthy information was available on the safety of trails.	Chi-square

Table 7 continues on the next page

Table 7 (continued): Hypotheses formulated for achieving Objectives 5 – 8

Influence of accreditation on decision making and purchase behaviour (Objective 6 & 7)		
Perceived importance of accreditation (Objective 6)		
H_{15}	The proportion of hikers who regard accreditation as important, very important or extremely important is 50%.	Binomial test
H_{16}	There is no association between hiking activity levels and the level of importance of accreditation.	Chi-Square
H_{17}	There is no difference between hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to the level of importance of accreditation.	Kruskal-Wallis
H_{18}	There is no association between the level of importance of accreditation and club membership.	Chi-Square
H_{19}	There is no association between the level of importance of accreditation and the choice of booking channels.	Chi-Square
H_{20}	There are no differences between hiker groups with differing views of the importance of accreditation when it comes to the importance of each of the five information factors.	ANOVA and Scheffe's test
Potential influence of accreditation on future purchase behaviour (Objective 7)		
H_{21}	The proportion of hikers who say they would either consider or definitely go hiking more frequently if trails were accredited is 50%.	Binomial test
$H_{22\ a,b,c,d,e}$	There are no differences between hiker groups with differing views of the importance of accreditation when it comes to their willingness to increase hiking activity if all trails are accredited.	ANOVA and Scheffe's test
H_{23}	The proportion of non-hikers saying they would consider or definitely go hiking if trails were accredited is 50%.	Binomial test
Willingness to pay (Objective 7)		
H_{24}	The proportion of hikers willing to pay more for an independently accredited trail is 50%.	Binomial test
H_{25}	The proportion of hikers willing to pay more for a trail under responsible management is 50%.	Binomial test
H_{26}	The proportion of hikers willing to pay more for a trail that managed in an environmentally sustainable way is 50%.	Binomial test
H_{27}	The proportion of hikers willing to pay more for better accommodation facilities is 50%.	Binomial test
Awareness of Green Flag (Objective 8)		
H_{28}	There is no association between the level of awareness of the Green Flag Accreditation System and hiking activity levels.	Chi-Square
H_{29}	There is no association between the level of awareness of the Green Flag Accreditation System and whether an individual is a hiker or not.	Chi-Square

5.6 ASSESSING AND DEMONSTRATING THE QUALITY OF RIGOUR OF THE PROPOSED RESEARCH DESIGN

Reliability, a key element of research quality, is concerned with whether the chosen data collection and data analysis methods and techniques would, if applied in a study on another occasion by a different researcher, result in similar findings. In the case of the quantitative methods that were applied to the study, the threats to reliability included participant error, participant bias, researcher error and researcher bias (Saunders *et al.*, 2012:192). Bias was partially addressed by the fact that a positivist approach was adopted, as the data collected can be considered to be separate to the researcher and the researcher's views, opinions and beliefs (Saunders et al., 2012:134). Through the use of web-based questionnaires, with no face-to-face contact with respondents, the data is more objective. The use of web-based questionnaires also eliminates the chance for researcher error as it is improbable that data will be misinterpreted, especially when mostly closed-ended questions were used. Web-based questionnaires enabled the researcher to target hikers and non-hikers from geographically dispersed areas, which provided a more balanced view of the constructs measured. As the study was based on a positivist approach it was imperative to eliminate researcher bias as far as possible.

Internal validity is the extent to which the research findings demonstrate a causal relationship between two variables (Saunders *et al.*, 2012:193). Sources of bias or error that apply to the quantitative methods in this study include past or recent events (a hiker's negative or positive experience on a recent hike might influence his or her response), mortality (in case of hiking members leaving the club or social group or of Wild Card members ceasing their membership) and ambiguity about causal direction.

Construct validity is the appropriateness of the research measures, in other words whether they actually measure what the researcher intended. Construct validity was determined through calculation of Cronbach's alpha of the various scales.

External validity is the confidence with which the study's research findings can be used for statistical inferences, in other words whether it can be applied to a larger population.

Non-probability sampling was chosen for both the hiker and non-hiker samples, implying that the samples would not necessarily be representative of the population. However, the negative effect of non-probability sampling was somewhat countered by the large sample size. Non-probability sampling was chosen for both the hiker and non-hiker samples, implying that the samples would not necessarily be representative of the population. However, the negative effect of non-probability sampling was somewhat countered by the large sample size. A large sample size (statistically regarded as more than 30), such as the one achieved in this study, is a countermeasure for the lack of representation inherent to convenience sampling. It has been proven that larger sample sizes increase the chance of normal distribution of the data due to the "central limit theorem" (Saunders *et al*., 2007:211), and normal distribution is one of the assumptions of inferential statistics.

5.7 RESEARCH ETHICS

The main ethical issues or problems that were expected in this study and the steps taken to minimise them, included the following (taken from Saunders *et al*., 2012:208-236):

- *Informed consent and the deception of participants*
  Each respondent was supplied with a copy of the informed consent form (see Appendix C) at the onset of the online questionnaire, informing him or her of the objectives of the study and requiring consent for participation on a voluntary basis. As minors were not included in the sample, parental consent was not necessary.
- *Voluntary participation and the right of subjects to withdraw from the study at any point without negative consequences*
  Specific points of inquiry, such as a respondent's age, population group or province of residence might be regarded as sensitive and a respondent may refuse to answer in such cases. Respondents indicated consent (Appendix C) as a sign of their participation on a voluntary basis.
- *Confidentiality and Anonymity*
  Respondents were assured via the informed consent form that individual responses will remain confidential and that they as individuals will remain anonymous throughout the entire process.

- *Gaining access*

  Obtaining the necessary permission from gatekeepers for access to the databases and lists mentioned in earlier sections of this proposal posed a large risk to the study as this could have had a significant impact on the sample size and quality of data collected. The researcher has obtained full support from HOSA and the manager of Green Flag Trails, Professor M.L. Hugo. The majority of hiking club representatives was largely accommodative to the requests from the researcher. The necessary permissions were obtained from SANParks and the Wild Card management team for promoting the study via the Wild Card Magazine's e-newsletter and Facebook page as well as sharing the link on the SANParks website and Facebook pages. Commercial entities such Hi-Tec, Outdoor Warehouse and Sportsmans Warehouse provided further permission for promoting the study on newsletters and social media pages deemed appropriate.

5.8 SUMMARY

The status of the hiking tourism sector was explored in chapter 2 of the literature review, providing context to the importance of hiking tourism in South Africa and shedding light onto how the industry currently operates. This information was supplemented by primary data collected from South African hikers including current levels of participation, channels used for bookings, main sources consulted for information about trails, and perceptions of the current conditions in hiking tourism. In order to uncover the consumer driven factors impacting on hiking tourism buying behaviour, motivations (and/or barriers) of consumers to embrace the product as an outdoor recreation or adventure tourism activity was investigated. Hikers' information preferences with regards to trail facilities and attributes was explored to determine the contributors to decision making. Non-hikers were surveyed to investigate whether the presence of the unique aspects of an accreditation system could change the decision not to hike into one of consideration.

Further to understanding consumer behaviour, a hypothetical country-wide implementation of Green Flag was presented to hikers and non-hikers in order to determine how the presence of such a system and its information attributes could impact future buying

behaviour. Hikers' and non-hikers' current awareness of both Green Flag and its logo was tested. Willingness to pay (WTP) for accredited trails as well as trails representing that which Green Flag stands for, was measured.

The results from the data analysis are discussed in detail in the next chapter.

CHAPTER 6: RESULTS AND DISCUSSION

6.1 INTRODUCTION

The results from the empirical research are described in this chapter. Demographical data is relayed first (section 6.2) as an introduction to the profile of hiking and non-hiking respondents, followed by sections 6.3 to 6.5, dealing with consumer behaviour in terms of purchase behaviour, motivations and constraints, and perceptions about hiking. section 6.6 addresses the role of information in hiking by investigating hikers' pre-trip information needs, sources of information, and the influence of trustworthy information on decision making. The results discussed in section 6.7 represents the core findings of this study and illustrates the influence of trail accreditation on decision making and future purchase intentions. The section also discusses the results from measuring consumers' willingness to pay for trails meeting certain conditions. Awareness of Green Flag is measured in section 6.8, followed by a summary of those factors tested for influencing the future uptake of hiking tourism in section 6.9.

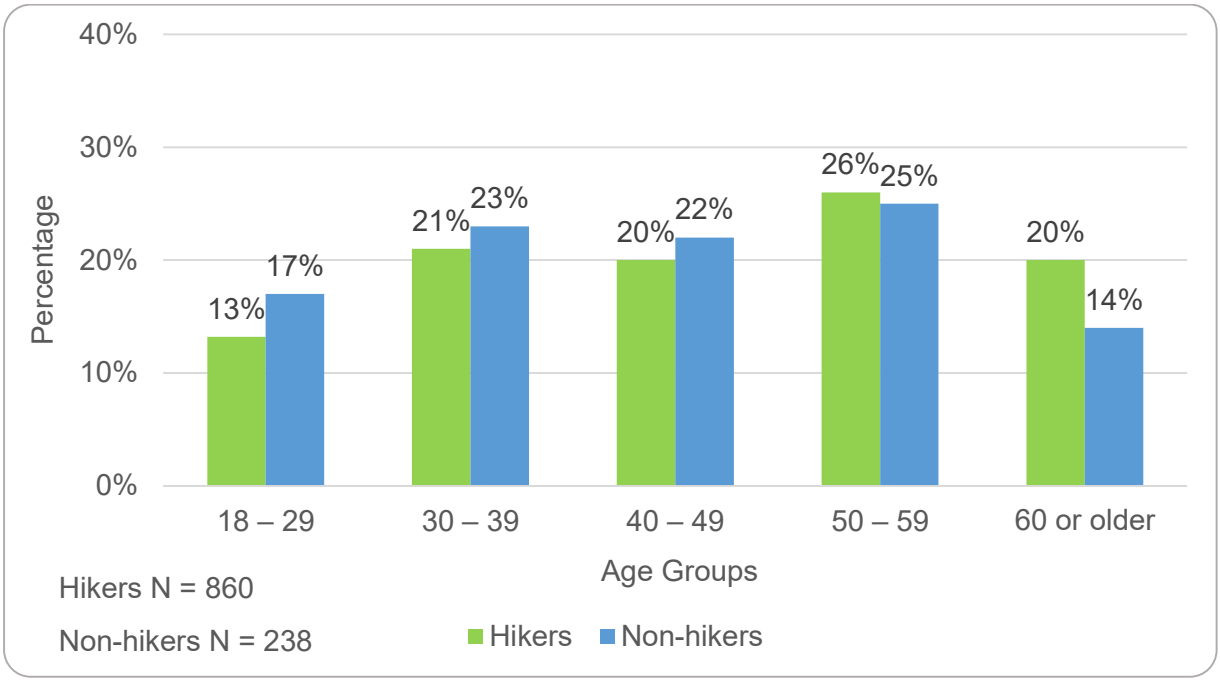
6.2 DEMOGRAPHICS

Demographical information related to age, gender, province of residence and population group is discussed in this section to assist in describing the characteristics of the sample of hikers as well as the sample of non-hikers. While the results cannot be used to make statistical inferences about the entire population of hikers and non-hikers in South Africa, it does provide insight into how participants were dispersed between different classes of attributes. In the case of the hiker population where a large sample of respondents was reached, the results are useful for understanding the typical individual engaging in hiking activities.

6.2.1 AGE

The distribution of age groups of the hiker and non-hiker populations is presented graphically in Figure 16. The figure indicates a fairly similar distribution across the different age categories for both samples.

Figure 16: Hiker and non-hiker respondents by age distribution



The majority (68%) of hikers were between 30 and 59 years of age with another 20% falling within the 60 years and older category. The results indicate that hiking is an activity currently enjoyed by all age categories from ages 18 and upwards. The percentage of hikers in their early twenties was however less represented than the other classes. Reasons for this could be a general lack of interest, not having the financial means to cover the equipment and travel costs of a hiking trip, other outdoor activities acting as bigger draw cards (such as cycling, mountain biking, running, mountain biking) or young people being too busy with other interests such as studies or hobbies. More research is however needed to substantiate these assumptions. This does however not fall into the scope of this study.

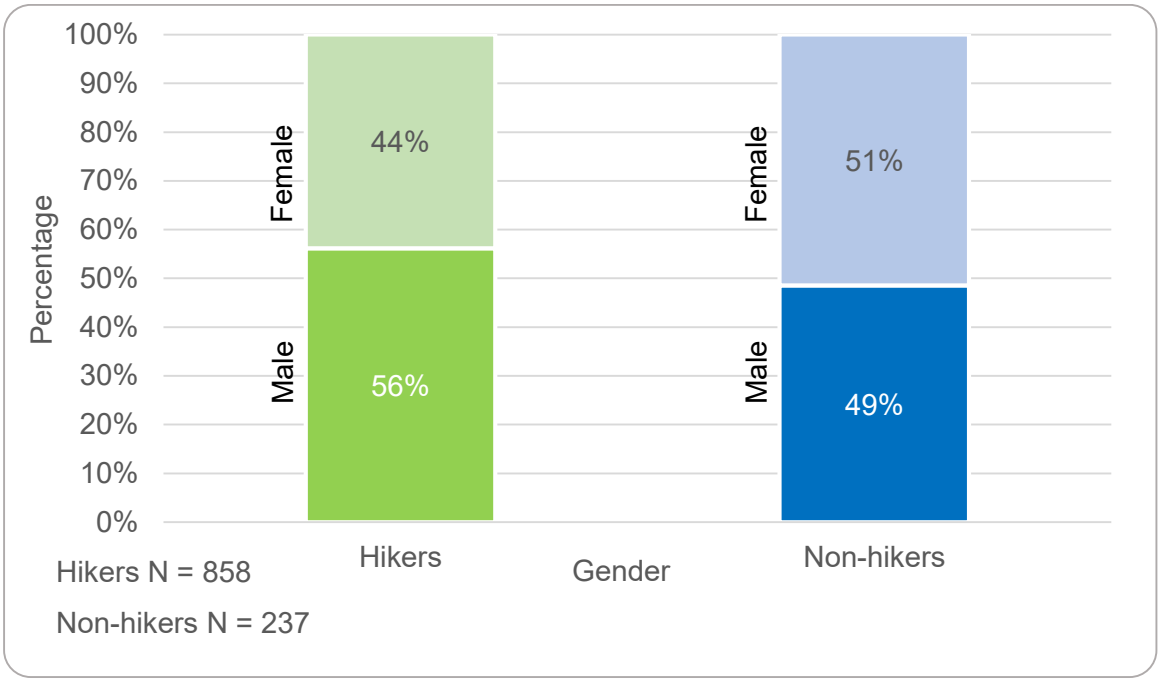
The age profile of the non-hikers produced a similar profile with 70% of respondents between 30 and 59 years of age. The lower percentage of twenty-something respondents can again

be explained by the fact that this age group may not be currently engaging in outdoor or nature tourism activities due to financial constraints or other interests and so may not be affiliating themselves with third parties offering outdoor, nature and wild life activity equipment and tourism products.

6.2.2 GENDER

Figure 17 illustrates the percentage distribution of male to female respondents for both the hiking and non-hiking samples.

Figure 17: Hiker and non-hiker respondents by gender distribution



The sample of hikers was made up of slightly more males (56%) than females (44%). In the case of non-hikers the distribution was more balanced with 51% females and 49% males.

6.2.3 PROVINCE OF RESIDENCE

Of the 859 hikers who disclosed their province of origin, 40% resided in the Western Cape, 34% in Gauteng and 12% in KwaZulu-Natal, representing 86% of hikers (seen in Table 8).

Table 8: Hiker and non-hiker respondents by province of residence

	Hikers		Non-hikers	
	N	**%**	**N**	**%**
Eastern Cape	40	5%	20	8%
Free State	15	2%	4	2%
Gauteng	288	34%	89	37%
KwaZulu-Natal	105	12%	21	9%
Limpopo	12	1%	3	1%
Mpumalanga	24	3%	10	4%
Northern Cape	7	1%	6	3%
North West	11	1%	8	3%
Western Cape	345	40%	72	30%
Outside RSA	12	1%	5	2%
Total	**859**	**100%**	**238**	**100%**

6.2.4 POPULATION GROUP

The distribution of respondents by population group is summarised in Table 9 for both hikers and non-hikers.

Table 9: Hiker and non-hiker respondents by population group distribution

	Hikers		Non-hikers	
	N	**%**	**N**	**%**
Black African	23	3%	13	5%
Coloured	42	5%	16	7%
Indian / Asian	22	3%	5	2%
White	739	87%	199	84%
Other	23	3%	4	2%
Total	**849**	**100%**	**237**	**100%**

The majority of respondents from both hikers and non-hikers where from the White population group (739 respondents, or 87%). A total of 27 individuals chose not to disclose their race and were placed in the "other" class. The second biggest group of hiker respondents were Coloureds (42 respondents), followed by Black Africans (23 respondents) and Indians or Asians (22 respondents).

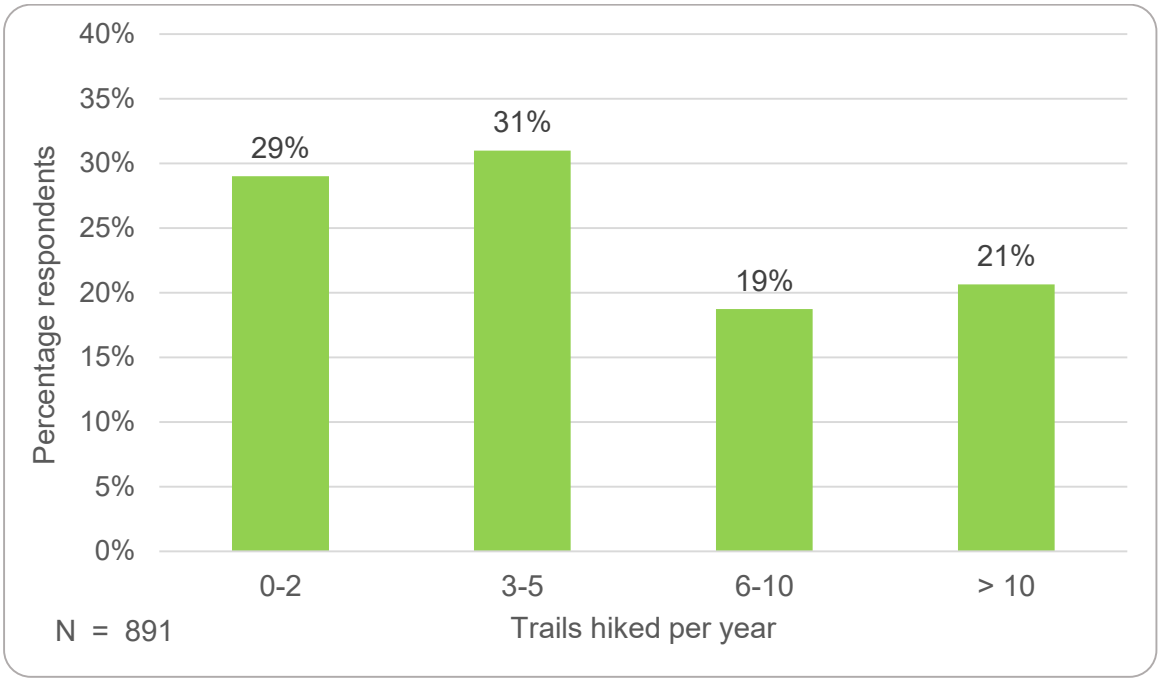
6.3 PURCHASE BEHAVIOUR

This section of results deals with Objective 4 of the study which is concerned with exploring purchase behaviour in hiking tourism along the lines of activity levels, club memberships and booking channels used in South Africa.

6.3.1 ACTIVITY LEVELS

Recording activity levels amongst hikers was of importance in order to determine whether differences in attitudes towards accreditation exist between frequent versus infrequent hikers. In order to distinguish between frequent and infrequent hikers, respondents were asked how many trails they embarked on in a typical year.

Figure 18: Hikers' activity levels by number of trails hiked per year

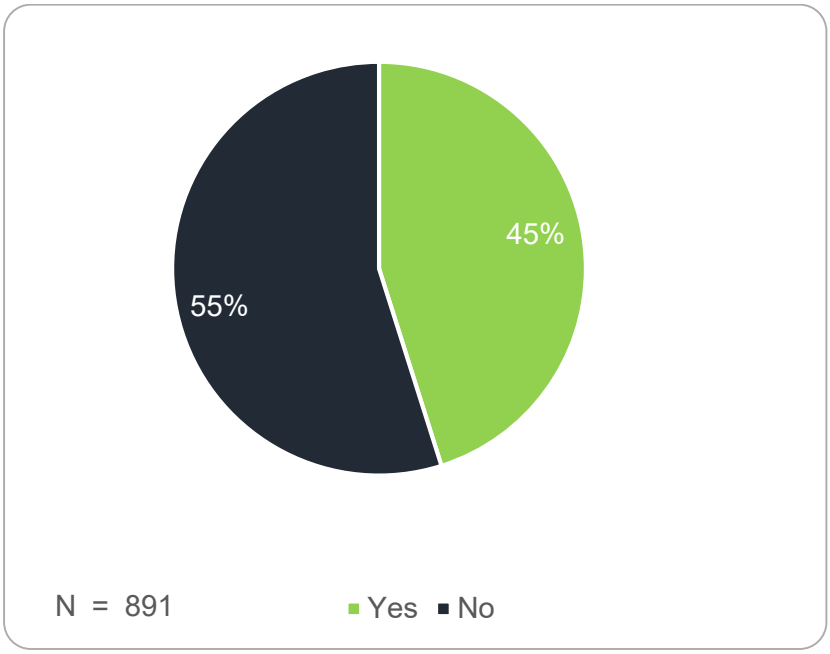


The spread of responses seen in Figure 18 suggests there was a good representation from all categories of hikers in the sample. A cumulative 40% of respondents hiked six or more trails in a typical year, suggesting that this group hikes at least every second month of the year. The majority of hikers (60%) were however classified as infrequent hikers.

6.3.2 CLUB MEMBERSHIP

Group buying behaviour plays a significant role in tourism (George, 2004:166-182). Little is however known about group buying behaviour in hiking tourism. The decision making process in a club context may differ from that of an individual's in a number of ways. Figure 19 reveals that 45% of respondents answered yes to the question "Are you a member of a hiking club?".

Figure 19: Are you a member of a hiking club?

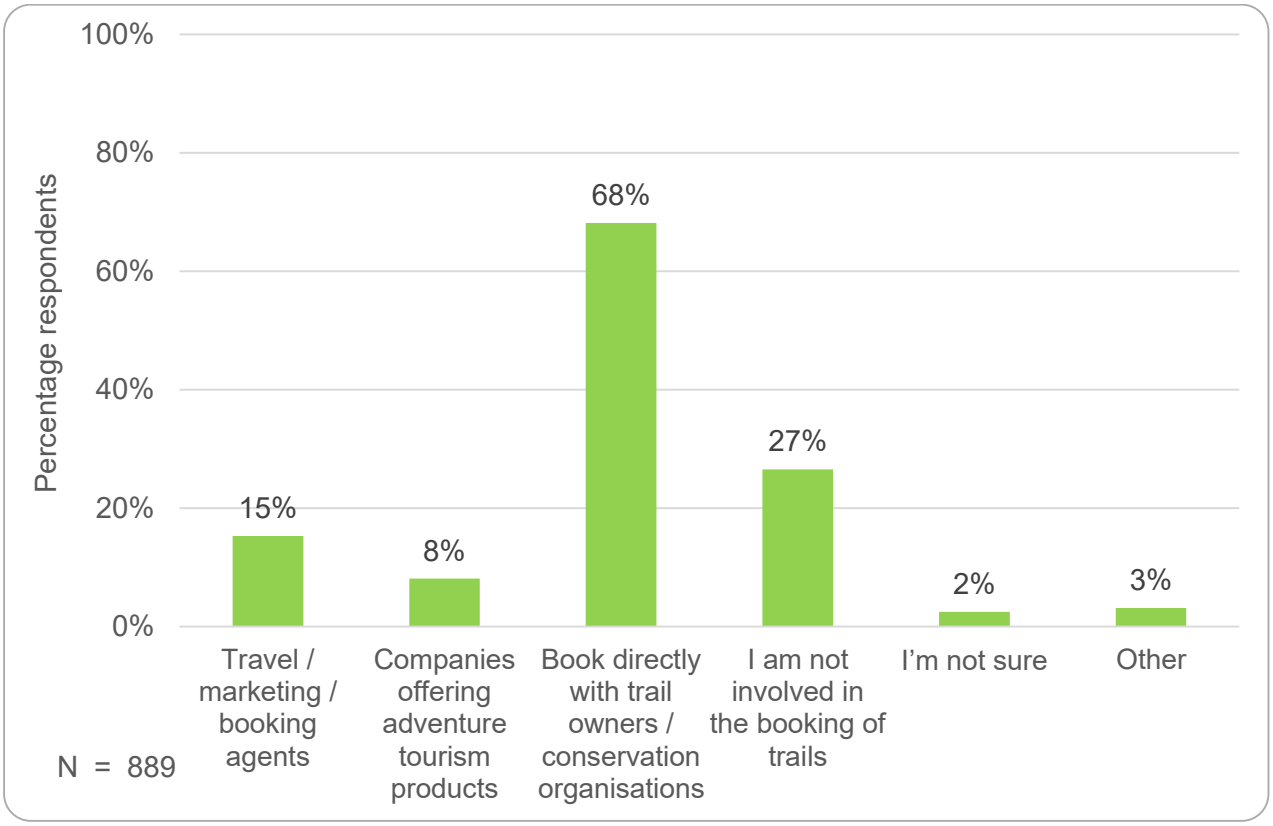


The decision makers of the club may place a greater importance on accreditation of trails, since they carry some of the responsibility in ensuring the trails selected are well managed, safe and deliver on what was marketed. If individual members of a club are not involved in the decision making or booking processes, one would expect to see accreditation being rated as slightly less important than for those involved in decision making and booking. This aspect has however not been explored further in this study.

