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# Determining the impact of hunting trips on the hunters' quality of life

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## Abstract

The objective of this study was to investigate the impact of a hunting trip on hunters' quality of life (QoL) as measured by life domains. A number of life domains that are directly related to a hunting trip may affect the QoL of hunters. A web-based survey was conducted and 158 responses were received. The statistical analysis consisted of descriptive statistics of the demographic profile of hunters, Cronbach's alpha, mean-inter-item-correlations, mean/standard deviation and a structural equation model. The results have indicated that social and travel life domains have a statistically significant effect on life domains overall, as well as on the QoL of hunters on a hunting trip as measured by life domains. The main contributions of the research are twofold: Firstly, it makes a contribution to the current literature on hunters and QoL; and secondly, it has identified the intangible aspects of hunting that may be used by owners of hunting products in marketing a hunting trip.

**Key words:** hunters, hunting trip, life domains, quality of life, structural equation model

Source: http://safarianticosti.com/wp-content/uploads/2011/06/image79.jpg

## Introduction

For several countries, wildlife-based tourism has become the leading foreign exchange earner (Reynolds & Braithwaite, 2001:32; Conradie & Van Zyl, 2013:134) and therefore, it constitutes an important segment of the tourism industry. This mode of tourism is typically undertaken by tourists who primarily wish to view or encounter wildlife and other nature-related aspects such as captive and non-captive wildlife (Newsome et al., 2004:18). In South Africa, wildlife tourism contributes to almost 80% of the tourism product offering in the country, with the greater portion of wildlife tourism taking place on privately owned game farms and reserves (Damm, 2005; Samuelsson & Stage, 2007; Van der Merwe, 2004). As a result of this growing demand, the number of game farms (hunting destinations) in South Africa has increased sharply since the early 1990s (Boddington, 2010:200; Mabunda, 2008:82). One of the main products on offer at game farms is hunting tourism (Van der Merwe & Saayman, 2003:105). It is estimated that upwards of 200 000 South African hunters engage in hunting trips in South Africa each year, thus making it one of the biggest and most important tourism market segments for hunting product owners.

A question that is frequently raised concerns the issue of whether hunting and hunters form part of tourism. The answer to this question lies within the following definition of tourism: “Tourism can be described as the total experience that originates from the interaction between tourists, job providers, government systems and communities in the process of providing attractions, entertainment, transport and accommodation to tourists.” (Buckart & Medlik, 1974:v.) According to this definition of tourism, it is evident that hunting can be described as a tourism product. A tourist may be defined as “a person who contributes an economic input with regard to any other area than that in which he/she generally lives and works” (Saayman, 2013:5), or “a person who voluntarily visits a place, away from his normal abode, for a period of at least 24 hours” (Saayman, 2002:533).

According to these definitions, the qualifying criteria are the motivation for travelling (for example to hunt), the length of stay, place of origin, group size and method of travelling. Hunters have a reason to travel (namely to hunt) and stay for a number of nights at a destination; they have a place of origin in mind such as Gauteng or the United States of America. In addition, local hunters prefer to hunt in groups and travel by making use of a “bakkie” (pickup) or 4x4 vehicles (Van der Merwe et al., 2011). They pursue durable leisure benefits such as self-actualisation, recreation, feelings of accomplishment, social interaction, renewal of the self and belongingness (Van der Merwe & Saayman, 2013:9; Komppulla & Gartner, 2013:168). Taking these factors into account, there is no doubt that hunters are also tourists and part of the tourism industry. A hunting trip may therefore be defined as a trip comprising hunters who travel to hunt at a hunting destination, who make use of different forms of transport, whose trip is longer than 24 hours and less than a year, whose main purpose is to hunt some wildlife species that are offered by the hunting product owner and who want to experience nature.