6.3.3 BOOKING CHANNELS

Hikers were asked to reveal the channels they most often used by selecting from five different options, with an alternative category named 'Other'. This information is important when investigating hikers' perceptions regarding the availability of information related to accreditation. Even though multiple selections were allowed, most respondents (65%) only selected a single booking channel (Figure 20).

Figure 20: Booking channels used by percentage of respondents



The sample of hikers revealed the following methods of booking trails in South Africa:

- Making use of travel agents, tour operators or marketing or booking agents. Figure 23 shows 15% of hikers make use of this channel.
- Adventure tourism companies. Less than 10% of hikers book their hikes through this option.
- The majority of hikers (68%) choose to contact trail owners, conservation organisations, provincial or municipal authorities directly to reserve a trail.
- A fair amount of hikers (27%) are not involved in the booking of trails.
- Two percent of hikers chose the "Other" category. The descriptive data revealed that many individuals prefer to plan their own trails in areas where free roaming is allowed, opting to hike non-commercialised trails, such as on private farms where an arrangement would be made with the land owner to allow the hiker access.

The next three sections of this chapter (6.4 – 6.6) address Objective 5 of the study, namely, describing the key factors influencing consumer behaviour in South African hiking tourism.

6.4 MOTIVATIONS AND CONSTRAINTS TO HIKING

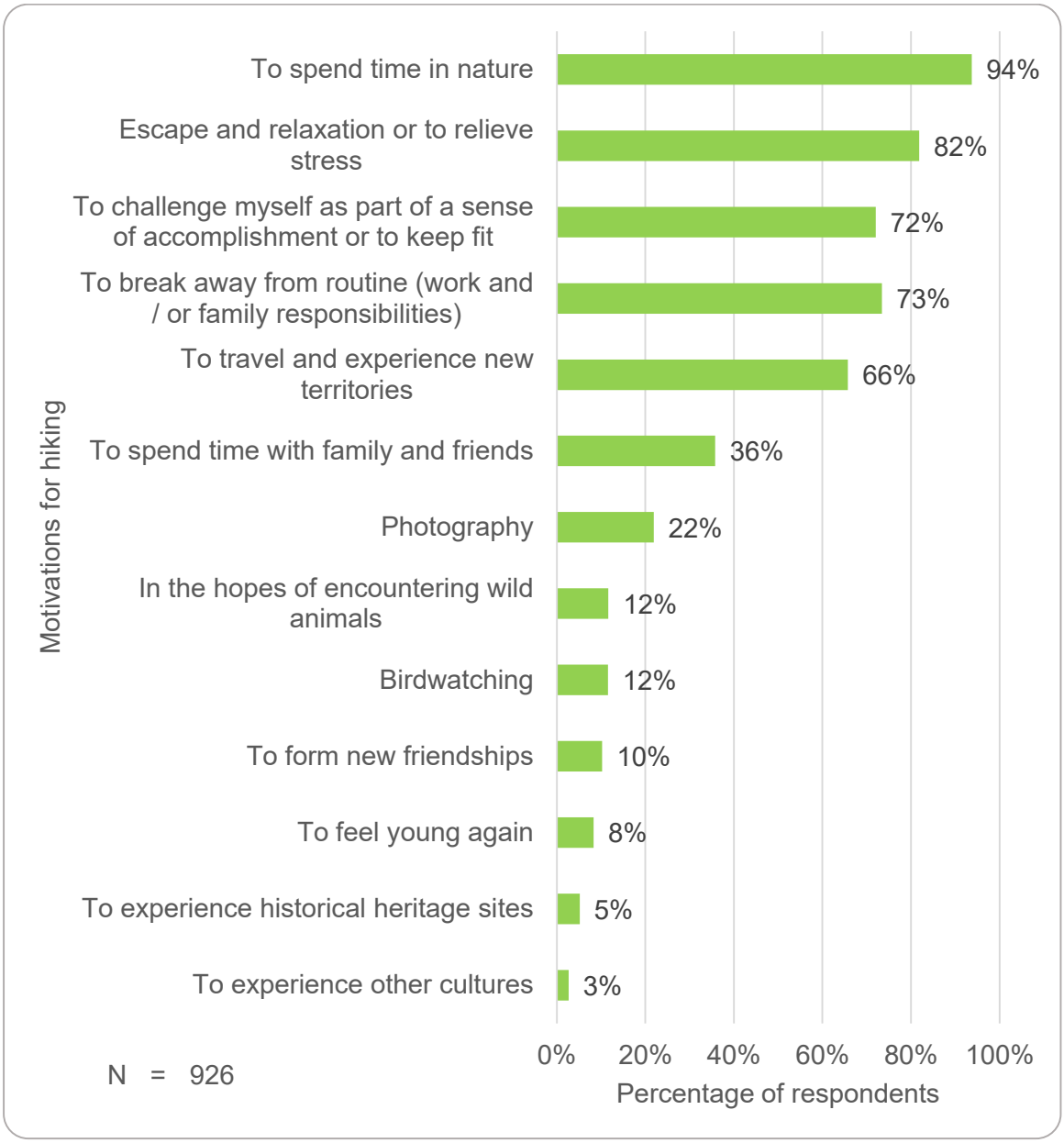
Measuring motivations and constraints to hiking forms part of Objective 5 of the study which describes the key factors influencing consumer behaviour in hiking tourism.

6.4.1 MOTIVATIONS FOR GOING HIKING

The main reasons why individuals go hiking are graphically displayed in Figure 21. Respondents were confronted with a list of 13 possible reasons and were asked to rank all of the reasons in order of importance with 1 being most important, 2 second most important and so on. A total ranking score was calculated to assign higher scores to motivational factors of higher importance. For each individual factor, the number of respondents who chose a particular rank number was multiplied by a weight number. A weight number of 15 was assigned for a ranking of 1 (highest importance), 14 for a ranking of 2, and so on with the lowest ranking of 15 assigned a weight number of 1. All weighted scores were then summed up to calculate a total score for each factor. The higher the total ranking score, the more important the reason. From these results, the top five reasons could easily be distinguished from the rest as the 6th most important reason's score came out far below the 5th (8033 versus 9332 for the 5th most important reason).

Respondents go hiking to spend time in nature, to escape, relax or relieve stress, to challenge themselves or to keep fit, to escape their daily routines and to travel to new destinations. To see how many respondents agreed that these represented their main motivations, Figure 21 displays the percentages of respondents who selected individual motivations as a top five reason.

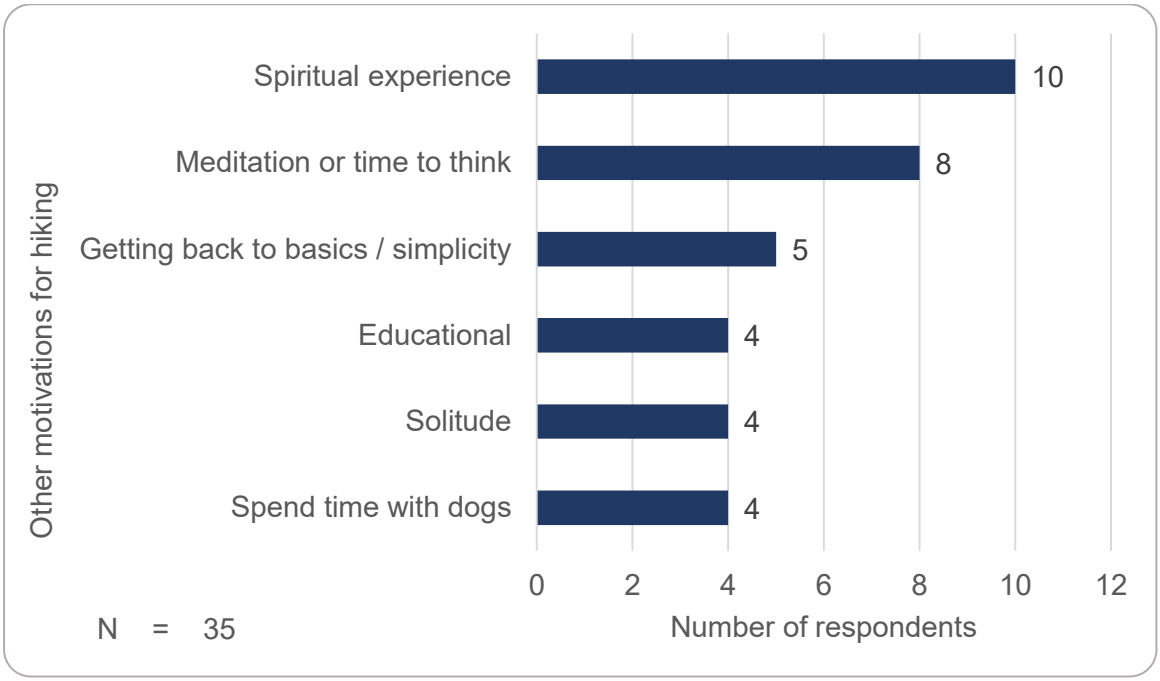
Figure 21: Percentage of respondents who ranked each motivation as their top five



The graphical display indicates that 94% of participants rated spending time in nature as one of their top five reasons for going hiking. Similarly, escape and relaxation was selected as a main reason for 82% of respondents. Almost three quarters of hikers do it primarily to challenge themselves or to keep fit (72%) and to break away from routine (73%). Travelling to and experiencing new destinations is also viewed as a main motivation by 66% of respondents.

Respondents were also asked to mention any other reasons not listed, if they considered it to be one of their top five reasons for going hiking. Figure 22 shows that ten respondents listed having a “spiritual experience” as one of their main reasons for going hiking, while eight individuals said they go hiking in order to have “time to meditate or think” which could arguably be linked to “spiritual experience”. Five respondents hike to “return to the basics” or “return to the simplicity of life”.

Figure 22: Other reasons for going hiking by number of respondents



At the opposite end of motivation, lies the constraints to participation which will be discussed next.

6.4.2 CONSTRAINTS TO OVERNIGHT HIKING

A list of 14 factors was presented to respondents as possible reasons why they are not engaging in overnight hiking. Similar to the motivations for hiking, a total ranking score was calculated to assign higher scores to constraint factors of higher importance. All weighted scores were then summed up to calculate a total score for each factor. The higher the total ranking score, the more important the reason for not hiking overnight.

The results illustrated in Figure 23 indicate that more than three quarters of respondents perceived their current state of health, fitness or physical abilities to be one of the top five reasons why they are not engaging in overnight hiking. More than half (53%) of participants said the fact that their companions, spouses or closest friends were not hiking was a main reason for them not participating. Half of respondents say the challenge of not having enough time as well as the perception of hiking being unsafe were main constraints.

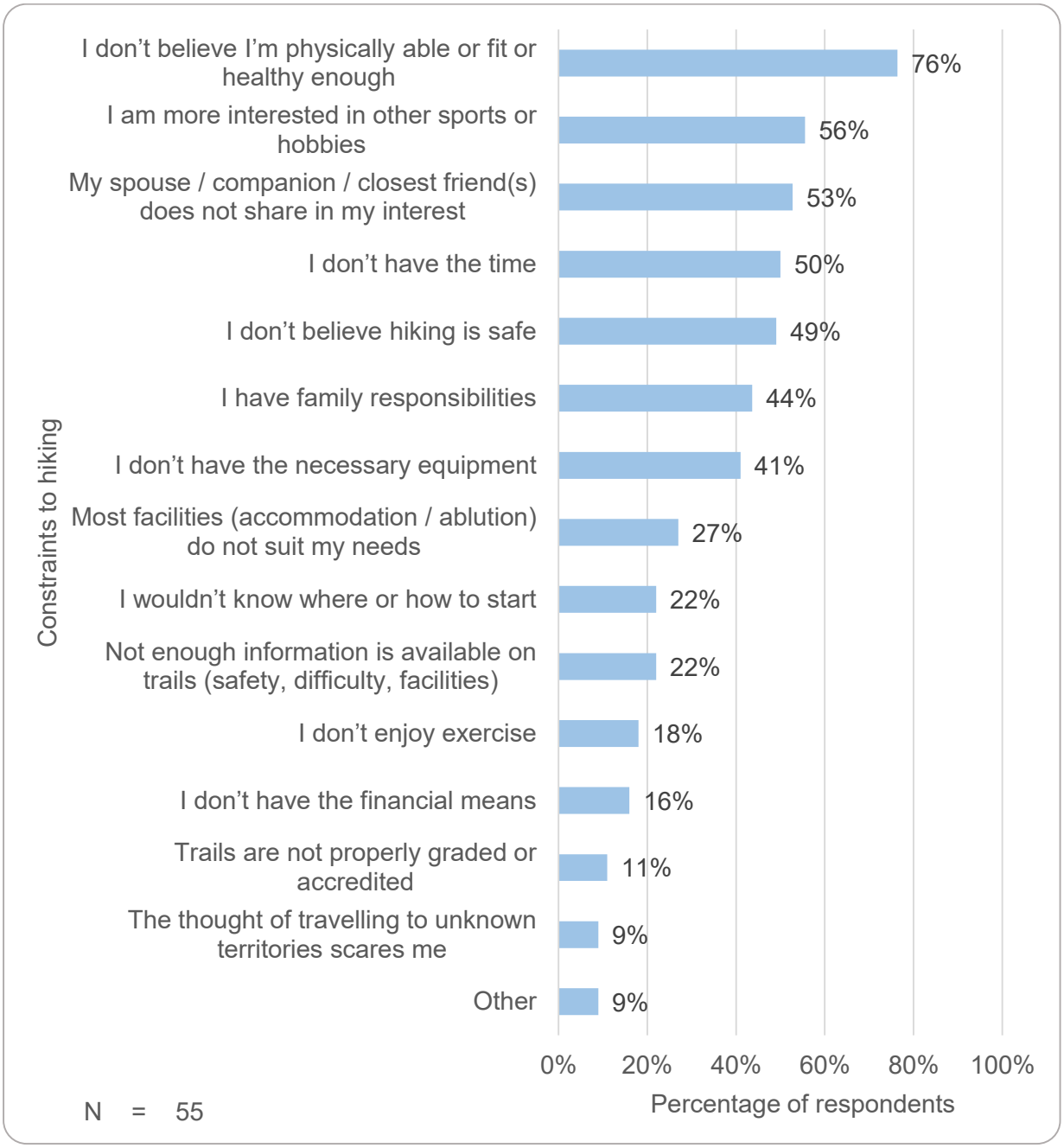
The findings that:

- 49% of respondents perceive hiking to be unsafe
- 27% perceive the facilities on trails (accommodation & ablution) as sub-standard
- 22% of respondents say they do not know where to start
- 22% of respondents feel not enough information is available on trails
- 11% feel trails are not properly graded or accredited

are relevant to this study as it indicate areas that can potentially be addressed by the provision of information through the accreditation of trails.

Of the reasons selected for non-participation, the view held by many hikers that they are not in a physical condition to participate, could for some cases be ascribed to the misconception that hiking is an activity for the fittest and strongest of society. If this proves to be the case, the difficulty ratings provided by accreditation could assist dispelling the myth.

Figure 23: Percentage of respondents who ranked each constraint as a top five reason



Respondents were also asked to mention any other reasons not listed, if they considered it to be one of their top five reasons for not considering overnight hiking. The reasons mentioned related to individuals' hygiene preferences, the fact that dogs were not allowed on many trails, and some respondents preferring better accommodation facilities (beds and bathrooms).

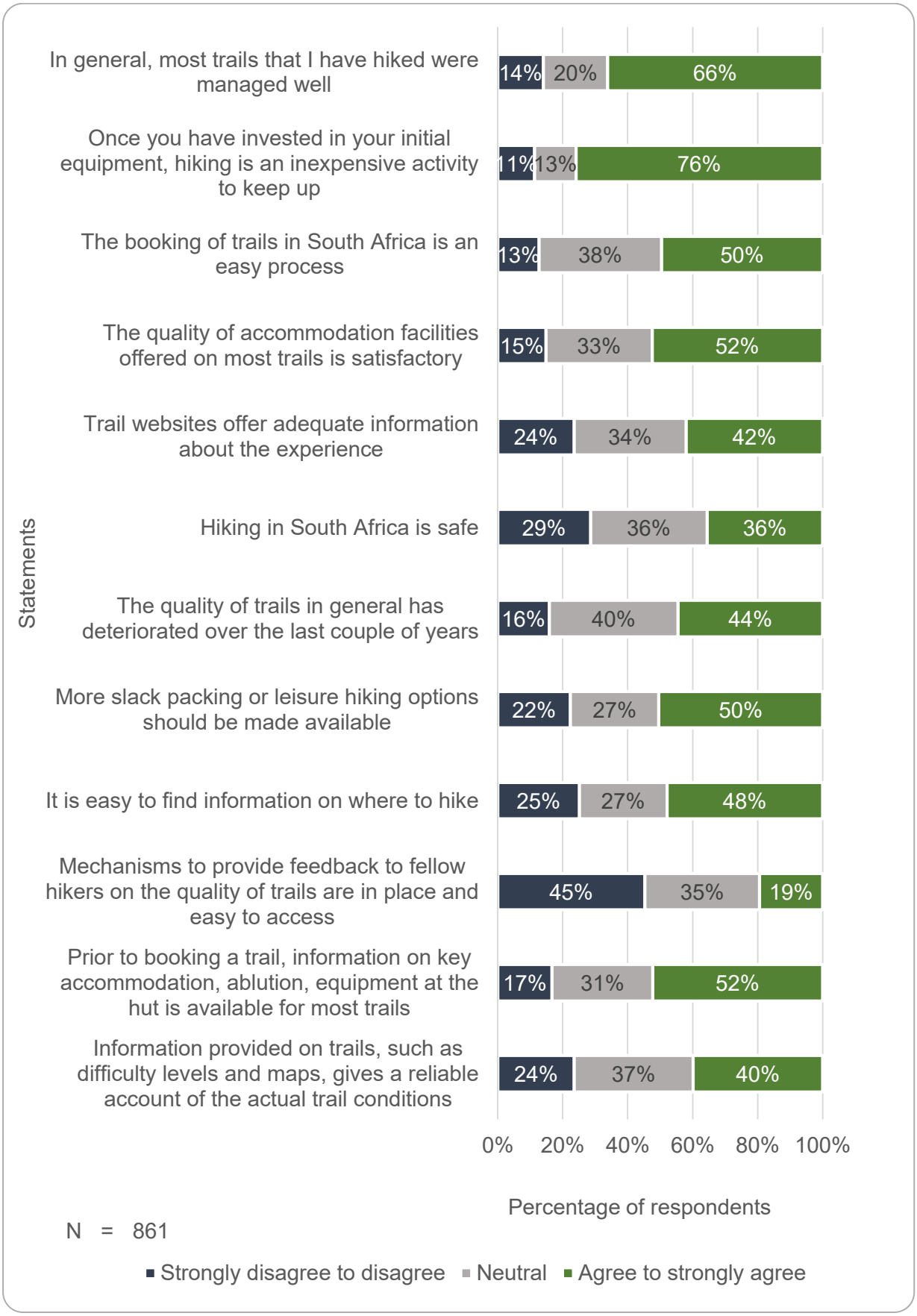
6.5 PERCEPTIONS OF HIKING CONDITIONS IN SOUTH AFRICA

The perceptions held by hikers of certain aspects of hiking in South Africa have a bearing on their decision making and consequently, purchase behaviour. This area, together with motivations and constrains (section 6.4) and information needs (section 6.6), forms part of Objective 5 of the study. The extent to which it also has an influence on the perceived importance of accreditation is studied in section 6.7.

As seen in Figure 24, hiking is regarded as an inexpensive activity by the majority of respondents (76%), indicating that the price or cost of hiking activity is unlikely to be a constraint to further activity (provided the individual has already acquired the basic equipment such as a backpack, hiking boots and sleeping bag). Slightly more than half of the respondents (52%) agreed information on key trail facilities (accommodation, ablution, equipment at the hut or camp) was available for most trails prior to booking. Fewer hikers however agreed with the statement that the difficulty levels and maps provided to hikers represent a reliable account of actual trail conditions (40% agree or strongly agree versus 24% who disagree or strongly disagree). For both these statements, a large percentage of respondents (31% and 37%) did not agree or disagree, indicating there may be mixed feelings towards whether information needs are being met and whether the information provided is trustworthy.

The safety of hiking in South Africa is of concern amongst the majority of hikers with only 36% considering it to be safe.

Figure 24: Perceptions of hiking conditions in South Africa



For purposes of the further analyses, the categories were regrouped. Hikers were split into two categories according to the answers provided for each question. The initial coding was: 1=Strongly disagree; 2=Disagree; 3=Neither agree nor disagree; 4=Agree; 5=Strongly agree. Respondents who selected 1, 2 or 3, were categorised as hikers who do not agree with the statement while those who answered 4 or 5 agreed that feedback mechanisms are in place.

6.5.1 TRAIL CONDITIONS

Only 14% of hikers didn't agree that most of the trails they have hiked to date were well managed. This percentage is low considering that 44% of hikers said the conditions of trails in general have been deteriorating. At first it may appear as if these findings are contradicting each other, however it may suggest that hikers were cautious in their selection of trails, having avoided certain trails known to have been sub-standard or in a deteriorated state over the last couple of years, based on word of mouth information. To test whether there was a difference in opinion amongst frequent and infrequent hikers, the following hypothesis was formulated and tested using the Mann-Whitney test, taken at a 5% level of significance.

H_0: There is no difference between frequent and infrequent hikers when it comes to the level of agreement to the statement that trail conditions have deteriorated in South Africa.
H_1: There is a difference between frequent and infrequent hikers when it comes to the level of agreement to the statement that trail conditions have deteriorated in South Africa.

The results (seen in Table 10) indicate that no statistical significant difference exists, at the 5% level of significance (*p=0.879*), between frequent and infrequent hikers with respect to their level of agreement to the statement that trail conditions have deteriorated in South Africa. The test statistic (Z = -.152) indicates the differences in opinion amongst frequent and infrequent hikers are negligible.

Table 10: Hikers agreement regarding the deterioration of trail conditions

Group	N	Mean Rank	Sum of Ranks.
Infrequent	517	429.99	222303.0
Frequent	340	427.50	145350.0
Total	857		
Test Statistics			
Mann Whitney U			87380.00
Wilcoxon W			145350.0
Z			-.152
Asymp. Sig. (2-tailed)			.879

The lack of formal feedback mechanisms on trail conditions is apparent from the fact that less than 20% of hikers agreed that mechanisms are in place and are easily accessible.
To test whether the result of this disagreement with said statement was meaningful, the binomial test was performed at a 5% significance level. Hikers were split into two categories according to the answers provided for each question. Respondents who selected 1, 2 or 3, were categorised as hikers who do not agree with the statement while those who answered 4 or 5 agreed that feedback mechanisms are in place. The hypothesis tested was:

H_0: The proportion of hikers who do not agree with the statement that feedback mechanisms are in place is 50%.
H_2: The proportion of hikers who do not agree with the statement that feedback mechanisms are in place is not equal to 50%.

The results from Table 11 indicate the null hypothesis is rejected on the 5% level of significance and can even be rejected on a 1% significance level ($p<0.001$). The observed proportion of hikers who do not agree with the statement is considerably more. It can therefore be deduced that, according to hikers, there is a lack of feedback mechanisms available for hikers to report back on trail conditions.

Table 11: Level of agreement with the statement regarding feedback mechanisms

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Hikers who do not agree	1	688	.81	.50	**.000**
Hikers who agree	2	166	.19		
Total		854	1.00		

Note: Significant differences indicated in bold

Hikers' disagreement with the statement is an important finding both for the management of trails in general and for an accreditation system as it indicates a gap in information flow between hikers and trail owners or industry bodies concerned with improving the qualities of trails, such as the Hiking Organisation of Southern Africa (HOSA).

6.6 THE ROLE OF INFORMATION IN HIKING TOURISM DECISION MAKING

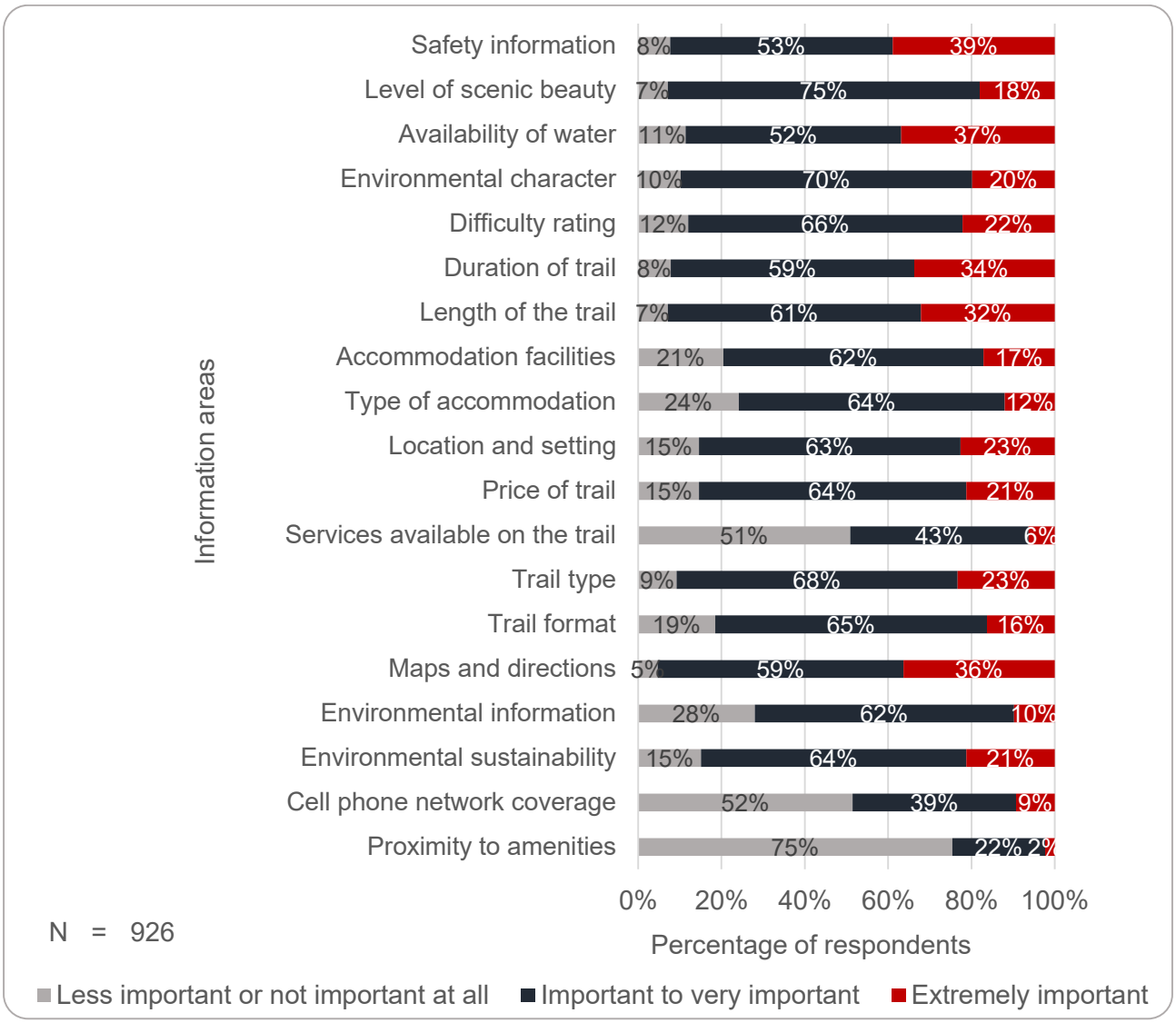
Literature has shown that tourists conduct pre-trip information searches to help improve decision making and eliminate unnecessary risks (Hales & Shams, 1991:9; Maser & Weiermair, 1998:107). Accreditation plays a significant role in supplying credible information to the tourist, and in so doing, establishing trust between tourist and supplier. It is therefore of value to establish which key information areas play a role in hikers' decision making and the level of importance of each. Further to this, the importance of an accreditation system in hikers' decision making may be influenced by hikers' needs for information. The section is divided into three sub-sections: information needs, sources of information, and the role of information in future behaviour. The first sub-section starts off by presenting the scores of the individual information items in terms of importance and then looks at the importance of safety-related and difficulty level information amongst different hiker groups. The sub-section then proceeds with an exploratory factor analysis to determine the dimensionality of the scale; followed by determining the importance levels of the emerging factors amongst different hiker groups. Lastly, additional information needs are mentioned. The last sub-section explores the influence of trustworthy information on future decisions to hike amongst different hiker groups.

6.6.1 INFORMATION NEEDS IN DECISION MAKING

6.6.1.1 Importance of individual information items

The key pieces of information needed for decision making were investigated by asking respondents to rate the importance of each of 19 areas on a five-point Likert scale (1=Not important at all; 2=Less important; 3=Important; 4=Very important; 5=Extremely important). Categories were again recoded into 'less important to not important at all' =1; 'important to very important' = 2, and 'extremely important' = 3. The results from this question are summarised in Figure 25.

Figure 25: Important information when deciding on which trails to hike



With the exception of 3 areas, respondents rated all of the information items as important to very important. Judging by the percentage of respondents who rated the items as important to extremely important, the key information determinants for decision making were maps and directions, length of the trail (distance), level of scenic beauty that can be expected, safety information, duration of the trail (hours/days), trail type (ramble/day walk/overnight trail/long distance) and environmental character (pristine/natural/rural/semi-urban). Looking at the percentage of respondents who rated an item as extremely important, the most critical pieces of information were safety information (39%), availability of water (37%), maps and directions (36%), duration of the trail (34%) and length of the trail (32%).

Reverting back to the original coding (1 = not important at all; 5 = extremely important), Table 12 shows the median, mode and the % of respondents who rated each of the information items as very important and extremely important. Using the median as a measure of central tendency is useful in ordinal data (Leedy & Ormrod, 2014:298; Saunders *et al*., 2012:504). The median represents the middle value of the set of data, separating the top 50% of data points from the bottom 50%. The mode, on the other hand is the category with the largest frequency. Unlike the mean, the mode and median cannot be influenced by outliers (Sirkin, 1999:97). Using the mode, one can conclude that more respondents chose to rate the following information items as extremely important (5): Safety information, availability of water on the trail, the duration of the trail as well as maps and directions. The level of scenic beauty, environmental character, length of the trail and accommodation facilities were rated as very important (4) by most.

Table 12: Important information when deciding on which trails to hike

Information area	Median	Mode	% respondents rating 3, 4 or 5
Safety information	4	**5**	92%
Level of scenic beauty	4	**4**	93%
Availability of water	4	**5**	89%
Environmental character	4	**4**	90%
Difficulty grading	4	3	88%
Duration of trail	4	**5**	92%
Length of the trail	4	**4**	93%
Accommodation facilities	3	**4**	80%
Type of accommodation	3	3	76%
Location and setting	4	3	85%
Price of trail	4	3	85%
Services available on the trail	2	2	49%
Trail type	4	3	91%
Trail format	3	3	82%
Maps and directions	4	**5**	95%
Environmental information	3	3	72%
Environmental sustainability	3	3	85%
Cell phone network coverage	2	2	49%
Proximity to amenities	2	2	25%

6.6.1.2 *The importance of safety-related and difficulty level information for different hiker groups*

To test the assumption that safety information was regarded as very important to hikers overall, a Binomial test was performed at a significance level of 5% to reject or not reject the null hypothesis:

H_0: The proportion of hikers rating safety information as either very important or extremely important is 50%.
H_3: The proportion of hikers rating safety information as very important or extremely important is not equal to 50%.

Hikers were grouped into two categories. Those who answered 1, 2 or 3 were placed in Category 1 while those rating safety information as either very important or extremely important (and thus answering a 4 or 5), formed part of Category 2. The two-tailed *p-value*, observed in Table 13, suggests that the null hypothesis is rejected at a level of 5% of significance and can also be rejected on a 1% significance level ($p<0.001$). We further observe that the proportion of hikers who regard safety information as either very important or extremely important is significantly more than the rest. Hikers thus regard safety information as either a very or extremely important piece of information to have when deciding on which trails to hike.

Table 13: The proportion of hikers rating safety information as very important

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Group 1	1.00	331	.36	0.5	**.000**
Group 2	2.00	595	.64		
Total		926	1.00		

Note: Significant differences indicated in bold

Infrequent hikers, not having acquired the skills set of those hiking frequently, may regard safety information are more important as they depend less on their past experiences and more on information to assess whether the trail should be embarked on and to make the appropriate preparations for the trip. To test whether this phenomenon was present in the sample, the null and alternative hypotheses were formulated as:

H_0: There is no difference between frequent and infrequent hikers with regards to the importance of safety information.
H_4: There is a difference between frequent and infrequent hikers with regards to the importance of safety information.

The trail difficulty level is another area where differences in the level of importance between frequent and infrequent hikers could be present, due to differences in the level of skills between the two groups which may result in infrequent hikers being more selective in their choice based on difficulty levels. To test this assumption, the hypothesis was formulated as:

H_0: There is no difference between frequent and infrequent hikers with regards to the importance of the trail difficulty level information.
H_5: There is a difference between frequent and infrequent hikers with regards to the importance of the trail difficulty level information.

For both hypotheses regarding the importance of information amongst frequent and infrequent hikers, the Mann-Whitney test was performed with a 5% level of significance. Table 14 provides a summary of the results of both tests.

Table 14: The importance of information regarding safety and trail difficulty level

	Safety			Trail difficulty		
Group	**N**	**Mean Rank**	**Sum of Ranks.**	**N**	**Mean Rank**	**Sum of Ranks.**
Infrequent	540	455.94	246206.5	540	449.70	242840.50
Frequent	351	430.71	151179.5	351	440.30	154545.50
Total	891			891		
Test Statistics			**H_4: Safety**			**H_5: Trail difficulty**
Mann Whitney U			89403.50			92769.500
Wilcoxon W			151179.5			154545.500
Z			-1.505			-.557
Asymp. Sig. (2-tailed)			.132			.577

The results indicated that no statistically significant differences exist in the importance of safety and trail difficulty information amongst frequent and infrequent hikers (*p=0.132* and *p=0.577* respectively). Though not significant, the mean ranks indicate that infrequent hikers tend to place a greater importance on safety information and trail difficulty information (mean ranks = 455.94 and 449.70 respectively) than frequent hikers (mean ranks = 430.71 and 440.30 respectively).

6.6.1.3 Exploratory factor analysis of the information needs scale

Exploratory factor analysis was subsequently performed using the maximum likelihood estimation method (ML) to group variables of information needs with similar underlying

structures into factors. Both the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.887) which is above the recommended threshold of 0.5 and the Bartlett's Test of Sphericity which is statistically significant ($p<0.05$), indicated that a factor analysis is appropriate.

The analysis identified five factors with eigenvalues greater than 1 from the original 19 information variables. The five factors explained 63.9% of the total variance explained. Table 15 illustrates the result of a maximum likelihood extraction using oblimin rotation with Kaiser Normalisation to identify the underlying dimensions of the information variables of importance to hikers during decision making.

Two cases of double loadings (Q14l and Q14o) occurred. The conceptual relevance of each of these two items were considered and based on that, items were placed with factors that it related to the most. The loading of Q14a was below the threshold value of 0.3 and Q14a was not consider further. The five factors with their new labels are indicated below.

Factor 1 = *Effort*:

- Difficulty grading
- Duration of trail
- Length of trail
- Trail type

Factor 2 = *Remoteness*:

- Cell phone network coverage
- Proximity to amenities

Factor 3 = *Responsible management*:

- Maps and directions for getting to the destination
- Environmental information
- Environmental sustainability

Factor 4 = *Attractiveness*:

- Level of scenic beauty
- Environmental character (pristine, natural, rural, semi-urban)

Factor 5 = *Accommodation & services*:

- Availability of water
- Accommodation facilities
- Type of accommodation
- Location and setting
- Price of trail
- Services available on the trail
- Trail format

Table 15: Final factor loadings of information needs scale

	Factor					Description of item
	1	2	3	4	5	
Q14f	**.909**					Duration of trail
Q14g	**.908**					Length of trail
Q14e	**.590**					Difficulty grading
Q14m	**.403**					Trail type
Q14s		**.806**				Cell phone network coverage
Q14r		**.698**				Proximity to amenities
Q14a						Safety information
Q14p			**.811**			Environmental information
Q14q			**.754**			Environmental sustainability
Q14o	.319		**.329**			Maps and directions for getting to the destination
Q14b				**.702**		Level of scenic beauty
Q14d				**.675**		Environmental character (pristine, natural, rural, semi-urban)
Q14i					**-.937**	Type of accommodation
Q14h					**-.819**	Accommodation facilities
Q14l			.328		**-.499**	Services available on the trail
Q14j					**-.437**	Location and setting
Q14n					**-.304**	Trail format
Q14k					**-.303**	Price of trail
Q14c					**-.499**	Availability of water

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 12 iterations.

Cronbach alpha values were calculated for each of the five factors to test the internal consistency of items (see Table 16).

Table 16: Internal consistency of information needs scale factors

Item	Corrected Item-Total Correlation	Cronbach's alpha if Item Deleted
Factor 1 – Effort (Cronbach's alpha for all items = 0.844)		
Difficulty grading (Q14e)	.605	.836
Duration of trail (Q14f)	.780	.758
Length of trail (Q14g)	.779	.760
Trail type (Q14m)	.570	.849
Factor 2 – Remoteness (Cronbach's alpha for all items = 0.746)		
Cell phone network coverage (Q14r)	.607	
Proximity to amenities (Q14s)	.607	
Factor 3 – Responsible management (Cronbach's alpha for all items = 0.701)		
Maps and directions for getting to the destination (Q14o)	.384	.760
Environmental information (Q14p)	.617	.477
Environmental sustainability (Q14q)	.568	.544
Factor 4 – Attractiveness (Cronbach's alpha for all items = 0.655)		
Level of scenic beauty (Q14b)	.489	
Environmental character (Q14d)	.489	
Factor 5 – Accommodation & services (Cronbach's alpha for all items = 0.827)		
Availability of water on the trail (Q14c)	.309	.844
Accommodation facilities (Q14h)	.701	.781
Type of accommodation (Q14i)	.746	.774
Location and setting (Q14j)	.618	.796
Price of trail (Q14k)	.513	.813
Services available on the trail (Q14l)	.581	.802
Trail format (Q14n)	.553	.807

The alpha value for e*ffort* reached 0.844, which is favourable for reliability. Removal of one of the individual items resulted in a higher Cronbach alpha, however the difference is

negligible. The *remoteness* factor yielded a Cronbach alpha value of 0.746 and had no items whose alpha values suggested exclusion from the overall factor. The result of the Cronbach alpha of one item in the *responsible management* factor indicated the overall alpha might be higher in the event of the exclusion of this item. This was the information variable of maps and directions to the location (Q14o). Considering both the fact that this variable conceptually associates well with others included in this factor (Q14p and Q14q) and the fact that the Cronbach alpha was already above the threshold of 0.7, the researcher decided against the removal of the item from the factor. *Attractiveness* scored a Cronbach alpha value somewhat lower than the recommended level. It was decided to not discard the factor completely due to the value approaching the 0.7 threshold (0.655), as well as the fact that values of 0.6 are satisfactory in the case of exploratory studies (Hair, Ringle & Sarstedt, 2011:145) and that lower scores are expected in the case of a limited number of items (Blaikie, 2003:235-235). Lastly, another factor which reached a favourable Cronbach alpha value was that of *accommodation and services* (Cronbach alpha = 0.827). All items suggested internal consistency.

Looking at the descriptive statistics for each of the information factors (displayed in Table 17), some interesting findings emerge:

- Information regarding the *effort* associated with a trail is regarded the most important, followed closely by information regarding the *attractiveness* of the trail.
- Information regarding how remote the trail is (cell phone coverage and proximity to amenities) is regarded the least important information factor.
- Hikers regarded information about the trail *accommodation and services* as less important in relation to the *effort*, *attractiveness* and *responsible management* of trails.

Table 17: Descriptive statistics for each of the five information needs scale factors

	Effort	*Remoteness*	*Responsible management*	*Attractiveness*	*Accommodation & services*
N	926	926	926	926	926
Mean	3.7711	2.2824	3.5313	3.6609	3.3624
Median	3.7500	2.0000	3.6667	3.5000	3.2857
Std. Dev	.80804	.97143	.78142	.78810	.74668

6.6.1.4 Importance of the five factors amongst different hiker groups

It has so far been established that there are no differences in the importance of safety and trail difficulty information amongst frequent and infrequent hikers. To test whether there exist significance differences in the importance placed on each of the information factors between frequent and infrequent hikers, the rated means per information factor are displayed in Table 18 and indicate that differences are present.

Table 18: The importance of the five information needs scale factors – comparing frequent and infrequent hikers

Information factor	Hiker category	N	Mean
Effort	Infrequent	540	3.80
	Frequent	351	3.75
Remoteness	Infrequent	540	2.32
	Frequent	351	2.20
Responsible management	Infrequent	540	3.57
	Frequent	351	3.47
Attractiveness	Infrequent	540	3.68
	Frequent	351	3.63
Accommodation & services	Infrequent	540	3.43
	Frequent	351	3.27

The following was subsequently tested:

H_0: There is no difference between frequent and infrequent hikers with regards to the importance of the information factors.
H_6: There is a difference between frequent and infrequent hikers with regards to the importance of the information factors.

T-tests were performed for each of the factors to indicate statistical significant differences between the means of the two independent samples (frequent and infrequent hikers). Table 19 shows the results of the Levene's test for equality of variances followed by the results from the *t*-tests for each factor.
For three of the information factors (*Remoteness, responsible management and accommodation & services*), a significant difference exists between the mean rankings of frequent and infrequent hikers on a 10% level of significance (*p-values 0.063; 0.070; 0.002* respectively). Referring back to Table 18, it can be concluded that infrequent hikers regard the following information factors as significantly more important in decision making than frequent hikers:

1. *Remoteness* – concerned with cell phone network reach and proximity to amenities.
2. *Responsible management* – reliable maps, environmental sustainable management and environmental information.
3. *Accommodation & services* – availability of water on the trail, accommodation facilities, type of accommodation, location and setting, price of trail, services available on the trail and trail format.

Table 19: The importance of five information factors by frequency levels

	Equal variances assumed or not	Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff	Std. Error Diff
Effort	Assumed	3.026	.082	.829	889	.408	.04562	.05506
	Not assumed			.819	716.918	.413	.04562	.05573
Remoteness	Assumed	.526	.469	1.865	889	**.063**	.12372	.06634
	Not assumed			1.867	750.661	.062	.12372	.06627
Responsible management	Assumed	.411	.521	1.812	889	**.070**	.09753	.05383
	Not assumed			1.788	714.565	.074	.09753	.05454
Attractiveness	Assumed	1.003	.317	1.027	889	.305	.05513	.05369
	Not assumed			1.013	713.774	.311	.05513	.05441
Accommodation & services	Assumed	3.597	.058	3.217	889	.001	.16323	.05074
	Not assumed			3.150	694.713	**.002**	.16323	.05182

Note: Significant differences indicated in bold

6.6.1.5 *Other information needs*

An opportunity was also provided to respondents for mentioning any other information areas they regard as important in decision making, which were not listed. The areas that were mentioned are categorised in Table 20.

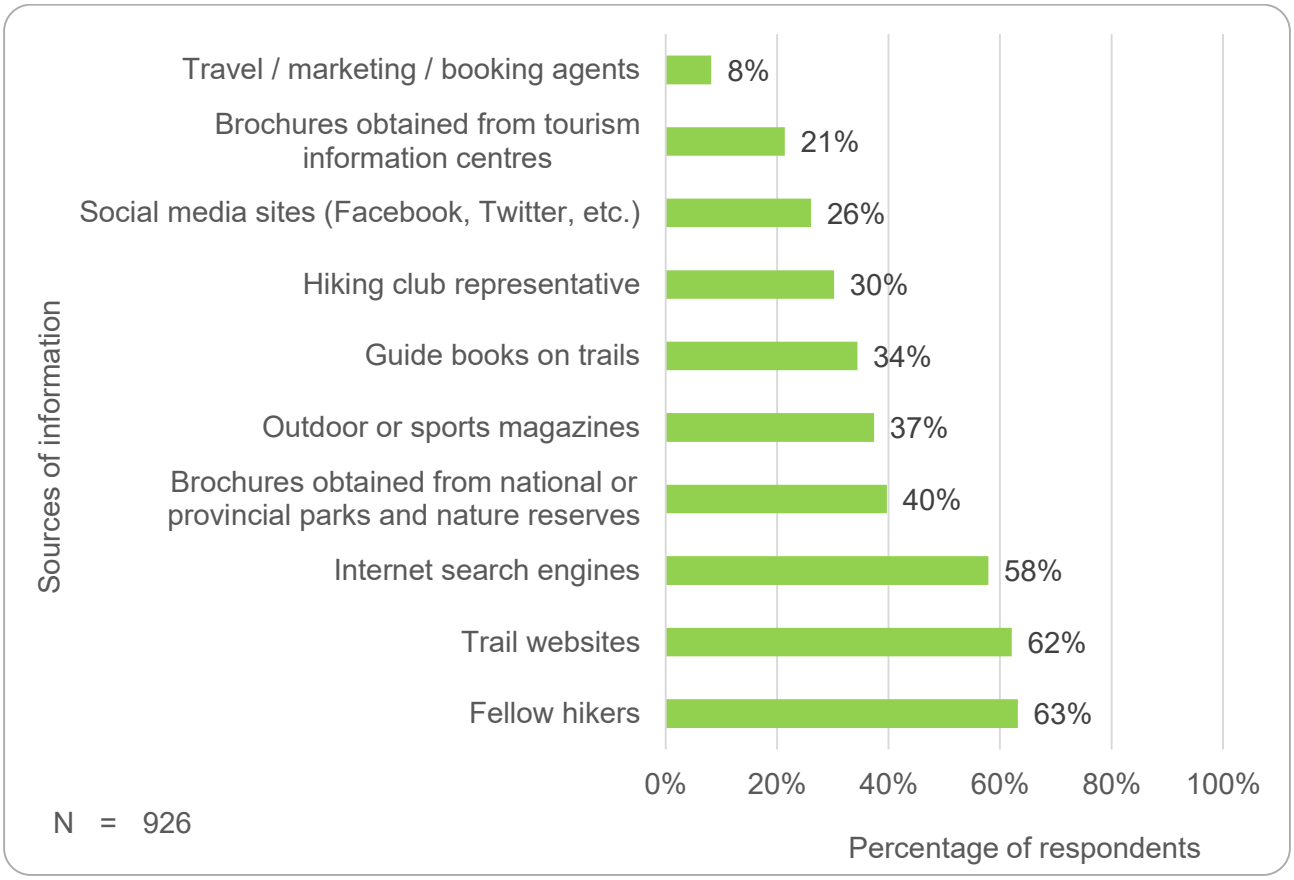
Table 20: Other areas of information of importance to hikers in decision making

Category	Information areas
Facilities	Availability of • Clean ablutions; • water at the huts and • swimming facilities;
Directional	GPS coordinates of the trail.
Trail attributes	Height of the climb from lowest to highest point; whether rock scrambling is involved; trail exposure to heights; level of remoteness of the trail; suitability for children; proper trail markings; noise pollution; considerations related to seasonal changes.
Emergency procedures	Hazardous conditions to take note of; access and proximity to medical services; exit routes for medical evacuation purposes; availability of emergency numbers.
Informative	Historical, political and spiritual information of the trail or area; booking information; trail popularity.

6.6.2 SOURCES OF INFORMATION

Hikers were asked to select their main sources of information by choosing from a list of 10 options, allowing for multiple selections. Most respondents (81%) said they used between three and seven different sources to gather information about trails (see Figure 26).

Figure 26: Sources of information about trails



The most popular sources of information about trails are displayed in Figure 31. They include: Fellow hikers (63%), trail websites (62%), and internet search engines (58%). Brochures from national or provincial parks or serves were consulted by 40% of hikers, followed by outdoor or sports magazines (37%) and guide books on trials (34%).