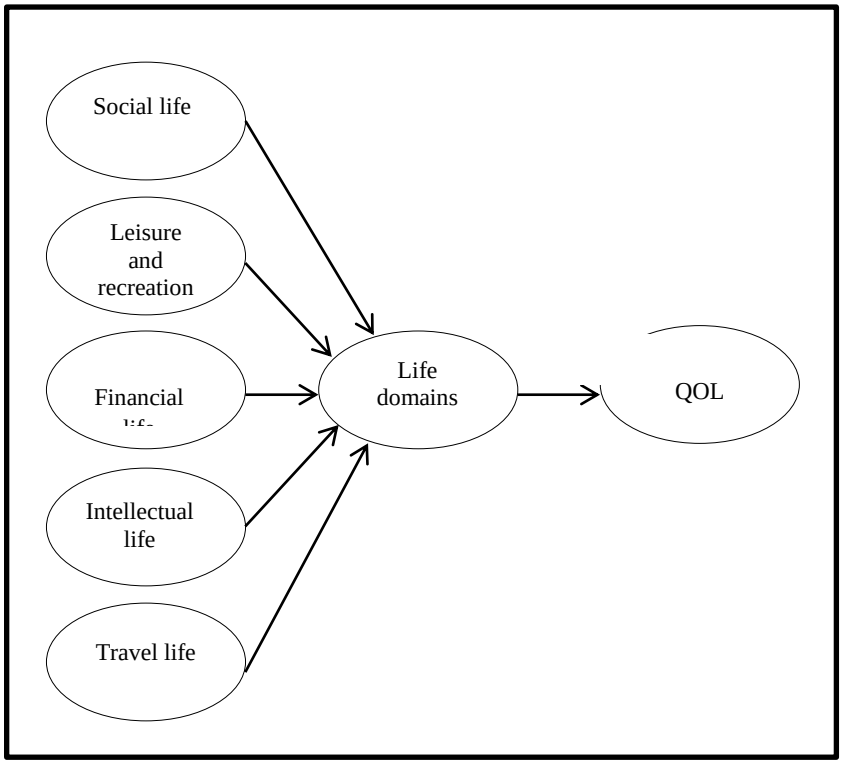
Saayman (2013:9) argues that the total tourism experience can be divided into various phases that are related to travelling, for example the planning, journey to the destination, destination experience, return journey and memory phases. For the purposes of this study, examples that are related to a hunting trip are provided. These include the planning phase (planning ahead to go on a hunting trip, which is the beginning of the tourism experience); journey to the destination (modes of transport that are used by hunters on a hunting trip); destination experience (experiences related to the hunting destination such as accommodation and type of game available); return journey (excitement

levels because they are going home and bringing back venison) and the memory phases (recalling the hunting experience and sharing it with their family/friends). These phases are useful in describing the total tourism experience (in this case, the hunters' experience), as the phases differentiate between the tourism experience and a pure service product.

According to Wearing and Neil (2009:7), the reason why tourists (hunters) are attracted to nature is that it has a positive impact on their QoL, resulting from the interaction between an individual and nature. QoL may involve a person's social, economic and physical well-being (Rapley, 2003:29). Satisfaction in different life domains (for example social life, leisure and recreational life, financial life, intellectual life and travel life) might spill over to life domains overall and QoL (Dagger & Sweeney, 2006:4).As hunters form such an important part of the tourist market, it is of importance for product owners of hunting destinations to determine the impact that a hunting trip has on the QoL of hunters. This information can be used to develop better products for these tourists and, additionally, used as a marketing incentive for hunting product owners to attract hunters. The purpose of this study was therefore to investigate the impact of a hunting trip on the QoL of hunters as measured by life domains. Recent research in the South African context, combining tourism with subjective well-being (QoL), has focused on travel motivations (Cini et al., 2012); experiences (Kruger et al., 2013); satisfaction (Kruger & Petzer, 2008); and satisfaction with travel (Sirgy et al., 2011). Benefits that are derived from the above studies for product owners in the broader tourism field are positive word-of-mouth recommendations; repeat visitation; customer satisfaction; quality service delivery, which enhances tourists' QoL; and product awareness. Studies that are related to hunters and hunting, on the other hand, have focused on satisfaction (Hammit et al., 1989); travel motives (Radder, 2005; Espinoza, 2002); hunting activities (Espinoza, 2002); and spending behaviour (Van der Merwe et al., 2007).

As research of this nature has not been conducted in the field of hunting tourism or on hunters, it was considered of relevance to investigate the impact of a hunting trip on hunters' QoL as measured by life domains (depicted in Figure 1). By combining tourism and QoL literature related to hunters, the study could assist hunting product owners in developing better products. Thus, the question that this research will attempt to address is the following: What is the impact of a hunting trip on hunters' QoL as measured by life domains?

**Figure 1:** Theoretical model of hunters' QoL




The proposed theoretical model is presented in Figure 1, which illustrates the six hypotheses, the estimated path coefficients and the links between the latent variables. This study proposes the relationship between life domains, life domains overall and QoL of hunters on a hunting trip as measured by life domains.