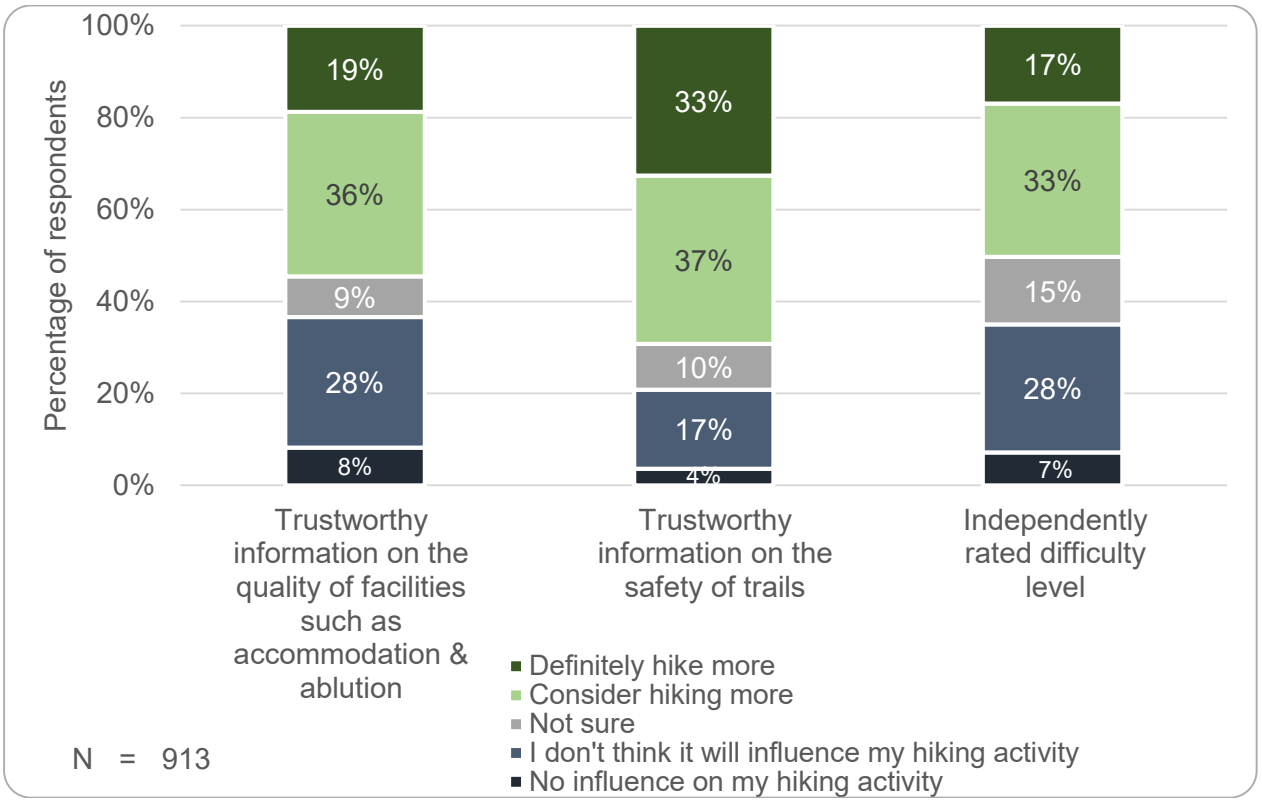
6.6.3 THE INFLUENCE OF TRUSTWORTHY INFORMATION ON FUTURE PURCHASE BEHAVIOUR

In this section, the potential influence of the availability of trustworthy information on three aspects is tested among hikers' and non-hikers' future intentions respectively. In the case of hikers, the intentions being tested are whether hikers' activity levels would change, and to what level of certainty. For the non-hikers, the intentions revolve around whether their decision to hike would change. Three key areas of information were focussed on, namely, the quality of facilities, the safety of trails, and a difficulty level that has been independently graded.

6.6.3.1 ***Hikers***

Figure 27 shows the proportion of hikers likely to increase their hiking activity levels should trustworthy information be available on the three key areas. Of the three measured, the information area which may have the most positive impact on hiking activity levels, is trustworthy information about the safety of the trail. A third of hikers reported they will definitely go hiking more, should trustworthy information be available regarding the safety of trails with another 37% saying they would consider it. This corresponds well with the percentage of hikers who disagreed with the statement that hiking in South Africa is safe (29%) and those remaining neutral about the subject (36%). Trustworthy information on the quality of the facilities on the trail showed the second highest potential to influence future hiking activity levels. Almost 20% of hikers would definitely increase their activity levels and a big proportion (36%) said they would consider going hiking more if trustworthy information was available regarding the quality of accommodation and ablution facilities. Fifty percent of hikers would either consider or definitely go hiking more frequently should the difficulty level of trails be independently rated.

Figure 27: Influence of trustworthy information on future purchase behaviour



Each of the three questions was put through tests of significance in order to determine whether the results found were meaningful. Hikers were split into two categories according to the answers provided for each question and the data was recoded. The initial coding was: 1=It would not influence my hiking activity at all; 2=I do not think it will make a difference in my hiking activity; 3=I am not sure; 4=I will consider going hiking more; 5=I would definitely go hiking more. For each of the questions, respondents who answered 1, 2 or 3 were categorised into Category 1 while those who answered 4 or 5 formed Category 2. In essence, Category 1 represents hikers saying the test condition would either have no influence or they were not sure whether it would influence their hiking activity or not. Category 2 represents hikers who said the test condition would either result in them considering going hiking more or definitely hike more. The same hypothesis was formulated for all three test conditions:

H_0: *The proportion of hikers categorised as* Category *2 is 50%.*
$H_{7, 8, 9}$: *The proportion of hikers categorised as* Category *2 is not equal to 50%.*

The results from the Binomial test for all three test conditions (Table 21) reveals two of the three hypotheses statements are rejected ($p=0.007$ and $p<0.001$) at a 1% level of significance.

Table 21: Willingness to increase activity if trustworthy information was available

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
H_7: Information on the facilities (accommodation & ablution)					
Group 1	1.00	415	.45	.50	**.007**
Group 2	2.00	498	.55		
Total		913	1.00		
H_8: Information on the safety of trails					
Group 1	2.00	632	.69	.50	**.000**
Group 2	1.00	281	.31		
Total		913	1.00		
H_9: Information on the difficulty level of trails					
Group 1	1.00	454	.50	.50	.895
Group 2	2.00	459	.50		
Total		913	1.00		

Note: Significant differences indicated in bold

What is further observed from the results in Table 21 is that, in two cases, the proportion of hikers who say they would either consider or definitely go hiking more is significantly greater than those saying it would either have no influence or they were not sure whether it would influence their hiking activity or not. From this we conclude that two types of information (information on the facilities and information on safety of trails) would make a significant difference in future uptake of hiking activities.

A hiker's perception of the conditions of hiking in South Africa may not only influence the level of importance placed on credible information and accreditation systems, but can also affect a hiker's intention of increasing his or her purchases of hiking products in the presence of reliable information. Hikers who regard hiking in South Africa as unsafe, may be more influenced to increase purchasing behaviour if trustworthy information regarding safety was available. To test this assumption, hikers were grouped into 3 categories. Those who strongly disagreed or disagreed with the statement that hiking in South Africa is safe (coded as 1 or 2 on the Likert scale), were categorised as Category 1. Category 2 represented those neither agreeing nor disagreeing with the statement (measured as 3). Those who agreed or strongly agreed that hiking is safe, made up Category 3. The following hypothesis was formulated:

H_0: There is no difference between hikers who agree that hiking is safe (category 3), those who are neutral (category 2) and those who disagree (category 1), with regards to their willingness to increase their activity levels if trustworthy information was available on the safety of trails.
H_{10}: There is a difference between hikers who agree that hiking is safe (category 3), those who are neutral (category 2) and those who disagree (category 1), with regards to their willingness to increase their activity levels if trustworthy information was available on the safety of trails.

Using the non-parametric test of Kruskal-Wallis, the mean ranks of all three categories were calculated and tested for significant differences. The result of the test, performed at a 5% level of significance, is shown in Table 22.

Table 22: Willingness to increase activity if trustworthy safety information was available

Category	N	Mean Rank
1.00	246	455.28
2.00	309	436.19
3.00	306	406.24
Total	861	
Test Statistics		
Chi-Square		35.261
df		2
Asymp. Sig.		**.000**

Note: Significant differences indicated in bold

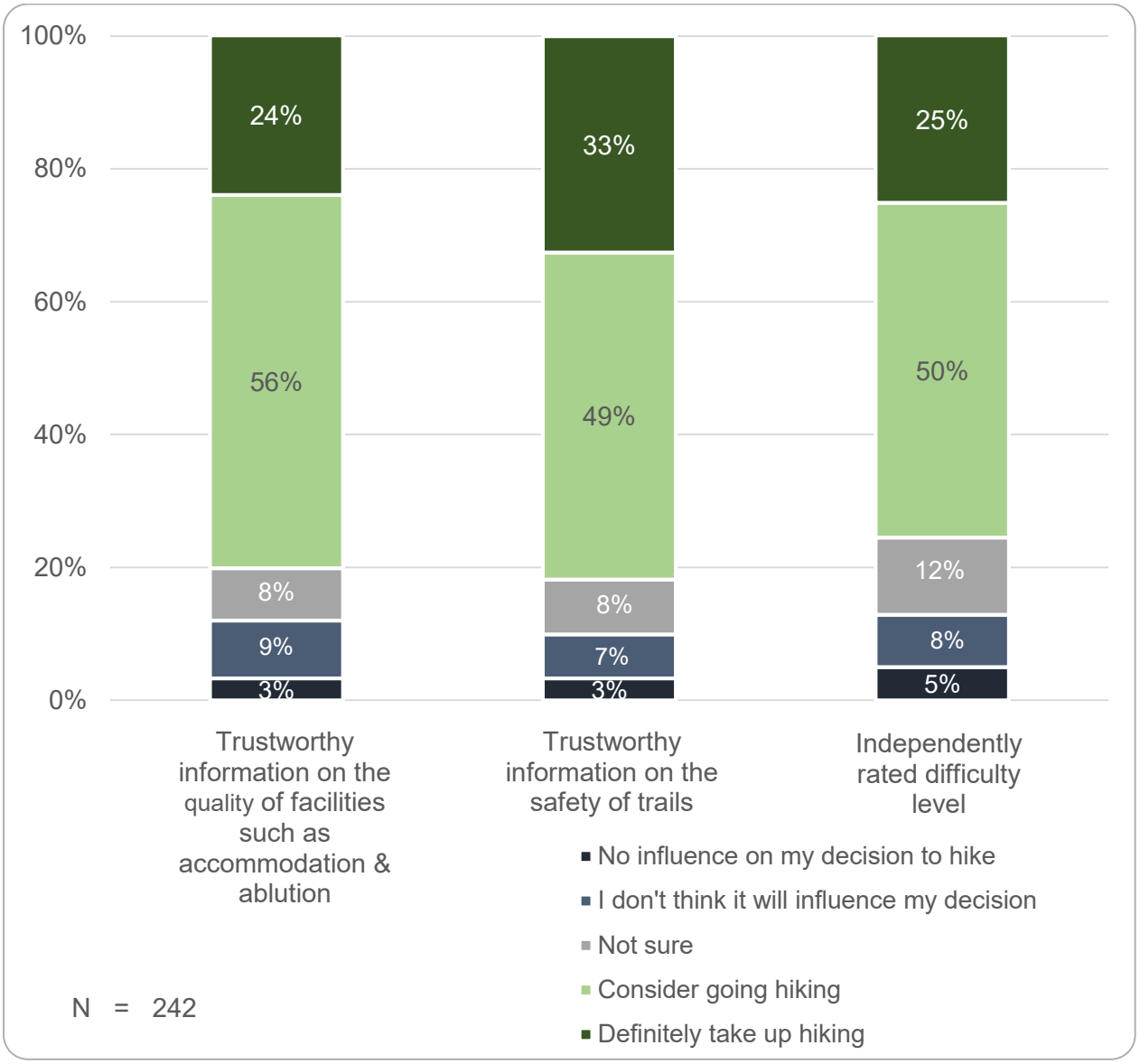
The null hypothesis is rejected on the basis of the *p-value* being less than 0.05 and even less than 0.01 which means it can also be rejected on a 1% level of significance. The results indicate there are significant differences between Category 1, 2 and 3. Studying the mean ranks, we can further conclude that Category 1 hikers (who perceive hiking to be unsafe) tend to have a stronger consideration towards increasing their activity levels. This indicates that the perception of the safety of hiking influences a hiker's intention to act on the availability of credible information regarding safety.

6.6.3.2 Non-hikers

Of the three information areas measured, the area most likely to change a non-hiker's decision regarding hiking, is the availability of trustworthy information about the safety of the trail (see Figure 28). This is not surprising considering almost half of non-hikers ranked safety as one of their top five reasons for not considering overnight hiking. A total of 33% of non-hikers said they would definitely take up hiking if information regarding safety on trails were trustworthy. Another 49% said they would consider going hiking if this was the case. Figure 28 shows that for all three information areas, three quarters or more respondents would either consider hiking or definitely get involved in hiking if trustworthy information was available on the area in question. The majority of non-hikers (56%) said they would consider changing their minds if trustworthy information on the quality of facilities was available, while an additional 24% of non-hikers reported they would definitely change their decision regarding hiking. Similarly, the independent grading of the difficulty of trails could help

persuade 50% of non-hikers to become hikers, while a strong 25% were already convinced it would be enough to convert them into hikers.

Figure 28: Influence of trustworthy information on decision making amongst non-hikers



The results from the questions regarding trustworthy information were tested for significance by grouping respondents into two categories based on their answers provided for each question. The initial coding used was: 1=It would not influence my decision at all; 2=I do not think it will make a difference in my decision; 3=I am not sure; 4=I will consider taking up hiking; 5=I would definitely take up hiking.

Non-hikers who selected 4 or 5 constitute Category 2, while non-hikers answering 1, 2 or 3 were categorised into Category 1. Category 2 therefore represents non-hikers saying the test condition would either result in them considering going hiking or result in them definitely taking up hiking. The same hypothesis was formulated for all three test conditions:

H_0: The proportion of non-hikers categorised as Category *2 is 50%.*
$H_{11,12,13}$: The proportion of non-hikers categorised as Category *2 is not equal to 50%.*

Table 23 provides a summary of the Binomial test results for all three test conditions, performed at a significance level of 5%. In all three cases significant *p-values* were reported (not only at 5% but also at the 1% level of significance), indicating that the observed proportions of non-hikers who say they would either consider or definitely take up hiking is significantly greater than those saying it would either make no difference or they were not sure whether it would influence their decision to hike or not. From the results, it can be concluded that the availability of credible information on these three aspects could result in non-hikers considering or becoming willing to start hiking.

Table 23: Consideration towards hiking if trustworthy information was available

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
H_{11}: Information on the facilities (accommodation & ablution)					
Group 1	2.00	194	.80	.50	**.000**
Group 2	1.00	48	.20		
Total		242	1.00		
H_{12}:Information on the safety of trails					
Group 1	2.00	198	.82	.50	**.000**
Group 2	1.00	44	.18		
Total		242	1.00		
H_{13}: Information on the difficulty level of trails					
Group 1	2.00	198	.82	.50	**.000**
Group 2	1.00	44	.18		
Total		242	1.00		

Note: Significant differences indicated in bold

Respondents who ranked safety as one of their main constraints to hiking display greater tendencies to alter their decision regarding hiking. To test this, non-hikers were grouped into 2 categories. Those who ranked safety as one of their top five constraints (thus ranking it 1 – 5) were categorised as Category 1. Those who assigned a ranking of 6 or greater to the safety concern, were categorised as Category 0. Table 24 represents the cross tabulation of safety rated as a top five constraint and non-hikers' willingness to consider taking up hiking.

Table 24: Cross tabulation of consideration of hiking

			Willingness to take up hiking if trustworthy information about safety of trails was available					Total
			1	2	3	4	5	
Safety rated as a top 5 constraint	0	Count	2	3	7	12	2	26
	1	Count	1	1	4	14	3	23
Total		Count	3	4	11	26	5	49

The following hypothesis was formulated:

H_0: There is no association between non-hikers safety concerns and their consideration towards hiking if trustworthy information was available on the safety of trails
H_{14}: There is an association between non-hikers safety concerns and their consideration towards hiking if trustworthy information was available on the safety of trails

Using the non-parametric test of Pearson Chi-Square, Table 25 indicates no significant difference between the two groups (*$p=0.675$*). Non-hikers who perceive hiking to be an unsafe activity, for whatever reason(s), do not necessarily show a greater willingness to consider hiking, should credible information on the safety of trails be available. This could perhaps be attributed to the fact that the size of the group tested became too small for significant differences to emerge (n=49).

Table 25: Consideration of hiking in the case of safety being a main constraint

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.330[a]	4	.675
N of Valid Cases	49		

a. 6 cells (60,0%) have expected count less than 5. The minimum expected count is 1,41.

6.7 ACCREDITATION'S INFLUENCE ON DECISION MAKING AND FUTURE PURCHASE BEHAVIOUR

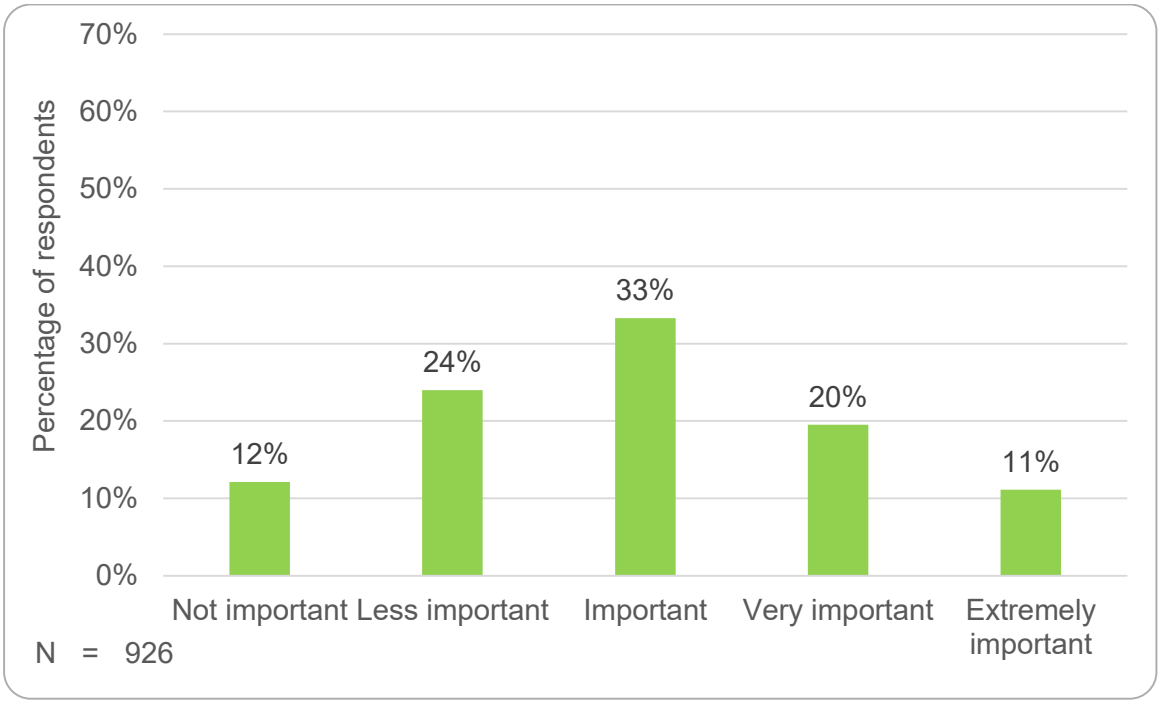
This section addresses Objectives 6 and 7 of the study and collectively represents the influence of an accreditation system on both the decision making and the future purchase behaviour of consumers in the context of hiking tourism. For achieving Objective 7 of the study, respondents were presented with a graphical representation (see Figure 7) of the key information points provided by a trail accreditation system, that of the case study of the Green Flag Accreditation System (Green Flag). Respondents were asked to rate how their current hiking activity levels (or lack thereof) would change (if at all) if all trails in South Africa were accredited and a trustworthy description of trail attributes were available such as in the example provided. Prior to presenting respondents with the key information outcomes of Green Flag, hikers' perceptions of the importance of trail accreditation in their decision making were measured to determine the need for such a system in general. Willingness to pay (WTP) was also measured to determine whether accreditation's influence may result in actual monetary commitments from hikers.

6.7.1 PERCEIVED IMPORTANCE OF ACCREDITATION DURING DECISION MAKING

Understanding the perceived level of importance of accreditation in decision making about trails provides a baseline for determining the need of an accreditation system in hiking tourism. The majority of hikers (64%) regard independent trail accreditation as important to extremely important when deciding on which trails to hike (shown in Figure 29). Almost a

third of hikers (31%) view it as a very important to extremely important consideration in decision making.

Figure 29: Importance of independent accreditation in decision making



The level of importance of accreditation to hikers was tested for significance. Hikers were split into two categories according to the answers provided for each question. The following initial coding was used: 1=Not important at all; 2=Less important; 3=Important; 4=Very important; 5=Extremely important. Hikers who answered 1 or 2 were categorised into Category 1 while those who answered 3, 4 or 5 formed Category 2. Category 2 represents hikers who rated accreditation as either important, very important or extremely important. The following hypothesis was formulated:

H_0: The proportion of hikers who regard accreditation as important, very important or extremely important (Category 2) is 50%.
H_{15}: The proportion of hikers who regard accreditation as important, very important or extremely important (Category 2) is not equal to 50%.

Binomial test was performed at a significance level of 5%.

Table 26: The level of importance of accreditation amongst hikers

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Group 1	1.00	334	.36	.50	**.000**
Group 2	2.00	592	.64		
Total		926	1.00		

Note: Significant differences indicated in bold

As seen from Table 26, the null hypothesis is rejected ($p<0.01$), on a 1% significance level. We conclude that hikers perceive accreditation systems as important, very important or extremely important in decision making. A number of factors could play a role in hiker's perception of the importance of accreditation. These include demographic variables, perception about the hiking conditions in South Africa as well as purchasing behaviour (such as activity levels and booking methods used).

6.7.2 FACTORS PLAYING A ROLE IN THE PERCEIVED IMPORTANCE OF ACCREDITATION

6.7.2.1 Frequency of hiking activity

To test whether the importance of accreditation is influenced by a hiker's frequency of hiking, a cross tabulation was done to determine if such a relationship emerged from the data. The results of the cross tabulation is seen in Table 27.

Table 27: Cross tabulation of importance of accreditation by frequency

			Importance of accreditation		
Hiking activity levels			**Not important or of little importance**	**Important to extremely important**	**Total**
	Infrequent	Count	174	150	324
	Frequent	Count	366	201	567
		Total	540	351	891

To test whether the differences witnessed per category was significant, the following hypothesis was formulated:

H_0: There is no association between hiking activity levels and the level of importance of accreditation.
H_{16}: There is an association between hiking activity levels and the level of importance of accreditation.

Using the non-parametric test of Pearson Chi-Square at a 5% level of significance, the null hypothesis is rejected on the basis of the results shown in Table 28 (*p=0.001*). The null hypothesis may also be rejected on a 1% significance level.

Table 28: Association between importance of accreditation and frequency of hiking

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.160[a]	1	**.001**
N of Valid Cases	891		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 127.64.

b. Computed only for a 2x2 table

Note: Significant differences indicated in bold

We therefore conclude that the importance of accreditation is higher amongst infrequent hikers than frequent hikers (hiking six or more trails per year).

6.7.1.2 Perceptions about the safety of hiking

Hikers' beliefs about the safety of hiking in South Africa can result in a greater demand for the independent accreditation of trails. It is argued that those who disagree that hiking in South Africa is safe, place a greater importance on accreditation of trails. To test this concept, the following hypothesis was put through the non-parametric test of Kruskal-Wallis, at a 10% significance level:

H_0: There is no difference between Category 1, Category 2 and Category 3 with regards to the level of importance of accreditation.
H_{17}: There is a difference between Category 1, Category 2 and Category 3 with regards to the level of importance of accreditation.

Those who strongly disagreed or disagreed with the statement that hiking in South Africa is safe (coded as 1 or 2 on the Likert scale), were categorised as Category 1. Category 2 represented those neither agreeing nor disagreeing with the statement (measured as 3). Those who agreed or strongly agreed that hiking is safe, made up Category 3.
The mean ranks of all three categories were calculated and tested for significant differences. The result of the test is shown in Table 29.

Table 29: Importance of accreditation and the perception regarding safety

Category	N	Mean Rank
1.00	246	455.28
2.00	309	436.19
3.00	306	406.24
Total	861	
Test Statistics		
Chi-Square		5.879
df		2
Asymp. Sig.		**.053**

Note: Significant differences indicated in bold

Based on the *p-value* reaching a value below 0.1, the null hypothesis can be rejected on a 10% level of significance. From this, we can conclude that the perception of the safety of trails has an influence on the importance placed on the accreditation of trails. It would appear as if hikers who regard hiking in South Africa as less safe, place a greater value on the accreditation of trails.