## Literature review

The literature review is subdivided into five sections, namely tourism and QoL; tourist satisfaction; satisfaction with travel trip; life domains; and the so-called bottom-up spillover theory.

### Tourism and QoL

The relationship between tourism and an individual's QoL has gradually been integrated into the tourism literature over the past few years, with research indicating that tourism activities could have an effect on a person's QoL (Genç, 2012:149). However, there is diversity in the attempt to explain the term 'QoL', with more than a hundred definitions found in the literature (Costanza et al., 2007:268).

According to Andereck and Nyaupane (2011:248), QoL can be described as a subjective experience that is reliant on time. The term QoL is multidimensional and an interactive construct, encompassing characteristics of peoples' lives and environments (Andereck & Nyaupane, 2011:248). Scholars in positive psychology suggest that QoL should be studied from the perspective of the individual (Moscardo, 2009; Rootenberg, 2013). QoL reflects on a state of human life situations (Matarrita-Cascante, 2010:108), measured by social indicators in various disciplines, and are included in this study of hunters on a hunting trip as measured by life domains. According to Sirgy (2002:xiii), striving to attain a better QoL for all is an end goal for society.

Sirgy (2002:xiv) adds that QoL is a broad umbrella term that encompasses intangibles such as happiness, well-being and a sense of satisfaction with life in general. The term 'QoL' (as referred to in this article) is explained by Neal and Gursoy (2008:53) as a traveller's (or

person's) perception of and satisfaction with his or her overall life. However, some literature involving the impacts of tourism and QoL is available (Chon, 1999; Andereck et al., 2007; Benckendorff et al., 2009). It may therefore be said that an individual's QoL is related to his or her eudaimonic and hedonic desires (Ryan & Deci, 2001:144-145). Eudaimonic well-being includes a sense of satisfaction with self-actualisation needs and values of a person, whereas hedonic well-being refers to temporary individual experiences through the fulfilment and immediate satisfaction of pleasures arising from subjective needs. Consequently, the well-being of a person forms part of an important component of the assessment of QoL (Diener et al., 2003:404).

The reasons for travelling are varied and the motivations for doing so may be a combination of relaxation, escapism, fun, freedom, self-development, meeting new people, spiritual needs, consolidating friendships and hedonism, pointing to a combination of tangible and intangible aspects (Puczkò & Smith 2012:264). Travel may also contribute towards the well-being (QoL) of an individual (Hallab, 2006:74), including his or her physical and mental development (Seaton & Bennet, 1996:69). For tourists (hunters), decision making and behaviour include a cognitive and emotional component of the approach to travel (Okello & Yerian: 2009:606). An individual is regarded as being a cognitive information processor who is influenced by emotions arising from sensory pleasures, enjoyment and dreams (Decrop, 1999:108). While Decrop describes an individual in rather limiting terms here, he does make the valid point that individuals are influenced by their emotions.

**Tourist satisfaction**

Satisfaction that is experienced as a result of hunting is normally treated as a measure of quality in outdoor recreation (Fulton & Manfredo, 2004:37). Therefore, hunting is not a rational experience; rather, it is the intense involvement of the hunter, identifying with the prey as well as the environment in which the hunt occurs (Bulbeck, 2005:146). Cundy, Schreyer and Krannich (cited by Hammitt et al., 1989:504) argue that hunting is influenced by many factors, including certain desired psychological outcomes (such as experiencing wildlife and being outdoors); hunting different species at different destinations; social factors (such as crowding and companionship); wildlife parameters (such as the number of wildlife viewed, shots taken and harvesting); and lastly, management parameters (such as the rules and regulations concerning the hunt). Tourists', and in this case hunters', satisfaction plays an important role in the success of any tourism-related business, as contentment will provide benefits such as repeat visitation and positive word-of-mouth recommendation (Gursoy et al., 2003; Gursoy et al., 2007). Thus, when hunters are satisfied with services that are rendered by product owners of hunting destinations, it could result in the abovementioned benefits.