6.7.1.3 Club membership

Hikers belonging to an organised hiking club often make only a limited contribution towards the decision regarding which trails to include in the club's annual program. Although this is not the case with all clubs, generally, the decision is often the responsibility of a smaller group of leaders within the club. Individual members are therefore not expected to examine and assess important criteria elements of a trail to determine its suitability. A lot of the preparation with regards to the collection of information is therefore done by only a handful of decision makers from within the group.

The cross tabulation of club membership and importance of accreditation is presented in Table 30.

Table 30: Cross tabulation of importance of accreditation by club membership

			Importance of accreditation		
Club membership			**Not important or of little importance**	**Important to extremely important**	**Total**
	Non-club member	Count	174	150	324
	Club member	Count	366	201	567
		Total	540	351	891

To determine whether club members have a different perception of accreditation than non-club members, the following hypothesis was phrased:

H_0: There is no association between the level of importance of accreditation amongst club hikers and non-club hikers.
H_{18}: There is an association between the level of importance of accreditation amongst club hikers and non-club hikers.

The non-parametric test of Pearson Chi-Square at a 5% level of significance was performed. The results thereof are shown in Table 31.

Table 31: Association between importance of accreditation and club membership

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.286	1	.593
N of Valid Cases	891		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 146.18.

b. Computed only for a 2x2 table

Note: Significant differences indicated in bold

The two-tailed test result indicates a *p-value* of greater than 0.05. We do not reject the null hypothesis and conclude that no statistical significant difference between the importance of accreditation amongst hikers belonging to a club and those who do not.

6.7.1.4 Preferred booking channel

To test whether a difference can be found in the importance of accreditation amongst those who book directly through trail owners versus those who do not, the hypothesis was stated as:

H_0: There is no association between the perceived level of importance of accreditation amongst hikers who book directly with trail owners and those who do not.
H_{19}: There is an association between the perceived level of importance of accreditation amongst hikers who book directly with trail owners and those who do not.

Firstly, we observe from the cross tabulation in Table 32 that, of those hikers who book directly through trail owners, a far bigger proportion rated accreditation as important compared to those who do not.

Table 32: Cross tabulation of the importance of accreditation by booking channel used

	Hikers who book directly through trail owners	Hikers who do not book directly through trail owners	Total
Accreditation rated as not important or of little importance	88	246	334
Accreditation rated as important, very important or extremely important	232	360	592
Total	320	606	926

The non-parametric test of Pearson Chi-Square at a 5% level of significance was performed to test whether significant differences existed between these proportions.

Table 33: Importance of accreditation by booking channel used

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.571[a]	1	**.000**
N of Valid Cases	926		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 115.42.

b. Computed only for a 2x2 table

Note: Significant differences indicated in bold

The result of the Pearson Chi-square produces a *p-value* of less than 0.05 (see Table 33) and on that basis, we reject the null hypothesis. The null hypothesis may also be rejected on a 1% level of significance. An inspection of the differences between the actual frequencies (Table 32) indicates that the proportion of hikers who book directly with trail owners and rated accreditation as important was greater than the proportion who rated accreditation as of no or little importance. Hikers who do not make use of third parties may require more information, thus placing more value on an accreditation system.

6.7.1.5 Information needs factors

To test the assumption that a relationship exists between the importance of information needs factors and the value placed on accreditation, the sample mean of the information factors between each rated level of importance of accreditation was investigated for

significant differences. To perform this test, the five factors identified during the exploratory factor analysis (see section 6.6.1) were used. They are: *effort*, *remoteness, responsible management, attractiveness, accommodation & services*. Table 34 outlines the sample means of the importance of each of the five information needs factors, categorised by the different levels of importance of accreditation.

Table 34: The importance of the five information needs factors, per level of importance of accreditation

Importance of information needs factor	Levels of importance of accreditation					
		Not important at all	Of little importance	Important	Very important	Extremely important
Effort	Mean	3.4442	3.5845	3.7979	3.9282	4.1723
Remoteness	Mean	1.7545	2.0721	2.2711	2.5055	2.9515
Responsible management	Mean	3.0982	3.3468	3.5130	3.7753	4.0259
Attractiveness	Mean	3.5045	3.5676	3.6510	3.7017	3.9903
Accommodation & services	Mean	2.9171	3.2124	3.3636	3.5714	3.7989
N		112	222	308	181	103

From Table 34 it is obvious that much higher values of means were achieved for the very important and extremely important categories of accreditation importance compared to the categories of little and no importance. To test whether these differences were meaningful, the following hypotheses were formulated for each information factor:

H_0: There are no differences between hiker groups with differing views of the importance of accreditation when it comes to the importance of each of the five information factors.
H_{20}: There are differences between hiker groups with differing views of the importance of accreditation when it comes to the importance of each of the five information factors.

Each of the information needs factors were then tested for significant differences in the rated means per level of importance of accreditation, using oneway ANOVA tests. Table 35

represents the results for each test. The test was performed at a 5% level of significance for all information factors.

Table 35: The role of the information factors in the importance of accreditation

		Sum of Squares	df	Mean Square	F	Sig.
Effort	Between Groups	40.971	4	10.243	16.756	**.000**
	Within Groups	562.994	921	.611		
	Total	603.964	925			
Remoteness	Between Groups	96.194	4	24.048	28.516	**.000**
	Within Groups	776.709	921	.843		
	Total	872.903	925			
Responsible management	Between Groups	64.637	4	16.159	29.755	**.000**
	Within Groups	500.177	921	.543		
	Total	564.814	925			
Attractiveness	Between Groups	16.181	4	4.045	6.673	**.000**
	Within Groups	558.344	921	.606		
	Total	574.525	925			
Accommodation & services	Between Groups	54.740	4	13.685	27.342	**.000**
	Within Groups	460.979	921	.501		
	Total	515.719	925			

Note: Significant differences indicated in bold

For each of the five information factors tested above, the results from the *p-value* suggests significant differences were found in the sample means during the oneway ANOVA (all *p-values* <0.05 and even <0.01, making it highly significant on a 1% level). Table 34, illustrating

the actual means per level of importance of accreditation, confirms that more positive opinions about the value of accreditation can be observed with higher levels of the importance of information factors.

A summary of the key factors influencing the perceived importance of accreditation amongst hikers is provided in Table 36.

Table 36: Factors tested for influencing the importance of accreditation

Factor	*Test statistic*		H_0 rejected or not
Activity levels	$\chi^2 = 10.160$***		Rejected
Club membership	$\chi^2 = 0.286$		Not rejected
Perception of safety of hiking	$\chi^2 = 5.879$*		Rejected
Booking directly with a trail owner	$\chi^2 = 15.571$*		Rejected
Information needs factors	*effort*	F = 16.756***	Rejected
	remoteness	F = 28.516***	Rejected
	responsible management	F = 29.755***	Rejected
	attractiveness	F = 6.673***	Rejected
	accommodation & services	F = 27.342***	Rejected

*** Significant at 1%
** Significant at 5%
* Significant at 10%

The following factors have thus been found to influence a hiker's perception of the importance of accreditation during decision making:

- A hiker's activity levels
- A hiker's perceptions of the safety of hiking
- Booking directly with trail owners
- A hiker's perceived importance of the five information needs factors representing information on the *effort* of the trail, *remoteness* of the trail, *responsible management* of the trail, *attractiveness* of the trail and the *accommodation and services* available on the trail.

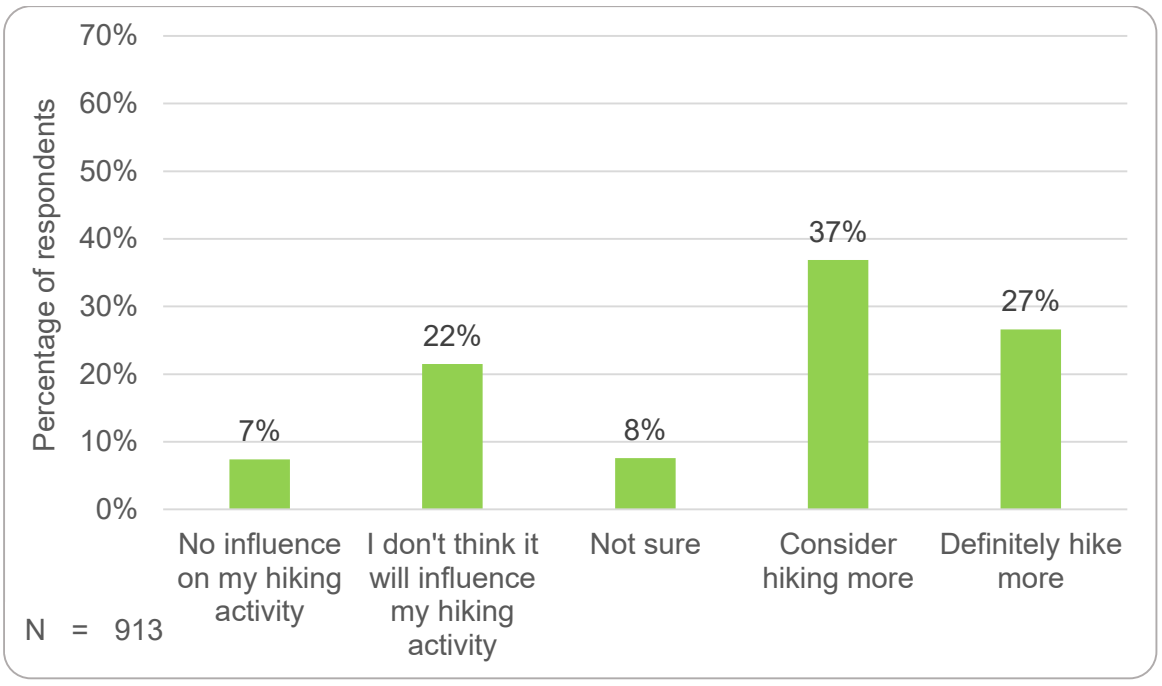
6.7.3 POTENTIAL INFLUENCE OF ACCREDITATION ON FUTURE PURCHASE BEHAVIOUR

6.7.3.1 Hikers

Two aspects are investigated in this section. Firstly, whether accreditation would increase future hiking activity and secondly, whether the importance assigned to the various information factors (Table 34) would increase future hiking activity.

As seen in Figure 30, 64% of hikers reported trail accreditation would likely positively influence their current hiking buying behaviour, either by considering embarking on more frequent hiking experiences or actually intending on doing so. More than a quarter (27%) said a widespread presence of trail accreditation would lead to an increase of their buying of hiking tourism products, while 37% would consider increasing the purchase of hiking tourism products. Less than 10% of hikers were certain accreditation would have no influence on their current hiking activity levels.

Figure 30: Influence of accreditation on future purchase behaviour of hikers



To test whether the country-wide implementation of an accreditation system would influence hikers' future purchase behaviour (in particular their intention to increase activity levels),

hikers were split into two categories according to the answers provided for each question. The following coding was used: 1=It would not influence my hiking activity at all; 2=I do not think it will make a difference in my hiking activity; 3=I am not sure; 4=I will consider going hiking more; 5=I would definitely go hiking more. For each of the questions, respondents who answered 1, 2 or 3 were categorised into Category 1 while those who answered 4 or 5 formed Category 2. In essence, Category 1 represents hikers saying accreditation would either have no influence or who were not sure whether it would influence their hiking activity or not. Category 2 represents hikers who said accreditation would either result in them considering going hiking more or definitely hike more. The following hypothesis was tested using a Binomial test at a 5% level of significance.

H_0: The proportion of hikers grouped as Category 2 is 50%.
H_{21}: The proportion of hikers grouped as Category 2 is not equal to 50%.

Table 37: Willingness to increase activity if all trails were accredited

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Group 1	2.00	580	.64	.50	**.000**
Group 2	1.00	333	.36		
Total		913	1.00		

Note: Significant differences indicated in bold

The test results are shown in Table 37 and indicate the *p-value* is less than 0.05 (also <0.01 which indicates significance on a 1% level). The proportion of hikers saying they will either consider increasing or will definitely increase their hiking activity was significantly higher than those who either said accreditation will not make a difference in their decision or those who were not sure whether it would impact their activity levels. Accreditation of trails could therefore positively influence future hiking activity levels.

To understand whether the perceived value of the five information factors played a role in the extent to which hiking activities will increase under the condition of accredited trails, the researcher investigated the sample means of the information factors between each rated category of willingness to increase activity. To perform this test, the five factors identified

during the exploratory factor analysis (see section 6.6.1) were used. They are: *effort*, *remoteness, responsible management, attractiveness, accommodation & services*. Table 38 outlines the sample means of the level of importance of each of the five information factors, categorised by the levels of willingness of a hiker to increase his/her activity levels should all trails be accredited.

Table 38: The importance of the information factors, per willingness to increase future activity

Importance of information factors	Willingness to increase future activity					
		No influence	Do not think so	Not sure	Consider hiking more	Definitely hike more
Effort	Mean	3.5515	3.5064	3.5580	3.8279	4.0381
Remoteness	Mean	2.1250	1.9617	2.2029	2.3205	2.5494
Responsible management	Mean	3.3039	3.3299	3.3575	3.5302	3.8038
Attractiveness	Mean	3.4338	3.5893	3.5217	3.6558	3.8354
Accommodation & services	Mean	3.1092	3.1618	3.2588	3.4392	3.5232
N		68	196	69	337	243

From Table 38 it can be observed that much higher values of rated means were achieved for the 'definitely go hiking' more and 'consider going hiking' more categories compared to the categories of 'no influence' and 'do not think it will make a difference'. To test whether these differences were meaningful, the following hypothesis were formulated for each of the five information factors:

H_0: There are no differences between hiker groups with differing views of the importance of accreditation when it comes to their willingness to increase hiking activity if all trails are accredited.

$H_{22a,b,c,d,e}$: There are differences between hiker groups with differing views of the importance of accreditation when it comes to their willingness to increase hiking activity if all trails are accredited.

Each of the information needs factors were then tested for significant differences in the rated means per level of willingness of increasing hiking activity, using oneway ANOVA tests. Table 39 represents the results for each test. The test was performed at a 5% level of significance for all information factors.

Table 39: The role of the information factors in the willingness to increase activity

		Sum of Squares	df	Mean Square	F	Sig.
Effort	Between Groups	38.549	4	9.637	15.756	**.000**
	Within Groups	555.371	908	.612		
	Total	593.919	912			
Remoteness	Between Groups	40.082	4	10.021	11.001	**.000**
	Within Groups	827.106	908	.911		
	Total	867.188	912			
Responsible management	Between Groups	31.597	4	7.899	13.560	**.000**
	Within Groups	528.936	908	.583		
	Total	560.533	912			
Attractiveness	Between Groups	13.252	4	3.313	5.456	**.000**
	Within Groups	551.344	908	.607		
	Total	564.596	912			
Accommodation & services	Between Groups	21.254	4	5.314	9.895	**.000**
	Within Groups	487.568	908	.537		
	Total	508.822	912			

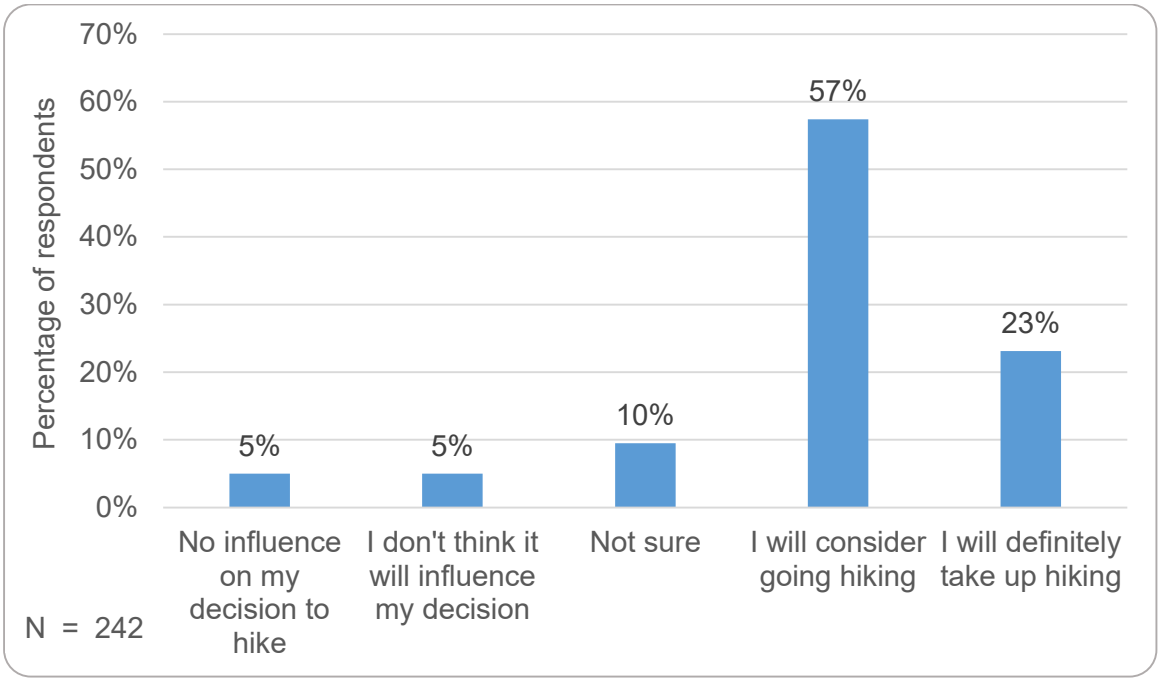
Note: Significant differences indicated in bold

For each of the five information factors tested above, the results from the *p-value* suggests that significant differences were found in the sample means during the oneway ANOVA (all *p-values* <0.05 and even <0.01). Table 38, illustrating the actual means per willingness to increase activity, confirms that the more value a hiker places on the availability of information, the greater their willingness towards increasing activity levels, should all trails be accredited.

6.7.3.2 Non-hikers

An overwhelming 57% of non-hikers were willing to reconsider their decision regarding hiking, should all trails be independently accredited (seen in Figure 31). A further 23% were convinced the presence of trail accreditation would persuade them into actual purchases of hiking tourism products.

Figure 31: Influence of accreditation on decision making amongst non-hikers



Non-hikers who selected 4 or 5 constitute Category 2, while non-hikers answering 1, 2 or 3 were grouped into Category 1. Category 2 therefore represents non-hikers saying the test condition would either result in them considering going hiking or definitely taking up hiking. The hypothesis was formulated as:

H_0: The proportion of non-hikers belonging to Category 2 is 50%.

H_{23}: The proportion of non-hikers belonging to Category 2 is not equal to 50%.

Table 40 indicates that, based on the *p-value* of less than 0.001, the null hypothesis can be rejected on a 1% level of significance.

Table 40: Non-hikers' consideration towards hiking if all trails were accredited

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Group 1	2.00	195	.81	.50	**.000**
Group 2	1.00	47	.19		
Total		242	1.00		

Note: Significant differences indicated in bold

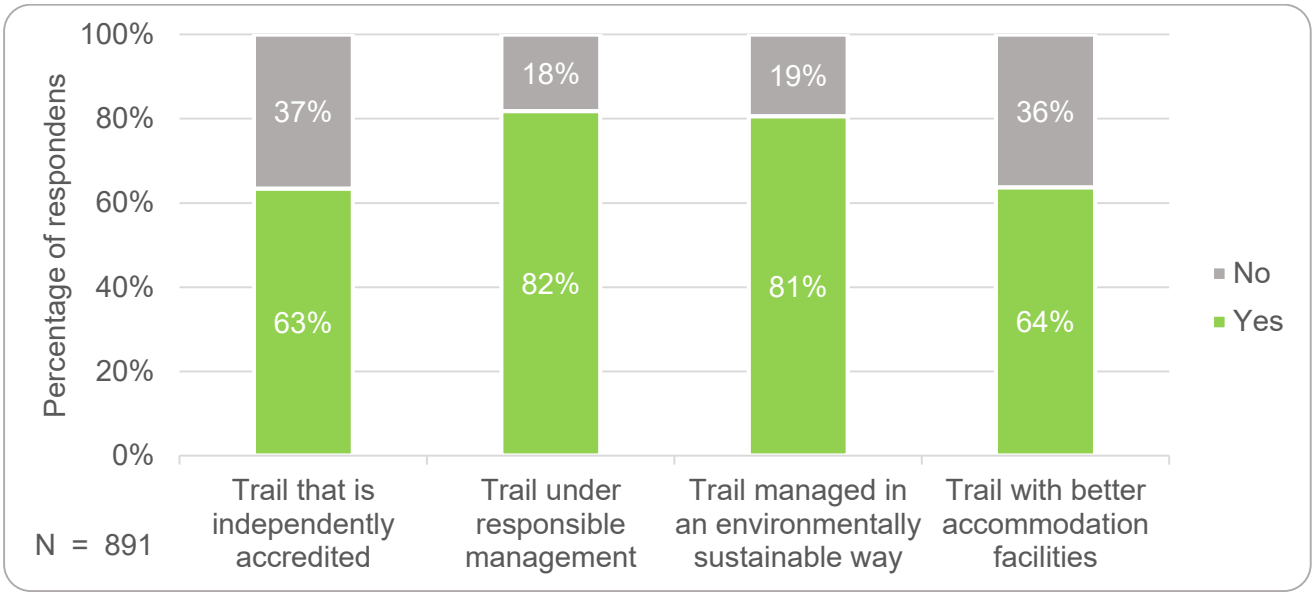
The proportion of non-hikers who say they would consider taking up hiking or definitely take up hiking is significantly larger (81%) than the rest. We therefore conclude that the accreditation of hiking trails on a large scale may influence non-hikers decisions around hiking.

6.7.4 WILLINGNESS TO PAY (WTP)

As an additional method of testing the influence of the presence of an accreditation system on purchase behaviour, hikers were asked whether they were willing to pay a premium for a trail that met certain conditions. The conditions tested related to the accreditation itself but also included attributes closely related to that of accreditation (responsible management of trails, better accommodation and the management of trails in an environmentally sustainable way). Conditions under which hikers would be willing to pay a premium for (refer to Figure 32), were:

- trails that are independently accredited (63%)
- trails managed responsibly by owners (82%)
- trails managed in an environmentally sustainable way (81%)
- trails with better accommodation facilities (64%)

Figure 32: Willingness to pay more for a trail when certain conditions are met



To test whether each of the conditions above realised significant differences between hikers answering yes and those saying the opposite, the Binomial test was performed at a 5% level of significance. Hikers answering yes were grouped into Category 2, while those saying they were not willing to pay more, constituted Category 1. The hypothesis statement was the same for all four test conditions:

H_0: The proportion of hikers belonging to Category 2 is 50%.
$H_{24,25,26,27}$: The proportion of hikers belonging to Category 2 is not 50%.

The results of the Binomial tests are shown in Table 41. In each of the four tests, the null hypothesis is rejected ($p<0.05$) and it can be concluded that hikers would be willing to pay more for trails that meet the conditions specified.

Table 41: Hikers propensity to pay more for a trail, should certain conditions be met

	Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
H_{24}: Trail that is independently accredited					
Group 1	2.00	565	.63	.50	**.000**
Group 2	1.00	326	.37		
Total		891	1.00		
H_{25}: Trail under responsible management					
Group 1	2.00	729	.82	.50	**.000**
Group 2	1.00	162	.18		
Total		891	1.00		
H_{26}: Trail managed in an environmentally sustainable way					
Group 1	2.00	718	.81	.50	**.000**
Group 2	1.00	173	.19		
Total		891	1.00		
H_{27}: Trail with better accommodation facilities					
Group 1	2.00	568	.64	.50	**.000**
Group 2	1.00	323	.36		
Total		891	1.00		

Note: Significant differences indicated in bold

The results indicate that a lot more hikers are willing to pay for trails under responsible management and trails that are managed in an environmentally sustainable way than for accredited trails. This can potentially be attributed to hikers' lack of understanding of what accreditation entails and the value it presents to the hiker.

6.8 AWARENESS OF THE GREEN FLAG ACCREDITATION SYSTEM

To test consumers' current awareness of the Green Flag Accreditation System (Green Flag), a two-pronged approach was followed. Firstly, an image of the Green Flag logo was provided and hikers were asked whether they recognised the symbol without any mention being made of the Green Flag Accreditation System. The main purpose of this question was to test whether they may have come across the logo either while on physical trails or as a result of consulting information sources where the logo was present such as marketing brochures, websites (trail websites as well as the Green Flag Trails website), magazine articles and more.