**Satisfaction with a travel trip**

Previous research by QoL scholars have addressed central issues that are related to travel and tourism, arguing that travel has many associated benefits, such as creating higher levels of happiness, improving health, increasing self-esteem, experiencing greater satisfaction with various aspects of life and greater overall QoL (Sirgy, 2001; Sirgy et al., 2000; Kilbourne, 2006; Neal et al., 2007). This concept of satisfaction, as explained by Bosque and Martin (2008:552), is described as being a cognitive-affective state that is derived from an experience such as the sense of satisfaction that an individual experiences on a travel trip. A study that was done by Neal et al. (1999) hypothesised that tourists' satisfaction with tourism services on a travel trip is a positive function of the aspects of the tourism phases. They found that satisfaction with the travel trip services significantly predicted satisfaction with the service aspects of the travel trip, which has a direct significant relationship with life domains and the life satisfaction (QoL) of travellers/tourists. Another group of studies found negative associations between tourists on a vacation trip and happiness (Neal, 2000; Kemp et al., 2008;

Nawijn et al., 2010). In an assessment of vacationers on a travel trip, Gilbert and Abdullah (2002) found no differences in happiness levels after the holiday trip.

**Life domains**

Social psychologists such as Lewin (1951) have previously recognised that affective experiences are segmented into various life spheres that are referred to as 'life domains' and are included in QoL research (Smith & Kelly, 2006). Life domains are organised in the memory of an individual according to a hierarchy. Feelings that are related to QoL are positioned at the top of the hierarchy. Underneath QoL are feelings that are related to life at large, which includes life domains such as social life and leisure life. At the bottom of the hierarchy, various events and affective responses within a life domain are included (Sirgy, 2002:36). When investigating an individual's QoL, life domains (for example social life and travel life that deals with a particular activity) should be considered, otherwise that person's QoL will be undervalued (Hajiran, 2006:31). QoL is influenced by life events within life domains, depending on the activity being participated in (Hajiran, 2006:33). Life domains may also be influenced, for example, by product owners of hunting destinations who provide a top quality product (Friedman, 1997:62). Different life events may influence different life domains (Lauer & Lauer, 2008:354). A typical example would be when family issues influence a life domain such as social life: If the hunter's partner does not like hunting, it may result in the hunter deciding not to go on a hunting trip with fellow hunters, thereby experiencing negative affect in the social life domain. Each life domain houses affective experiences (emotional responses to the domain outcome) concerning that domain and they are further segmented into life events that have occurred in the person's life (Sirgy, 2002:36-37). Thus, the balance between the various life domains contribute towards the enhancement of the QoL of the individual (Sirgy, 2002:261; Smith & Puczko, 2009:43). Tourism, therefore, has a direct relationship with the notion of life domains in QoL (Rahman et al., 2005). Any feelings that are experienced during an activity such as hunting may affect the life domains of the individual positively or negatively. For example, activities relating to hunting with a group of friends may influence the individual's social life. As identified by Auld and Case (cited by Lloyd & Auld, 2002:46), social interaction is usually a positive experience and is central to most leisure activities. However, the attitude and state of mind of the participant must be borne in mind to determine whether the experience will have a positive or negative affect on his or her QoL (Lloyd & Auld, 2002:46). A life domain is defined positively when it contains significantly more positive affect than negative affect as a result of satisfying the human developmental needs of the individual (Sirgy, 2002:65) and vice versa.

**Bottom-up spillover theory**

The following question may arise: What is the impact of a hunting trip on hunters' QoL as measured by life domains? A possible answer could be found in the bottom-up spillover theory that is depicted graphically in Figure 1. This theory holds that QoL may be improved by allowing positive and negative affect in various life domains to spill over into life domains overall (Sirgy, 2002:58). The bottom-up spillover theory further maintains that when QoL is attained, satisfaction has also been accomplished in the various life domains (Neal et al., 2007:154). Sirgy (2002:51) defines the bottom-up spillover theory as the spillover effect from salient life domains such as intellectual life, travel life and family life of the individual to life domains overall and, eventually, to QoL. This theory also maintains that when satisfaction has been attained during a specific life event, for example during a leisure activity such as a hunting trip, the life domain to which this kind of activity belongs will be positively or negatively affected (Neal et al., 2007:154). QoL can be influenced by various multidimensional sets of domains that represent the daily life of an individual (Hajiran, 2006:31).

**Research objectives**

The study builds on a model that has been developed by Sirgy et al. (2011), demonstrating the relationship between life domains, life domains overall and QoL of hunters on a hunting trip. The specific research objectives in this study will seek to identify the most parsimonious summary of the sources of positive and negative affect in social, leisure and recreation, financial, intellectual and travel life that have a linear relationship with life domains overall and QoL of hunters on a hunting trip, which reflects the effects (relationships) that have been observed in the data.