Figure 33: Recognition of the Green Flag logo

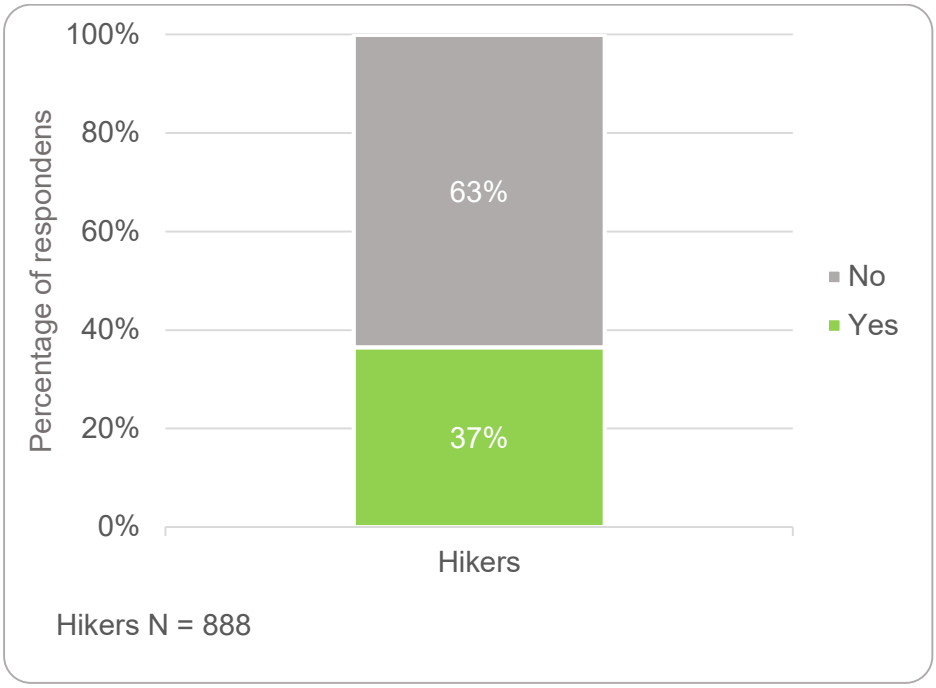
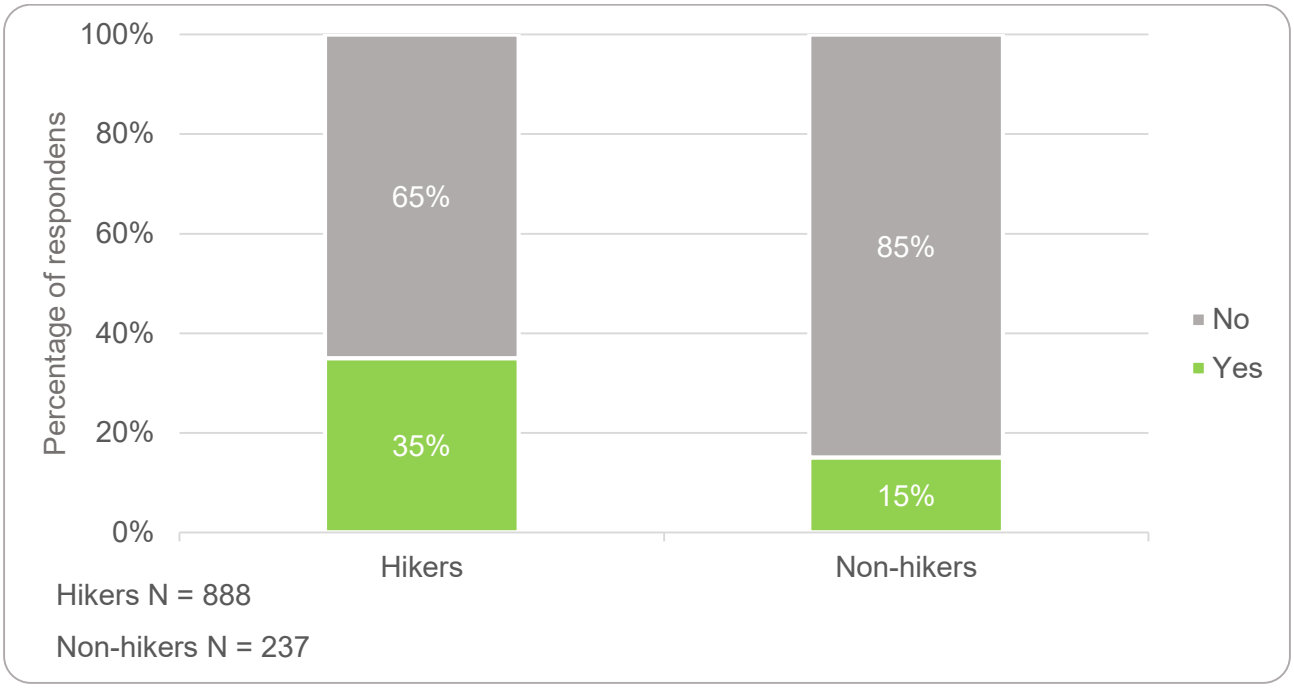


Figure 33 indicates that the awareness of the Green Flag logo was low amongst the sample of hikers, with only 37% saying they have seen it before.

The next approach involved both hikers and non-hikers being questioned on whether they have heard of Green Flag Trails or the Green Flag Accreditation System. Figure 34 records the percentages of both hikers and non-hikers answering positively or negatively to the question.

Figure 34: Awareness of Green Flag Trails or the Green Flag Accreditation system



The majority of 85% of non-hikers were not familiar with Green Flag at all. Only 35% of hikers however reported having heard of Green Flag Trails or Green Flag, again indicating that awareness of the accreditation system amongst hikers are low. There was a slightly greater awareness of the Green Flag logo (37%) than of the term or concept of Green Flag (35%) amongst hikers, indicating that hikers may have seen the symbol but may not have known what it stood for at the time. It could be that frequent hikers, having to deal more with trail owners' marketing collateral and having spent more time on trails, were more aware of Green Flag than infrequent hikers. The cross tabulation, seen in Table 42, shows the frequencies per each category for both dimensions.

Table 42: Cross tabulation of awareness of Green Flag by frequency of hiking

			Awareness of Green Flag logo		
			No	Yes	Total
Hiking activity levels	Infrequent	Count	348	189	537
	Frequent	Count	215	136	351
		Total	563	325	888

To test whether any significant differences exists amongst the frequency classes, the non-parametric test of Pearson Chi-Square was used to examine whether significant differences existed. This assumption was tested by formulating the following hypothesis:

H_0: There is no association between the level of awareness of the Green Flag Accreditation System and hiking activity levels.
H_{28}: There is an association between the level of awareness of the Green Flag Accreditation System and hiking activity levels.

The test was performed at a significance level of 5%. The results from the Pearson Chi-Square test, shown in Table 43, indicate there was no statistically significant difference (*p=0.283*) between the groups with regards to the awareness of Green Flag.

Table 43: The awareness of Green Flag amongst frequent and infrequent hikers

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.153[a]	1	.283
N of Valid Cases	888		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 128.46.

b. Computed only for a 2x2 table

Even though overall awareness of Green Flag was low, the awareness of Green Fla should be greater amongst hikers than non-hikers. To further investigate this, cross tabulation of the frequencies per category was done (Table 44).

Table 44: Cross tabulation of awareness of Green Flag by sample group

			Awareness of Green Flag logo		
			No	Yes	Total
Hiker or non-hiker	Non-hiker	Count	203	36	239
	Hiker	Count	577	311	888
		Total	780	347	1127

To test whether any significant differences exists amongst the frequency classes, the non-parametric test of Pearson Chi-Square was used to examine whether significant differences existed. This assumption was tested by formulating the following hypothesis:

H_0: There is no association between the level of awareness of the Green Flag Accreditation System and whether an individual is a hiker or not.
H_{29}: There is no association between the level of awareness of the Green Flag Accreditation System and whether an individual is a hiker or not.

The non-parametric test of Pearson Chi-Square at a 5% level of significance was performed and it was found (with $p<0.05$) (Table 45) that the awareness of Green Flag between the two groups differed significantly (and even on a 1% level of significance). Awareness was a lot higher amongst hikers.

Table 45: The awareness of Green Flag amongst hikers and non-hikers

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	35.206[a]	1	**.000**
N of Valid Cases	1127		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 73.59.

b. Computed only for a 2x2 table

Note: Significant differences indicated in bold

The results of this section indicate hikers are not aware of Green Flag, in fact, those hiking six or more trails per year are not more likely to be aware of Green Flag than those hiking less frequently, which indicates to a lack of effective marketing.

6.9 FACTORS INFLUENCING THE FUTURE UPTAKE OF HIKING TOURISM ACTIVITIES

A summary of the factors tested for influencing the future uptake of hiking tourism, the tests used and the result of the hypothesis tests are provided in Table 46.

Table 46: Factors tested for influencing the future uptake of hiking tourism

Factor	*Test statistic*		H_0 rejected or not
For non-hikers			
Trustworthy information on the facilities of trails (accommodation & ablution)	Observed Prop = 0.80***		Rejected
Trustworthy information on the safety of trails	Observed Prop = 0.82***		Rejected
Trustworthy information on the difficulty level of trails	Observed Prop = 0.82***		Rejected
Accreditation of trails	Observed Prop = 0.81***		Rejected
For hikers			
Trustworthy information on the facilities of trails (accommodation & ablution)	Observed Prop = 0.55***		Rejected
Trustworthy information on the safety of trails	Observed Prop = 0.69***		Rejected
Trustworthy information on the difficulty level of trails	Observed Prop = 0.50		Not rejected
Perception of safety of trails	χ^2 = 35.261***		Rejected
Importance placed on information concerning:	*effort*	F = 16.756***	Rejected
	remoteness	F = 28.516***	Rejected
	responsible management	F = 29.755***	Rejected
	attractiveness	F = 6.673***	Rejected
	accomm & services	F = 27.342***	Rejected
Accreditation of trails	Observed Prop = 0.64***		Rejected

*** Significant at 1%
** Significant at 5%
* Significant at 10%

6.10 SUMMARY OF RESULTS

The results from the empirical study produced a large set of data which provided the researcher with bountiful opportunities for examining relationships within the data for addressing the Research Objectives 5 through 8. Through a variety of statistical techniques, each Objective was delineated and analysed further where it was deemed appropriate. The result thereof is a comprehensive view of the determinants of consumer behaviour in hiking tourism with an exploration of factors which could potentially influence the future buying behaviour of both hikers and non-hikers. The chapter further described consumer perceptions and response to accreditation and the individual constructs represented by accreditation, such as trustworthy information. Factors playing a role in the perceived importance of accreditation amongst hikers were identified.

For each of the Objectives 5 – 8, a breakdown of all hypotheses tested, the test used, the result and the direction of results are summarised in Table 47.

A discussion of the main insights concluded from these results is provided in the next chapter before a set of recommendations to management is made, followed by directions for future research.

Table 47: Hypotheses and test results for Objectives 5, 6, 7 and 8

H_0	Statement	Reject H_0 or not	Test statistic	Direction
	Perceptions of hiking conditions (Objective 5)			
H_1	There is no difference between frequent and infrequent hikers when it comes to the level of agreement to the statement that trail conditions have deteriorated in South Africa.	Do not reject	U = 87380.00	
H_2	The proportion of hikers who do not agree with the statement that feedback mechanisms are in place is 50%.	Reject	Observed Prop = 0.81***	>50%
	Importance of information (Objective 5)			
H_3	The proportion of hikers rating safety information as either very important or extremely important is 50%.	Reject	Observed Prop = 0.64***	>50%
H_4	There is no difference between frequent and infrequent hikers with regards to the importance of safety information.	Do not reject	U = 89403.50	
H_5	There is no difference between frequent and infrequent hikers with regards to the importance of the trail difficulty level information.	Do not reject	U = 92769.50	
H_6	There is no difference between frequent and infrequent hikers with regards to the importance of each of the five information factors.	Reject for three factors. Do not reject for the remaining two factors.	*remoteness* t = 1.865*; *responsible management* t = 1.812*; *accommodation & services* t = 3.150***; *attractiveness* t = 1.027; *effort* t = 0.819.	For three factors: *Remoteness*, *responsible management* as well as *accommodation & services*, information is more important to infrequent hikers than frequent hikers.
	Influence of trustworthy information on hiker activity levels (Objective5)			
H_7	The proportion of hikers willing to hike more if trustworthy information on the facilities was available is 50%.	Reject	Observed Prop = 0.55***	> 50%
H_8	The proportion of hikers willing to hike more if trustworthy information on the safety of trails was available is 50%.	Reject	Observed Prop = 0.69***	> 50%
H_9	The proportion of hikers willing to hike more if trustworthy information on the difficulty level of trails was available is 50%.	Do not reject	Observed Prop = 0.50	

Table 47 (continued): Hypotheses and test results for Objectives 5, 6, 7 and 8

H_{10}	There is no difference between hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to their willingness to increase their activity levels if trustworthy information was available on the safety of trails.	Reject	$\chi^2 = 35.261$***	> 50%
Influence of trustworthy information on non-hikers decisions (Objective 5)				
H_{11}	The proportion of non-hikers willing to consider hiking if trustworthy information on the facilities was available is 50%.	Reject	Observed Prop = 0.8***	> 50%
H_{12}	The proportion of non-hikers willing to consider hiking if trustworthy information on the safety of trails was available is 50%.	Reject	Observed Prop = 0.82***	> 50%
H_{13}	The proportion of non-hikers willing to consider hiking if trustworthy information on the difficulty level of trails was available is 50%.	Reject	Observed Prop = 0.82***	> 50%
H_{14}	There is an association between non-hikers safety concerns and their consideration towards hiking if trustworthy information was available on the safety of trails.	Do not reject	$\chi^2 = 2.330$	
Influence of accreditation on decision making and purchase behaviour (Objective 6 & 7)				
Perceived importance of accreditation (Objective 6)				
H_{15}	The proportion of hikers who regard accreditation as important, very important or extremely important is 50%.	Reject	Observed Prop = 0.64***	> 50%
H_{16}	There is no association between hiking activity levels and the level of importance of accreditation.	Reject	$\chi^2 = 10.160$***	Infrequent hikers are more likely to regard accreditation as important than frequent hikers.
H_{17}	There is no difference between hikers who agree that hiking is safe, those who are neutral and those who disagree, with regards to the level of importance of accreditation.	Reject	$\chi^2 = 5.879$*	Accreditation is more important to those who disagree that hiking is safe
H_{18}	There is no association between the level of importance of accreditation and club membership.	Do not reject	$\chi^2 = 0.286$	

Table 47 continues on the next page

Table 47 (continued): Hypotheses and test results for Objectives 5, 6, 7 and 8

H_{19}	There is no association between the perceived level of importance of accreditation and the choice of booking channels.	Reject	$\chi^2 = 15.571$***	Direct bookings are associated with higher importance of accreditation.
H_{20}	There are no differences between hiker groups with differing views of the importance of accreditation when it comes to the importance of each of the five information factors.	Reject for all five information factors.	*effort* F = 16.756***; *remoteness* F = 28.516***; *responsible management* F = 29.755***; *attractiveness* F= 6.673***; *accommodation & services* F = 27.342***.	Higher means are observed for each of the information factors amongst groups who rate accreditation as of higher importance.
Potential influence of accreditation on future purchase behaviour (Objective 7)				
H_{21}	The proportion of hikers who say they would either consider or definitely go hiking more frequently if trails were accredited is 50%.	Reject	Observed Prop = 0.64***	The majority of hikers say they would consider or definitely increase hiking activity.
$H_{22\ a,b,c,d,e}$	There are no differences between hiker groups with differing views of the importance of accreditation when it comes to their willingness to increase hiking activity if all trails are accredited.	Reject for all five information factors.	*effort* F = 16.756***; *remoteness* F = 28.516***; *responsible management* F = 29.755***; *attractiveness* F = 6.673***; *accommodation & services* F = 27.342***;	Higher means are observed for each of the information factors amongst groups who are more willing to increase activity.
H_{23}	The proportion of non-hikers saying they would consider or definitely go hiking if trails were accredited is 50%.	Reject	Observed Prop = 0.81***	The majority of non-hikers say they would consider or definitely go hiking if trails were accredited

Table 47 continues on the next page

Table 47 (continued): Hypotheses and test results for Objectives 5, 6, 7 and 8

Willingness to pay (Objective 7)				
H_{24}	The proportion of hikers willing to pay more for an independently accredited trail is 50%.	Reject	Observed Prop = 0.63***	The majority of hikers are willing to pay more for an independently accredited trail
H_{25}	The proportion of hikers willing to pay more for a trail under responsible management is 50%.	Reject	Observed Prop = 0.82***	The majority of hikers are willing to pay more for a trail under responsible management
H_{26}	The proportion of hikers willing to pay more for a trail that managed in an environmentally sustainable way is 50%.	Reject	Observed Prop = 0.81***	The majority of hikers are willing to pay more for a trail managed in an environmentally responsible way
H_{27}	The proportion of hikers willing to pay more for better accommodation facilities is 50%.	Reject	Observed Prop = 0.64***	The majority of hikers are willing to pay more for better accommodation facilities
Awareness of Green Flag (Objective 8)				
H_{28}	There is no association between the level of awareness of the Green Flag Accreditation System and hiking activity levels.	Do not reject	$\chi^2 = 1.153$	
H_{29}	There is no association between the level of awareness of the Green Flag Accreditation System and whether an individual is a hiker or not.	Reject	$\chi^2 = 35.205$***	Hikers are more aware of Green Flag than non-hikers

*** Significant at a level of 1%
** Significant at a level of 5%
* Significant at a level of 10%

CHAPTER 7:CONCLUSION AND RECOMMENDATIONS

The final chapter of this dissertation is a discussion of the main findings of the study with a connection made between the conclusions, findings, research objectives and literature review. The researcher's interpretation of results takes a strong positivist approach as the conclusions revolve around an acceptable level of knowledge achieved in establishing a link between accreditation of hiking trails and consumer behaviour, through examining previous studies as well as the empirical results from this study. The results are analysed and conclusions made through the researcher's view that data gathered are factual and measurable. The limitations to the research methodology are mentioned with recommendations for how these may be addressed in future. Recommendations to three levels of management are made based on the findings from both the study of literature and the empirical results. They are: Trail owners, Green Flag management as well as industry bodies and governmental institutions. The academic value and contribution of the study is discussed in chapter 1 of this dissertation (section 1.5).

7.1 DISCUSSION

7.1.1 SUMMARY OF FINDINGS

7.1.1.1 Perceptions and attitudes towards current hiking tourism products

While South Africa offers some of the most spectacular hiking tourism opportunities in the world, current literature gives no recent account of the overall health of hiking tourism in South Africa, nor does it provide any data or insight into the historical growth or future prospects for the sector (chapter 2, addressing Objective 1). Looking at the current conditions of this tourism subsector in South Africa, the results from this study reveal mixed opinions amongst consumers as to whether current hiking conditions are supportive towards a substantial improvement in hiking tourism growth (sections 6.4.2 and 6.5). The investigation into the literature highlighted three important factors in the context of this study which could influence decision making and behaviour amongst consumers. These included

perceptions about risks, service quality as well as attitudes towards the environment (section 3.3.3). While the measurement of consumers' attitudes towards the environment and their awareness of environmental concerns did not form part of the scope of this study, the fact that 81% of respondents display a willingness to pay for trails managed in an environmentally responsible way (section 6.74), indicate a strong support towards environmentally sustainable practices and that hikers' attitudes towards such practices may influence their future buying behaviour. These findings are supported by Andereck (2009:496) who considered the perceptions tourists have of environmentally sustainable practices and found that tourists placed a reasonably high level of importance on the implementation of these types of practices by tourism businesses.

A substantial number of hikers (44%) agree that the quality of trails in general in South Africa has deteriorated over the last couple of years with another 40% choosing to stay neutral on the topic – perhaps indicating that for this group, both their own experiences on trails and word of mouth reports from fellow hikers have left them indecisive on the subject. The finding that two thirds of hikers say the trails they have embarked on were managed well, suggests hikers are particular about their purchases. Another finding substantiating the fact that current product offerings are not quite aligned with hikers' needs and expectations in terms of quality and diversification, is the demand from hikers for more leisure hiking products.

With more than three quarters of hikers agreeing that hiking is a cost-effective activity and only 16% of non-hiking nature-lovers indicating financial reasons as a main constraint, consumers' perceptions about the price of hiking tourism products can be eliminated as a constraint to further uptake.

As indicated earlier in this dissertation (section 3.3.3), a critical condition for success involves the development of trust with consumers as their perceptions, attitudes and knowledge influence the effectiveness of a destination's marketing efforts (Mlozi & Pesämaa, 2013:91). In the context of hiking tourism, where unique risks are associated with each destination, it becomes crucial for marketers to address any safety or quality concerns consumers may have in order to lure them to the destination.

7.1.1.2 Motivation and constraints to hiking tourism

The perception of safety on trails in South Africa remains a major concern as non-hikers ranked it a main constraint to hiking. Even amongst those currently hiking, only 36% of respondents regard hiking as safe. Feedback from the empirical research therefore supports many of the statements made by industry players such as HOSA and Tourism KwaZulu-Natal who listed the following as major challenges to future growth: Deterioration in the conditions of trails, safety issues, lack of signage on trails, poor mapping skills, environmental degradation, and inadequate or polluted water supply (Bossert, 2013a; Kohler, 2015).

The lack of formal feedback mechanisms on trail conditions may compound the problems of quality and safety (section 6.5), as problems are often not escalated to the right authorities with little to no consequences to trail owners not adhering to basic requirements. Major constraints (other than safety) to overnight hiking amongst the potential (non-hiking) market include physical abilities, lack of support from companions or friends, more attractive alternatives, and time constraints (section 6.4.2). With the exception of time limits, these barriers differ considerably from the findings by Bialeschki and Henderson (1988:24) who found time, lack of information, financial constraints, health, and distance from home to be inhibiting factors. Literature on the motivations and constraints to hiking is confined to the work of a few scholars. The motivations of hikers identified in this study, namely a strong need to spend time in nature, relaxation, achieve a sense of accomplishment or challenge oneself, break away from routine and experience new territories – to a fair degree agree with findings from other studies in adventure tourism and hiking tourism, particularly those of Rupf *et al.* (2014:253-255), Terblanche (2012:93) and TREES (2014a:12-13). The fact that spending time in nature represents a major reason for participation in hiking tourism, confirms the significance of nature as a stimulus for tourism experiences, which is in agreement with other studies such as Andereck (2009:496).

7.1.1.3 Purchase behaviour

Literature regarding the underlying concepts at play in the behaviour of consumers of hiking tourism products is lacking. As an alternative, literature describing the factors affecting

decision making and consumer behaviour in the context of adventure and nature-based tourism was examined. These included the concepts of consumer profiling and consumer preferences, motivators and constraints, consumer perceptions and attitudes, information needs and purchase behaviour. The majority of the research reviewed addressed a particular geographic region or place of interest which makes the application to hiking tourism in South Africa challenging and in many instances inappropriate (chapter 3, addressing Objective 2).

As a basis for exploring the purchase behaviour of hikers (Objective 4) and measuring the influence thereof on the perceived importance of accreditation – activity levels, club membership and booking channels were described (section 6.3). It was found that the majority (60%) of respondents hiked five or less trails per year, with just over half (55%) belonging to clubs. The preferred method for reserving a trail is through direct booking with trail owners, conservation organisations such as SANParks, Ezemvelo KZN Wildlife and Cape Nature and provincial or municipal authorities.

7.1.1.4 Information needs

A tourist searches for information in the pre-trip stage mainly to improve decision making and reduce his/her risks (Hales & Shams, 1991:9; Maser & Weiermair, 1998:107). Although some researchers have touched on the information search behaviour of hikers, very few studies address the information needs of hikers in terms of categories of information and its relative importance in the pre-trip planning stage. In contrast, this study has identified the most important information aspects in decision making as well as measured the influence of trustworthy information on future purchase intentions (both in the case of hikers and non-hikers) (section 6.6, addressing Objective 5).The findings show that information regarding the *effort* associated with a trail (difficulty level, duration, length and trail type) is regarded the most important information factor to hikers. Second most important is information regarding the *attractiveness* (level of scenic beauty, environmental character) of the trail (section 6.6.1).

The empirical results have shown that the activity levels of hikers influence the importance placed on information factors. This is in agreement with other literature which states that

information search is influenced by past travel experiences (Jun, Vogt & MacKay, 2007:266-274). Infrequent hikers rate information on the trail's *remoteness, responsible management* and *accommodation & services* as of higher importance than frequent hikers (Table 18 and 19). In the case of information about the safety and difficulty level of trails, there were no differences between the opinions of frequent and infrequent hikers regarding the importance thereof (Table 14). Studying section 6.6.1, we conclude that hikers, regardless of their level of activity, are in agreement that information on the safety of trails is very important.

The search for information, initiated by perceived or real risk, emphasises the importance of the availability of trustworthy and accessible information sources. Destination-related risks impact on tourists' decisions on whether to travel to that particular destination or not (Sharifpour *et al*., 2013:1).The results from this study indicate that the availability of credible information on the quality of accommodation & ablution as well as the safety of a trail could result in an increase of hiking activity amongst hikers (Table 21). While four of the five information factors achieved means of 3 (important) and higher, hikers regard information regarding *accommodation & services* at the huts as less important in decision making in relation to other factors such as *effort*, *attractiveness* and *responsible management* of trails (Table 18). This could be due to the fact that hikers felt basic information regarding accommodation, ablution and equipment at the huts are already available for most trails prior to booking. Hikers were not so confident about the information on trail websites being adequate and even less confident about difficulty gradings and maps being reliable (Figure 24).

While the difficulty grading of a trail was regarded as important in decision making by 88% of respondents (section 6.6.1), which is in agreement with Arias (2007:35), the supply of trustworthy information about the difficulty grading of trails were however not found to influence hiker's intentions to increase future activity levels. A possible reason for this could be that difficulty gradings may be a determinant in the choice of which trails to hike, but not when it comes to the decision regarding how often to go hiking.

Furthermore, the perception of the safety of hiking influences a hiker's response to the availability of credible information regarding safety (Table 22).

In the case of non-hikers, the availability of credible information on

- the quality of accommodation and ablution and
- the safety of the trail as well as
- the difficulty grading of the trail

could result in non-hikers considering or becoming willing to start hiking (Table 23).

7.1.1.5 The importance of accreditation

The benefits of accreditation in tourism in general is convincing: Minimising of environmental impacts, cost savings due to effective management, setting of price premiums, reduction of risk, increased marketing and branding, improved public relations, introduction of standards leading to better quality products and services, implementation of environmental management practices, access to skills and resources and destination branding (section 4.3, addressing Objective 3). An additional value-add of accreditation in the case of hiking tourism is not in the grading or rating of a particular trail above its peers, but rather in delivering credible information in a consistent manner, thereby increasing transparency and establishing trust between hikers and trail owners by sharing more information (Zillifro & Morais, 2004:170) as well as enabling hikers with different needs or requirements to make an informed choice (Arias, 2007:35-37; Hugo, 2013). In the literature review of accreditation systems in tourism (chapter 4), a distinction was made between systems tasked with the grading or classification of tourism products and third parties whose purpose it is to award a status or certification to a supplier based on the meeting of certain standards in the responsible management of tourism practices. It was found that existing classification and grading schemes do not offer independently assessed, uniform standards with criteria often unclear and based on subjective measures. It was concluded that a lack of uniform standards in the supply and management of hiking trail products exists globally.

While current literature is not in agreement with each other as to whether accreditation can influence consumer decision making and buying behaviour (Chia-Jung & Chun, 2014:937; Font, 2002:197; Foster, 2003:15; Leonard, 2011:13; Lacher, 2012:10; Marchoo *et al.*, 2014:16), this study has proven such link to exist (Objectives 6 and 7), despite a lack of consumer awareness of existing systems. The importance of independent accreditation of trails was measured and found to be perceived as a valuable discriminator in decision

making amongst hikers (sections 6.7.1 and 6.7.2, addressing Objective 6). A range of factors were tested for influencing hikers' opinions regarding their perceptions of accreditation. It was found that the following factors influenced the value placed on accreditation:

- A hiker's activity levels
- A hiker's perceptions of the safety of hiking
- Booking channels used
- A hiker's perceived importance of information on the:
    - *effort* of the trail
    - *remoteness* of the trail
    - *responsible management* of the trail
    - *attractiveness* of the trail
    - *accommodation and services* available on the trail

Third-party information significantly affect destination choice (Luthe & Schläpfer, 2011:234), often regarded as key sources of information needed to discern between destination alternatives. Hikers may rely on third parties for aiding in the decision making process with regards to trails - to varying degrees. The fact that a hiker books through a third party does not necessarily excuse him/her from the task of selecting a trail in the first place. A third party may be able to provide additional information about the trail, share previous clients' experiences and offer advice when alternatives are considered. Those who book directly with trail owners may have different information needs and may carry different perceptions about the importance of the accreditation of trails. This study has revealed that accreditation by an independent third party becomes more important when hikers book directly with trail owners.

Clubs may decide on and book trails in advance in order to secure a trail and supply members with the hiking schedule at the start of the club year. Clubs may be more cautious in their selection of trails since they have the interests of more than one individual at heart. They may for example choose to only select trails with a good track record, as reported on by fellow members of the hiking community. Group discount may apply on some trails which also plays a role in the selection criteria. Clubs may want to adhere to the group's preferences towards environmental character, accommodation types and trail format. Some

clubs only embark on day walks due to the physical limitations of members. This study has however shown that club members do not carry a different perception towards accreditation compared to non-club members. The role of accreditation in cases where the group (such as a hiking club) makes the decisions regarding trails to hike as opposed to individual hikers, remains undiscovered.

Infrequent hikers depend less on their past experiences and more on information to assess whether the trail should be embarked on and to make the appropriate preparations for the trip. This assumption could have important implications for the management of Green Flag, and was proved by the findings that

- infrequent hikers rated information regarding the *remoteness*, *responsible management* and *accommodation & services* of trails higher than frequent hikers (Table 19) and
- accreditation was regarded more important to infrequent hikers (Table 27).

These findings are supported by Kerstetter and Cho (2004:965), stating that past experience is one of the most influential factors in the decision making process, effecting the acquisition of incoming information from external sources. The authors found evidence from some studies where a negative relationship was observed between past experience and information search (as experience with a destination increases, search for external information decreases).

Most importantly, this study has produced evidence that the accreditation of trails could positively influence the future uptake of hiking tourism amongst hikers and non-hikers (section 6.7.3, addressing Objective 7). This was achieved by presenting a hypothetical country-wide implementation of the case study accreditation system to hikers and non-hikers in order to determine how the presence of such a system and its information attributes could impact future buying behaviour. In addition, willingness to pay (WTP) for accredited trails and trails adopting the principles which Green Flag stands for (such as responsible management, environmental sustainability and quality accommodation), was demonstrated (section 6.7.4), which supports many other studies showing consumers' willingness to pay more for environmentally concerned products (most notably Chan, 2014:915; Lacher, 2012:70, Puhakka and Siikamäki, 2012:64).

The finding of low levels of consumer awareness of the Green Flag Accreditation System amongst non-hikers was to be expected (section 6.8, addressing Objective 8). The fact that hikers too were mostly unaware of Green Flag, is also not surprising when considering similar results were found by scholars such as Fairweather *et al*. (2005:82) and Lübbert (2001:71) who found moderate to low levels of awareness amongst visitors to New Zealand and Germany respectively. This could be attributed to the fact that Green Flag, like similar schemes, has limited visibility in the market (Puhakka and Siikamäki, 2012:64). Most local schemes do not have the resources and regulatory backing needed to reach its objectives of becoming the standard in industry.

Other factors which may influence growth in hiking tourism were also identified. Table 48 presents a list of factors tested for potentially having an impact on consumer behaviour:

Table 48: Findings: Factors influencing future uptake of hiking tourism

Factor
For non-hikers
Trustworthy information on the facilities of trails (accommodation & ablution)
Trustworthy information on the safety of trails
Trustworthy information on the difficulty level of trails
Accreditation of trails
For hikers
Trustworthy information on the facilities of trails (accommodation & ablution)
Trustworthy information on the safety of trails
Trustworthy information on the difficulty level of trails
Hikers' perception of the safety of trails
Importance placed on information about: • *Effort* • *Remoteness* • *Responsible management* • *Attractiveness* • *Accommodation & services*
Accreditation of trails

The findings show that higher values of the availability of information could be associated with higher levels of importance of accreditation, proving that accreditation has a valuable

role to play in becoming a trusted third party provider of information to consumers. The results therefore confirm the association between the importance of accreditation and the importance of each of the five information factors (section 6.7.2). Furthermore, considering the variety of reasons stated for not participating in hiking, the results implicating the potential impact of both trustworthy information and the presence of an accreditation system on non-hikers future intentions are encouraging.

In conclusion, the independent accreditation of trails has the potential to meaningfully grow hiking tourism if the accreditation system implemented can address the main constraints to growth amongst the current and potential markets. This study has, through the case study of the Green Flag Accreditation System, shown that such a system exists in South Africa which could address constraints by:

- Providing reliable information regarding trail difficulty levels to non-hikers, which could alter individual (wrongful) perceptions of hiking being an activity for the young, the fittest and the strongest.
- Demonstrating to hikers and non-hikers that hiking in South Africa is reasonably safe through independent assessments.
- Addressing consumers' needs by encouraging and endorsing better quality and a greater variety of accommodation.
- Providing a global platform for hikers to give feedback on the conditions of trails.
- Putting formal processes in place to address quality concerns.

7.1.2 LIMITATIONS

This study measured consumers' intention to react to the presence of accreditation and not actual purchase behaviour. It is acknowledged that discrepancies may exist between consumers' intentions and actual behaviour, particularly where respondents chose the socially desirable answer (Miller, 2003:19). However with the lack of awareness of Green Flag amongst hikers, at this stage any observation of actual behaviour would make limited contributions towards the knowledge gaps and managerial challenges identified in chapter 1. This study was further not concerned with measuring the impact of implementation of accreditation systems on the supply side of the market.

7.2 MANAGEMENT RECOMMENDATIONS AND IMPLICATIONS

7.2.1 RECOMMENDATIONS TO TRAIL OWNERS

To attract more hikers to trails, owners should focus efforts on winning the trust of hikers through the provision of third-party, credible information on:

- The safety of their trail(s);
- The *effort* associated with their trail(s) (related to difficulty level, duration and length of the trail and the trail type);
- The accommodation and ablution facilities of their trail(s); and
- Trail maps.

A standard accreditation system with a wide implementation will take the effort out of decision making for hikers when choosing which trails to hike (Arias, 2007:35). This could be achieved by becoming an accredited Green Flag Trail. Such accreditation could provide a competitive advantage to trail owners who adopt the accreditation system as well as provide the added benefits of differentiation. Of these benefits, increased marketing exposure is important in establishing a trail as a destination brand representing a quality product. Marketing may be particularly valuable in the case of new trail owners, who often lack the resources to make any substantial investments in this area. Access to the skills and resources of the Green Flag Accreditation System is a benefit which should not be overlooked by trail owners as it provides the knowledge which enables owners to manage trails in a way as to minimise environmental impacts and reduce unnecessary risks.

7.2.2 RECOMMENDATIONS TO THE MANAGEMENT OF GREEN FLAG

Given the absence of other accreditation schemes for trails in South Africa, Green Flag Trails or the Green Flag Accreditation System is in a particularly favourable position to establish itself as a strong brand, differentiating it as a quality standard providing a level of consistency and reliability throughout the hiking tourism market. While a Green Flag accredited trail is not necessarily a better trail than its non-accredited peers, it promotes quality products that has been independently rated and provides a trustworthy description

of the experience that can be expected. Accreditation schemes such as ecolabels can be a valuable environmental tool, on the condition that the ecolabel enjoys broad exposure in applicable market sectors, entry criteria and auditing is clear and is properly stipulated and non-compliance is penalised (Buckley, 2002:183-208).

The current low level of awareness of Green Flag amongst hikers creates a cyclical problem for the accreditation scheme – trail owners will not invest unless proof of consumer demand can be provided, while the limited uptake by trail owners result in consumers not being aware of such schemes and therefore not demanding it from the industry. The results of this study suggest that hikers, once aware of Green Flag and the principles it represents, would take such accreditation into consideration in deciding on which trails to hike and respond accordingly with an intention to increase purchases.

To improve the current level of awareness, Green Flag should consider implementing the following actions:

- Secure regulatory backing and funding by being recognised as the official standard for hiking trails in Southern Africa and beyond. Green Flag should become a more publicly supported and financed accreditation scheme, who, through a transparent process, award the top performers in the industry and in doing so also create public awareness (Leonard, 2011:31).
- Consider partnering with an international organisation that promotes sustainable tourism certifications (Lacher, 2012:151).
- Invest in dedicated resources tasked with the responsibilities of marketing Green Flag as the industry standard amongst hikers and non-hikers. This should include creating a strong presence in the channels most utilised by hikers (Figure 26) such as marketing on trail websites and in national park brochures and implementing web strategies such as search engine optimisation (SEO). Green Flag should:
    - Focus its key marketing messages on the responsible and sustainable management of trails, reliable trail difficulty gradings and quality accommodation facilities.
    - Target marketing messages at nature-based tourists with environmentally conscious attitudes as they would be more supportive of green innovations (Andereck, 2009:497).

Apart from increasing Green Flag's exposure in the market, the management of Green Flag should put in place a formal process (with the necessary regulatory backing) for addressing non-compliance of trail owners to the standards set by Green Flag. This should include the establishment of a feedback mechanism for hikers which feeds directly into a regulatory body responsible for the upholding of quality standards in the supply of hiking tourism products.

7.2.3 RECOMMENDATIONS TO INDUSTRY BODIES AND GOVERNMENTAL INSTITUTIONS

As suggested in the previous section, strong regulatory backing from governmental departments such as the National Department of Tourism (NDT) and the Department of Environmental Affairs (DEA) will be needed if Green Flag is to address quality standards and other consumer needs in hiking tourism. Buckley (2002:204) suggests ecolabels should unite with public policy processes such as environmental laws and guidelines, followed by the implementation of protocols and an accompanying process of monitoring and evaluation in terms of environmental performance and contributions to conservation. This may increase the likelihood for an ecolabel such as Green Flag to become a high-end tool for environmental management in tourism.

To this end, governmental departments such as NDT and DEA should consider taking the following actions:

- Investigate and determine:
    - The challenges experienced in the industry over the last couple of years, including the conditions of trails in South Africa.
    - The contribution of the subsector to the broader tourism industry.
    - The potential contribution of an extensive implementation of Green Flag towards employment and rural economic development.
- Introduce quality standards in hiking tourism by formally recognising Green Flag as the standard accreditation system for trails in South Africa.
- Further the implementation of Green Flag through providing financial support to prevent costs being transferred to end consumers who already pay for access to trails in South Africa (in contrast to European markets where free access is the norm).

- Support and fund industry bodies such as HOSA by recognising its efforts in promoting hiking tourism and upholding quality standards in tourism and environmental management.
- Provide incentives to trail owners who demonstrate commitment towards the responsible and environmentally sustainable management of trails.
    - Together with Green Flag management and HOSA, put processes in place for the ongoing monitoring and evaluation of the conditions of trails and the impact thereof on tourism development.

7.3 RECOMMENDATIONS FOR FUTURE RESEARCH

The main aim of this study was to investigate the role accreditation has to play in hiking consumer behaviour and consumer decision making. The scope was therefore limited to accreditation's impact on the demand side of hiking tourism. While the benefits of accreditation to providers of tourism products were broadly outlined in the literature review, future empirical studies could focus on answering the question "Does Green Flag accreditation provide effective market advantage to trail owners?". Specific benefits experienced by accredited Green Flag Trail owners could be identified coupled with an investigation into whether accredited trails experience higher occupancy rates than non-accredited trails.

Future studies could also look into commonalities found amongst successful ecolabels and other accreditation schemes, including the marketing approaches used by each. What would also be worthwhile investigating is cases where governments have subsidised such initiatives and the lessons learned from such endeavours.

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APPENDIX A

- Green Flag Trail brochure: Wild Coast Meander -

Accommodation Facilities

types:
(A) excellent
(B) standard
(C) rustic

All Accommodation

- ✓ Accommodation: (A) Good quality hut/lux.tent/house with several sleeping rooms
- (B) Basic hut or tent(s) provided
- (C) Shelter against elements for sleeping or tent site only
- ✓ Toilet: (A) Flush toilet inside hut (1:6 people) and toilet paper
- (B) Separate toilet building, flush facilities outside hut (toilet paper provided)
- (C) Pit toilet (max 50 m min 20 m from hut) or alt. hygienic system (toilet paper)
- ✓ Beds: (A) Single / double beds only
- (B) Bunk beds OR
- (C) No beds provided
- ✓ Mattresses: (A) Thick (10 cm) high density foam or spring
- (B) Thin
- (C) None
- ✓ Washing: (A) Shower and/or bath with geyser or "donkey" pre-lit by attendant
- (B) Shower and/or bath (hot and cold with "donkey")
- (C)Shower (cold) or natural place to bath
- ✓ Braai area: (A) Under cover barbecue, with windshield, tapa (1:10 people)
- (B) Barbeque area, covered only, with grate,
- (C) Barbeque (open) area with grate only or no fires allowed or possible
- ✓ Fire wood provided: (A) Ample chopped wood (also for campfire)
- (B) One only bundle for braai
- (C) Dry treelogs with saw/axe provided or no fires allowed/possible (delete one)
- ✓ Kitchenware: (A) Fridge/cooler and cutlery/crockery: provided
- (B) Fridge/cooler or cutlery/crockery: provided (delete one)
- (C) NOT provided
- ✓ Kitchen: (A) Separate "kitchen"/common room with basin and tap inside hut
- (B) Dish washing / cooking place near or adjacent to hut (with table/surface)
- (C) No separate facilities provided
- ✓ Lighting: (A) Electric/gas/solar
- (B) Candles/paraffin lamps or similar
- (C) None of these provided
- ✓ Heating: (A) Air conditioning or stoves in all rooms
- (B) Heating by means of fire place; coal/wood stove in common room
- (C) None of these
- ✓ Cooking facilities: (A) Stove/hot plate/burner and kettle, pots & pans
- (B) Stove/Hot plate/burner or kettle, pots & pans
- (C) None of these

Trail Facilities & Safety

Facilities:
Booking facilities and information: E-mail, fax & phone
Reception office: Yes
Road signs to start of trail: Clear
Access road to start: Tarred
Trail Format: Linear
Map/guide: Colour with no contours
Facilities for handicapped: None
Brochure/guide: Guided
Water availability for swim/drink: No water for drinking. Swim in sea
Environmental education: Guided

Safety:
Parking: Safe
Accommodation: Safe
Safety on Trail:
Markers: No markers/guided
Warning signs: Guided
Water potability: No water
Hikers' general safety (mugging): Safe
Other: (bridges, ladders, stiles, etc): Safe
Crossings (road/rivers): Safe at low tide
Emergency:
Escape routes: Yes
Telephone/cell: Partial
Medical aid/evacuation system: Limited

Basic Trail Description

This five-day, six-night slackpacking trail starts at Kob Inn in the Transkei and finishes 55km later across the Kei River at Morgan Bay, a couple of hours north of East London. Access is limited to a few roads that lead from the N2 to coastal villages and the scattered resorts, so the only way to see most of the magnificent coastline is to travel on foot or on horseback along the sleigh paths and intricate tracks. As a result, the coast here is pristine and wild – a true nature lover's paradise. Hiking the long, lonely beaches allows you to appreciate not only the exquisite natural environment, but also gives you an insight into the unique culture of this remote part of the Eastern Cape. For the local people life goes on as it has for centuries, the trappings of civilisation are few and they love the opportunity to interact with visitors. Along the way there are some interesting diversions and optional side trips that illustrate the diversity of this coastline, including a booze cruise or canoe trip on the Nxaxo River from Wavecrest, and Trevor's Trail into the forests and gorges behind Trennery's. The Meander was the first of the slackpacking trails in South Africa, and it remains one of the best.

Contact / Booking Information

Bookings

Wild Coast Holiday Reservations
Tel: +27 (0) 43 743 6181
Fax: +27 (0) 43 743 6188
Cell: 083 701 6330
e-mail: fraieross@safrica.com

GREEN FLAG
ACCREDITED HIKING TRAIL

Wild Coast Meander
Hiking Trail

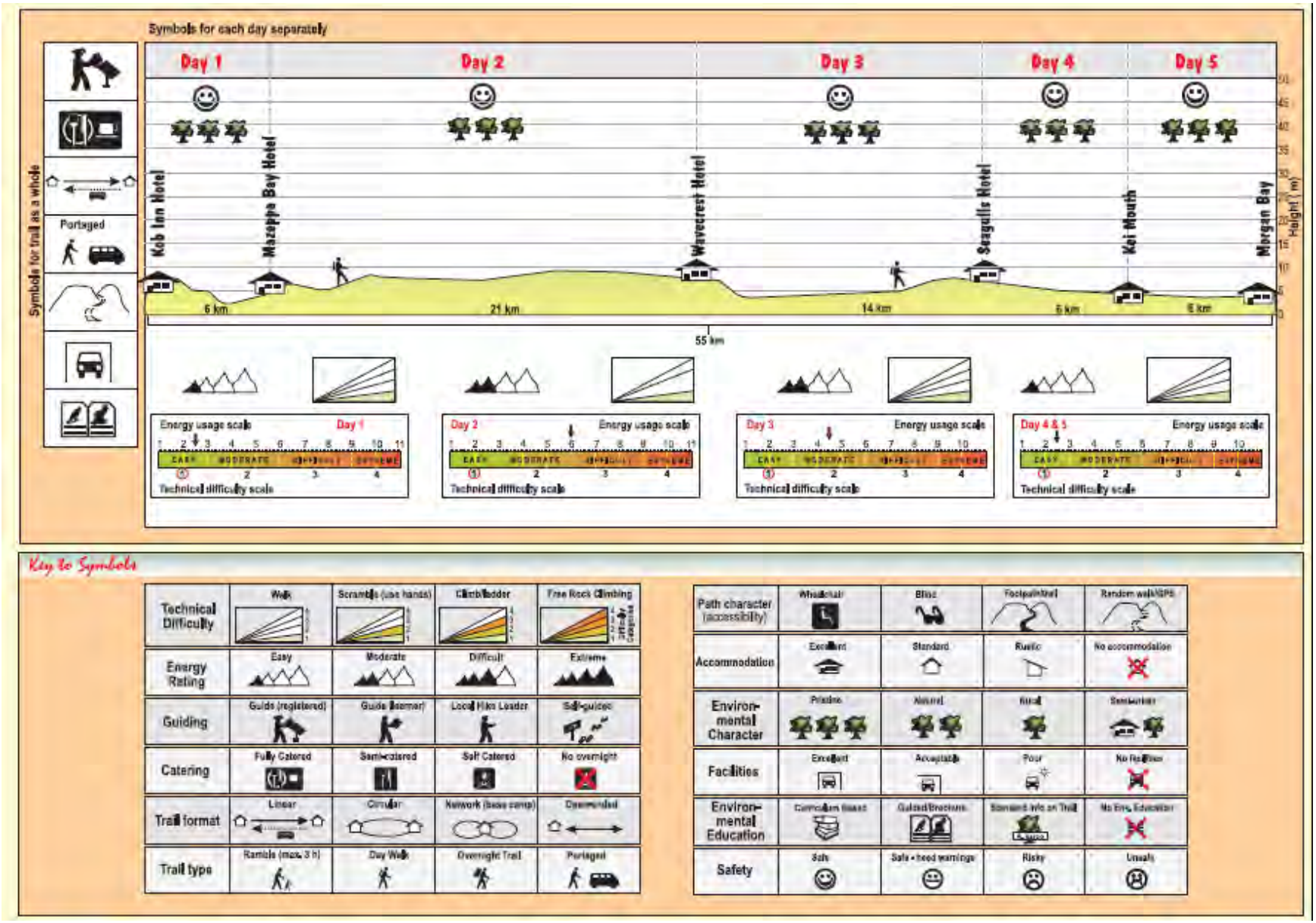
Classification

Five day catered, portaged
linear, guided trail
Environment: *pristine*
Accommodation: *excellent*
Difficulty Rating: *easy to moderate*
with easy short walk options
Facilities and safety: *satisfactorily maintained*

GREEN FLAG TRAILS
ACCREDITED HIKING TRAIL

www.trailinfo.co.za

Accreditation underwritten by:
South African Hiking Trail Owners Association (SAHTOA),
Hiking Organization of Southern Africa (HOSA),
Southern Africa Tourism Services Association (SATSA),
Eco-Trail.



APPENDIX B

- Permission obtained from hiking clubs – three examples -

Liandi Slabbert <u97021980@tuks.co.za>

Accreditation System for Trails

Joshua Marais <joshua.marais@hotmail.com> 18 February 2015 at 16:58
To: Liandi Slabbert <liandislabbert@tuks.co.za>

Hi, I will gladly help to improve the data on hiking trails. I will send you a list of the people's contact details.

Joshua
Organiser Pta Hiking Club

Pretoria Hiking Club

Liandi Slabbert <u97021980@tuks.co.za>

RE: Accreditation System for Trails

Chris van Zyl <chris@vineyard.co.za> 17 February 2015 at 18:15
To: Liandi Slabbert <LiandiSlabbert@tuks.co.za>
Cc: Chris van Zyl <chris@vineyard.co.za>

Hi I am happy to assist I have sent it on to our commii ee to make sure they are happy to distribute the quesi onnaire .Doubt there will be a problem.

chris van zyl | group environmental manager and horticulturist
t +27 (0)21 657 4620
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e chris@vineyard.co.za

Cape Union Mart Hiking Club

Liandi Slabbert <u97021980@tuks.co.za>

FW: Accreditation System for Trails

Amanda Matthee <amandam@mweb.co.za> 19 February 2015 at 22:39
To: LiandiSlabbert@tuks.co.za
Cc: Steph Du Toit <steph@netpoint.co.za>

Beste Liandi

Sanlam-Staptoerklub sal graag wil help met jou opname. Ons het 'n databasis van sowat 300 stappers. As jy die hiperskakel na die vraelys vir my stuur, sal ek dit in ons e-nuusbrief en ons op ons Facebook-blad sit.

Vriendelike groete

Amanda

Sanlam Staptoerklub

Amanda Mai hee

Voorsii er: Sanlam-Staptoerklub

www.sanlamstaptoerklub.co.za

APPENDIX C

- Informed consent form and data collection instrument -

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Economic and Management Sciences
Dept. of Tourism Management

THE IMPACT OF AN ACCREDITATION SYSTEM FOR TRAILS ON GROWTH IN HIKING TOURISM

Research conducted by:
Mrs. L.M. Slabbert (97021980)
Email: liandislabbert@tuks.co.za

Dear Respondent,

You are invited to participate in an academic research study conducted by Liandi Slabbert, a Masters student from the Department Tourism Management at the University of Pretoria.
The purpose of the study is to determine if, how, and to what extent, the implementation of an accreditation system for trails can contribute to improving hiking tourism growth in South Africa.

Please note the following:

- This study involves an anonymous survey. Your name will not appear on the questionnaire and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 10 minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- As a token of appreciation for your participation in the study, we would like to offer you a chance of winning a copy of Willie Olivier's guide book on South African trails entitled "Hiking Trails of South Africa".
- The closing date for participation in this survey is the 15th of May 2015.
- The winner of the guide book will be randomly selected and notified via email by no later than the 20th of May 2015.
- The study enjoys full support from the Hiking Organisation of Southern Africa.

Please contact my supervisor, Mrs. E.A. Kruger at elizabeth.kruger@up.ac.za if you have any questions or comments.

By clicking on the NEXT button below, you hereby indicate that you have read and understood the information provided above and that you willingly agree to participate in the study.

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

Definition of Hiking: The activity of hiking, also referred to as outdoor walking or backpacking, is the activity of walking along trails or footpaths carrying a rucksack, backpack or day pack containing one's supplies and equipment

*** 1. Do you consider yourself to be a hiker?**

- ○ No
- ○ Yes

Section A: Non-hikers

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 2. Would you consider going on an overnight hike in the future?**

- ○ No
- ○ Yes

*** 3. Would you consider going on a day walk in the future?**

- ○ No
- ○ Yes

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

4. Please choose and rank your main reasons for not considering overnight hiking in the future. Rank the most important reason as 1, the next as 2, and so on.

PLEASE NOTE: Once you rank your number 1 reason, the software automatically populates rankings for the remaining options by moving other reasons down the ladder. You will need to change each ranking to fit your individual choice. Click on the dropdown arrow to make a choice. Every time you do, the reasons that have a lower importance will move down and the more important reasons will move up. Keep ranking each reason individually until you are satisfied with your final ranking.

- I am more interested in other sports or hobbies
- I don't believe I'm physically able or fit or healthy enough
- I have family responsibilities (tending to small children or aging / sick family members)
- I don't have the time
- I don't believe hiking is safe
- My spouse / companion / closest friend(s) does not share in my interest and I won't go without them
- Not enough information is available on trails (safety, difficulty, facilities)
- I don't enjoy exercise
- Most facilities (accommodation / ablution) do not suit my needs
- I don't have the necessary equipment
- Trails are not properly graded or accredited
- I don't have the financial means
- The thought of travelling to unknown territories scares me
- I wouldn't know where or how to start
- Other

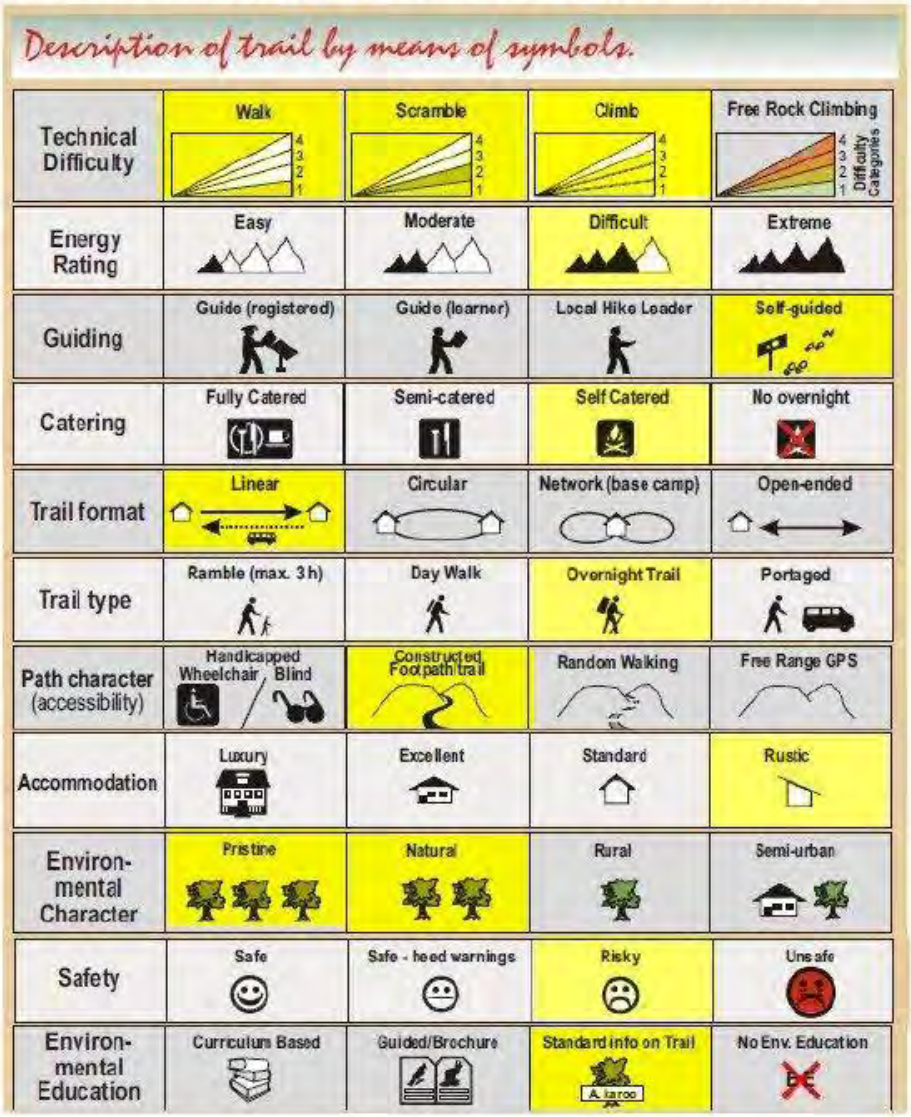
5. If you ranked Other as one of your top 5 reasons for not considering overnight hiking, please mention what those reasons are?

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 6. How would the following aspects influence your decision to hike South African trails? Please choose the option that best reflects your view.**

	It would not influence my decision at all	I don't think it will make a difference in my decision	I'm not sure	I would consider taking up hiking	I would definitely take up hiking
If trustworthy information was available to me regarding the quality of the facilities (such as accommodation and ablution) on trails	○	○	○	○	○
If trustworthy information was available to me regarding the safety of trails	○	○	○	○	○
If the level of difficulty of all trails were independently rated	○	○	○	○	○

To answer the next question, please have a look at the image below



*** 7. If all hiking trails in South Africa were assessed by an independent body and a detailed description of each trail (as in the example) was available, how would this influence your decision to hike?**

- ○ It would not influence my decision at all
- ○ I don't think it will make a difference in my decision
- ○ I'm not sure
- ○ I would consider taking up hiking
- ○ I would definitely take up hiking

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 8. Are you a Wild Card holder?**

- ○ No
- ○ Yes

*** 9. Have you ever heard of Green Flag Trails or the Green Flag Accreditation system?**

- ○ No
- ○ Yes

10. Which of the following activities are you currently actively involved in? Tick all that apply.

- ☐ Canoeing / kayaking / river rafting
- ☐ Mountain biking
- ☐ Trail running
- ☐ Adventure racing and / or triathlons or similar
- ☐ Climbing
- ☐ Horseriding
- ☐ Scuba diving
- ☐ Surfing or similar
- ☐ Cycling (road)
- ☐ Running (road)
- ☐ Fishing
- ☐ 4x4 and / or quad biking
- ☐ Camping or caravanning
- ☐ Hunting
- ☐ Bird watching

Section B: Hikers

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 11. Please choose and rank your main reasons for going hiking? Rank the most important reason as 1, the next as 2, and so on. PLEASE NOTE: Once you rank your number 1 reason, the software automatically populates rankings for the remaining options by moving other reasons down the ladder. You will need to change each ranking to fit your individual choice. Click on the dropdown arrow to make a choice. Every time you do, the reasons that have a lower importance will move down and the more important reasons will move up. Keep ranking each reason individually until you are satisfied with your final ranking.**

- To spend time in nature
- To challenge myself as part of a sense of accomplishment or to keep fit
- To break away from routine (work and / or family responsibilities)
- Escape and relaxation or to relieve stress
- To travel and experience new territories
- To feel young again
- To spend time with family and friends
- To form new friendships
- Photography
- Birdwatching
- In the hopes of encountering wild animals
- To experience other cultures
- To experience historical heritage sites
- Other

12. If you ranked Other as one of your top 5 reasons for going hiking, please mention what those reasons are?

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

The act of accreditation by an official body is defined as the act of giving authority when recognised standards have been met. Similarly, to certify is to guarantee or endorse reliability in accordance with established requirements or standards.

*** 13. Please select the option that best reflects your view.**

	Not important at all	Of little importance	Important	Very important	Extremely important
When deciding on which trail(s) to hike, how important is it that a trail be accredited or certified by an independent body or authority?	○	○	○	○	○

*** 14. When deciding on which trail(s) to hike, how important is it to have information on each of the areas mentioned below before you can make an informed decision?**

	Not important at all	Of little importance	Important	Very important	Extremely important
Safety information	○	○	○	○	○
Level of scenic beauty that can be expected	○	○	○	○	○
Availability of water on the trail	○	○	○	○	○
Environmental character (Pristine, natural, rural, semi-urban)	○	○	○	○	○
Difficulty rating	○	○	○	○	○
Duration of trail (days / nights)	○	○	○	○	○
Length of the trail (distance)	○	○	○	○	○
Accommodation facilities such as kitchenware/cooking facilities, availability of firewood, lighting and heating.	○	○	○	○	○
Type of accommodation	○	○	○	○	○
Location and setting (province, town)	○	○	○	○	○
Price of trail	○	○	○	○	○
Services available on the trail (porter and catering services)	○	○	○	○	○
Trail type (ramble, day walk, overnight trail, long distance)	○	○	○	○	○
Trail format (linear, circular, network or open-ended)	○	○	○	○	○
Maps and directions for getting to the destination	○	○	○	○	○
Environmental information for education purposes	○	○	○	○	○
Environmental sustainability (is the trail managed in an environmentally sustainable manner?)	○	○	○	○	○
Cell phone network coverage at the huts or camps	○	○	○	○	○
Proximity to amenities such as shops and restaurants	○	○	○	○	○

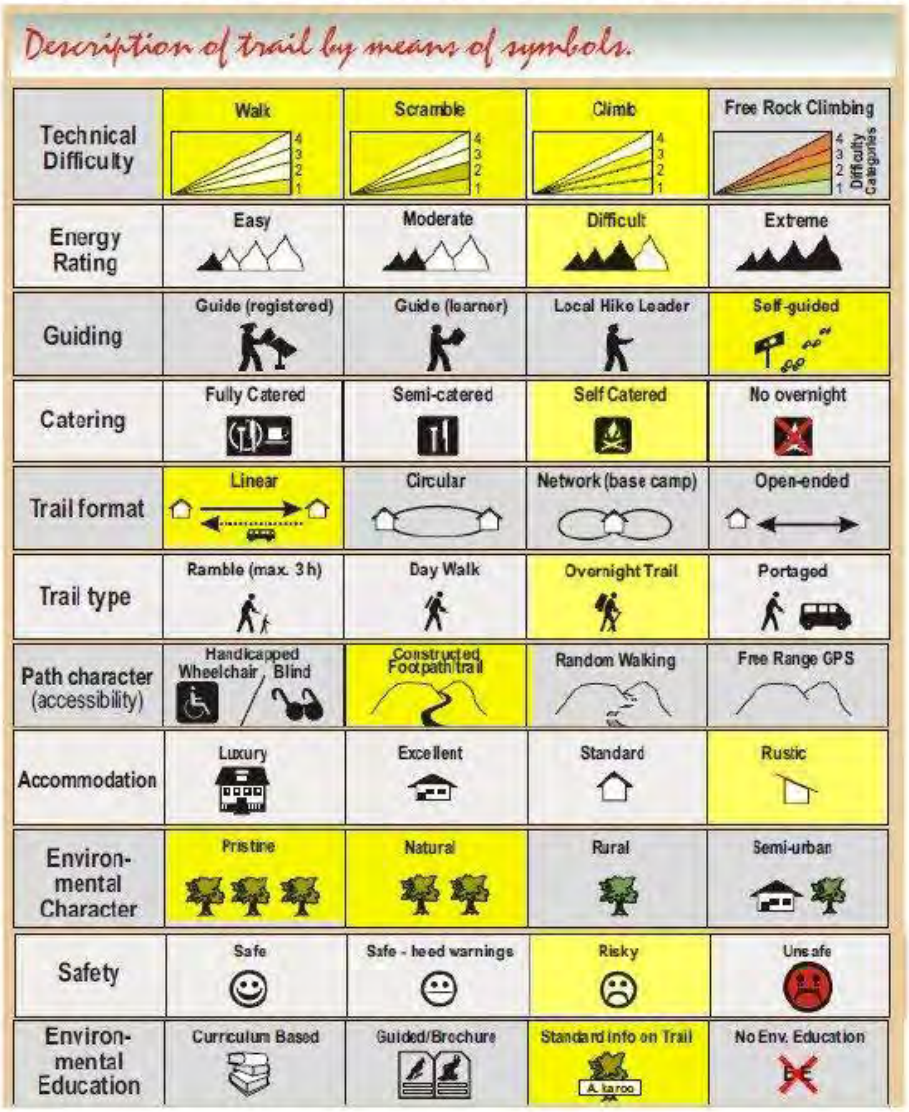
Other (please specify)

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 15. How would the following aspects influence your future hiking activity on South African trails?**

	It would not influence my hiking activity at all	I don't think it will make a difference in my hiking activity	I'm not sure	I would consider hiking more frequently	I would definitely go hiking more
If trustworthy information was available to me regarding the quality of the facilities on trails (such as accommodation and ablution)	○	○	○	○	○
If trustworthy information was available to me regarding the safety of trails	○	○	○	○	○
If the difficulty level of all trails were independently rated	○	○	○	○	○

In order to answer the next question, please have a look at the image below



*** 16. If all hiking trails in South Africa were assessed by an independent body and a detailed description of each trail (as in the example above) be made available to you, how would this influence your future hiking activity?**

- ○ It would not influence my hiking activity at all
- ○ I don't think it will make a difference in my hiking activity
- ○ I'm not sure
- ○ I would consider hiking more frequently
- ○ I would definitely go hiking more

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 17. How many trails do you hike on average in a typical year?**

- ○ 0
- ○ 1-2
- ○ 3-5
- ○ 6-10
- ○ more than 10

*** 18. Please select the option that best reflects your view.**

	No	Yes
I am prepared to pay more for a hiking trail that is shown to be managed responsibly by the trail owner	○	○
I am prepared to pay more for better accommodation facilities	○	○
I am prepared to pay more for a hiking trail that is proven to be managed in an environmentally sustainable way	○	○
I am prepared to pay more for a trail that has been accredited or certified by an independent authority	○	○

*** 19. Are you a member of a hiking club?**

- ○ No
- ○ Yes

*** 20. Are you Wild Card holder?**

- ○ No
- ○ Yes

*** 21. Which channel(s) do you most often make use of to book a trail? Please check all that apply.**

- ☐ Travel / marketing / booking agents
- ☐ Companies offering adventure tourism products
- ☐ Book directly with trail owners / conservation organisations
- ☐ I am not involved in the booking of trails
- ☐ I'm not sure
- ☐ Other (please specify)

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

*** 22. Do you recognise the symbol below?**

- ○ No
- ○ Yes

*** 23. Have you ever heard of Green Flag Trails or the Green Flag Accreditation system?**

- ○ No
- ○ Yes

*** 24. Have you ever hiked a Green Flag Trail?**

- ○ No
- ○ Yes
- ○ I'm not sure

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

25. Please indicate your level of agreement with each of the following statements. Please select the option that best reflects your answer.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
In general, most trails that I have hiked were managed well	○	○	○	○	○
Once you have invested in your initial equipment, hiking is an inexpensive activity to keep up	○	○	○	○	○
The booking of trails in South Africa is an easy process	○	○	○	○	○
The quality of accommodation facilities offered on most trails is satisfactory	○	○	○	○	○
Trail websites offer adequate information about the experience	○	○	○	○	○
Hiking in South Africa is safe	○	○	○	○	○
The quality of trails in general has deteriorated over the last couple of years	○	○	○	○	○
More slack packing or leisure hiking options should be made available	○	○	○	○	○
It is easy to find information on where to hike	○	○	○	○	○
Mechanisms to provide feedback to fellow hikers on the quality of trails are in place and easy to access	○	○	○	○	○
Prior to booking a trail, information on key trail facilities (accommodation, ablution, equipment at the hut) is available for most trails	○	○	○	○	○
The information provided on trails gives a reliable account of the actual trail conditions and attributes (think difficulty level, reliability of the map etc)	○	○	○	○	○

26. Who or what are your main sources of information about trails? Please tick all that apply.

- [ ] Trail websites
- [ ] Hiking club representative
- [ ] Fellow hikers
- [ ] Outdoor or sports magazines
- [ ] Travel / marketing / booking agents
- [ ] Social media sites (Facebook, Twitter, etc.)
- [ ] Brochures obtained from national or provincial parks and nature reserves
- [ ] Brochures obtained from tourism information centres
- [ ] Internet search engines
- [ ] Guide books on trails

Other (please specify)

Section C: Demographics – all respondents

The Impact of an Accreditation System for Trails on Growth in Hiking Tourism

27. What is your age?

- 17 or younger
- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

28. Are you male or female?

- Female
- Male

29. From which population group are you?

- Black African
- Coloured
- Indian / Asian
- White
- Other (please specify)

30. In which province do you reside?

- Eastern Cape
- Free State
- Gauteng
- KwaZulu-Natal
- Limpopo
- Mpumalanga
- Northern Cape
- North West
- Western Cape
- I do not reside in South Africa

APPENDIX D

- Specific forms of data collected and measured -

	Variable type	Attribute or characteristic measured	Question type	Literature
Demographics				
Q27	Attribute	Age	Category	Saunders *et al*. (2012:440); TREES, 2014a:18.
Q28	Attribute	Gender	Category	George (2004:146-152); Saunders *et al*. (2012:434).
Q29	Attribute	Population Group	Category	George (2004:146-152); Saunders *et al*. (2012:434); Statistics South Africa (2012), Census 2011 survey.
Q30	Attribute	Province of residence	Category	Saunders *et al*. (2012:434); Wall-Reinius and Bäck (2011:47.
Purchase behaviour				
Q1	Opinion	Hiking participation classification	Category	Saunders *et al*. (2012:434)
Q2	Opinion	Non-hikers' future consideration of overnight hiking	Category	Saunders *et al*. (2012:434)
Q3	Opinion	Non-hikers' future consideration of day walks	Category	Saunders *et al*. (2012:434)
Q17	Behavioural	Hiking activity levels	Category	Moutinho *et al*. (2011:85); Saunders *et al*. (2012:434).
Q19	Behavioural	Club membership	Category	Saunders *et al*. (2012:434); Wall-Reinius and Bäck (2011:47.
Q21	Behavioural	Booking channel	List	Saunders *et al*. (2012:433)
Motivations and constraints to hiking				
Q4	Opinion	Constraints to overnight hiking	Ranking	Bialeschki and Henderson (1988:20-28); George (2004:146-152); Gilbert and Hudson (2000:906-925); Moutinho *et al*. (2011:85); Saunders *et al*. (2012:434); Williams and Fidgeon (2000:379-393);
Q11	Opinion	Motivation for hiking	Ranking	Buckley (2012:961-962); George (2004:146-152); Kil *et al*. (2014:16); Moutinho *et.al*. (2011:83-85); Saunders *et al*. (2012:434); Terblanche (2012:93); TREES (2014a:12-13); Wall-Reinius and Bäck (2011:47).
Q10	Behavioural	Alternatives to hiking	List	Moutinho *et al*. (2011:85); Saunders *et al*. (2012:433).

Perceptions of hiking conditions				
Q25	Opinion	Perceptions of hiking conditions	Rating – Likert scale	Adam (2015:99); Moutinho *et al*., (2011:97); Saunders *et al*. (2012:436); Sharifpour, Walters and Ritchie (2013:1).
The role of information in hiking tourism decision making				
Q14	Opinion	Information needs and importance of each area in decision making	Rating – Likert scale	George (2004:152-154); Green Flag (2015); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436)
Q26	Opinion	Sources of information	List	George (2004:152-154); Moutinho *et al*., (2011:99); Rupf *et al*., (2014:254); Saunders *et al*. (2012:433)
Q6	Opinion	Influence of availability of key information on decision making	Rating – Likert scale	Bradburn, Sudman and Wansink (2004:129-142); George (2004:152-154); Green Flag (2015); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436)
Q15	Opinion	Influence of availability of key information on future purchase behaviour	Rating	Bradburn, Sudman and Wansink (2004:129-142); George (2004:152-154); Green Flag (2015); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436-439)
Accreditation's influence on decision making and future purchase behaviour				
Q13	Opinion	Perceived importance of accreditation during decision making	Rating – Likert scale	George (2004:152-154); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436)
Q16	Opinion	Influence of accreditation on future purchase behaviour	Rating	Bradburn, Sudman and Wansink (2004:129-142); George (2004:152-154); Green Flag (2015); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436-439)
Q7	Opinion	Influence of accreditation on decision making	Rating – Likert scale	Bradburn, Sudman and Wansink (2004:129-142); George (2004:152-154); Green Flag (2015); Moutinho *et al*., (2011:99); Saunders *et al*. (2012:436)
Willingness to pay				
Q18a	Opinion	Influence of trail under responsible management on willingness to pay	Category	Bergin-Seers and Mair (2009:109); Bradburn *et al*. (2004:131); Chan (2014:915); Fairweather *et al*. (2005:87); Green Flag (2015); Lacher (2012:70); Luthe and Schläpfer (2011:245); Miller (2003:35); Puhakka and Siikamäki (2012:64); Saunders *et al*. (2012:434).
Q18b	Opinion	Influence of better accommodation facilities on willingness to pay	Category	Bergin-Seers and Mair (2009:109); Bradburn *et al*. (2004:131); Chan (2014:915); Fairweather *et al*. (2005:87); Green Flag (2015); Lacher (2012:70); Luthe and Schläpfer (2011:245); Miller (2003:35); Puhakka

				and Siikamäki (2012:64); Saunders *et al*. (2012:434).
Q18c	Opinion	Influence of trail managed in an environmentally sustainable way on willingness to pay	Category	Bergin-Seers and Mair (2009:109); Bradburn *et al.* (2004:131); Chan (2014:915); Fairweather *et al*. (2005:87); Green Flag (2015); Lacher (2012:70); Luthe and Schläpfer (2011:245); Miller (2003:35); Puhakka and Siikamäki (2012:64); Saunders *et al*. (2012:434).
Q18d	Opinion	Influence of trail that is independently accredited on willingness to pay	Category	Bergin-Seers and Mair (2009:109); Bradburn *et al.* (2004:131); Chan (2014:915); Fairweather *et al*. (2005:87); Lacher (2012:70); Luthe and Schläpfer (2011:245); Miller (2003:35); Puhakka and Siikamäki (2012:64); Saunders *et al*. (2012:434).
Awareness of the Green Flag Accreditation System				
Q9	Opinion	Concept awareness	Category	Fairweather *et al*. (2005:82); Lacher (2012:5); Lübbert (2001:71); Saunders *et al*. (2012:434)
Q22	Opinion	Brand awareness	Category	Fairweather *et al*. (2005:82); Lacher (2012:5); Lübbert (2001:71); Saunders *et al*. (2012:434)
Q23	Opinion	Concept awareness	Category	Fairweather *et al*. (2005:82); Lacher (2012:5); Lübbert (2001:71); Saunders *et al*. (2012:434)