**Hypotheses**

As presented in Figure 1, this study proposes the following null hypotheses:

$H^1$: There is no significant relationship between hunters' social life and life domains overall.

$H^2$: There is no significant relationship between hunters' leisure and recreation life and life domains overall.

$H^3$: There is no significant relationship between hunters' financial life and life domains overall.

$H^4$: There is no significant relationship between hunters' intellectual life and life domains overall.

$H^5$: There is no significant relationship between hunters' travel life and life domains overall.

$H^6$: There is no significant relationship between hunters' life domains overall and QoL.

**Research methodology**

The research methodology was twofold, consisting of a literature study and an empirical research survey. Secondary data for the research topic were collected from existing literature that is related to tourism and QoL, as well as by means of a questionnaire that was utilised to capture the primary data.

**Research design and data collection method**

The research method that was employed was of a quantitative nature. Numerical data from only a selected population were used for this study (Maree & Pietersen, 2008:145). Descriptive research was conducted by means of a web-based questionnaire which was posted on the website of the South African Hunters and Game Conservation Association. The members of the association (namely South African hunters) completed this questionnaire online and e-mailed it back to the researchers. The target population included members of the association (hunters) who visited the website during September 2012. Thus, a convenient sampling (non-probability) technique was applied and the results cannot be generalised to a larger population. One hundred and fifty-eight completed questionnaires were received and used in the statistical calculations of this study.

**Development of the questionnaire**

The questionnaire comprised three sections:

Section A included the demographic questions such as gender, age, marital status, level of education, work status, recent out-of-home hunting trip (within the last week – within the last six months) and hunting destination (where the hunt took place), and contained open- and closed-ended questions.

In Section B, the different life domains that are applicable to a hunting trip were introduced to hunters. Sources of positive and negative affect were included in the life domains' statements (see the bottom-up spillover theory). This section included the following life domains: social life (e.g. *I felt good spending quality time with my friends while on the hunting trip; I did not spend enough time alone during my hunting trip because of the people accompanying me*); leisure and recreation life (e.g. *It felt good to be in nature and to observe the wild as a leisure activity; I feel bad going on this hunting trip, leaving*

*significant others at home*); financial life (e.g. *I felt good because the hunting trip was well worth the money spent; I feel bad for returning home with debt after the hunting trip*); intellectual life (e.g. *I gained more hunting experience on my hunting trip; I feel bad not learning something new on the hunting trip*); and travel life (e.g. *I felt good enjoying new hunting destinations to visit; I want to visit other hunting destinations*).

Section C included statements on life domains overall (e.g. *Overall, the hunting trip made me feel satisfied with my travel life in general*).

Section D included questions concerning QoL (e.g. *Overall, my experience with this hunting trip was memorable, having enriched my QoL; I am satisfied with my life in general and overall, I am happy*).

In Sections B, C and D, a labelled five-point Likert scale was used, ranging from 1 to 5, where 1 represents *Don't agree at all* and 5 represents *Totally agree*. Sections B, C and D were formulated on a well-tested measuring instrument that was used by Sirgy et al. (2011:266), adapted to suit the present study and presenting an overview of the different life domains, life domains overall and QoL. The questions that had been compiled by Sirgy et al. (2011:265) were previously administered to tourists in the South African environment and were therefore suitable for use in the hunting tourism sector. Based on the previous study that had been conducted by Sirgy et al. (2011:266), some of the questions were specifically tailored to meet the objectives of this study and had not been tested on hunters before, thereby enhancing the empirical results and scientific nature of the study.

The questionnaire was further enhanced by current literature on the topic. Before the commencement of the main study, the survey was pretested by means of a pilot study that involved 20 individuals, including hunters, to ensure that the questions were well structured.

**Statistical procedure**

The data was analysed by using SPSS 17.0 (SPSS Inc., 2009) for reporting descriptive statistics on the demographic profiles of the hunters, reliabilities (Cronbach's alpha) of the Likert scales that were used in Sections B, C and D, mean and standard deviation and a structural equation model (SEM). According to Schreiber et al. (2006:323), a SEM is a confirmatory technique that is used in AMOS (Amos Development Company, 2009) and it is theory driven. The planning of these analyses is driven by the relationships among observed and unobserved variables. The SEM is then conducted by using a model to minimise the difference between the estimated and observed matrices.

AMOS (Amos Development Company, 2009) was used to present the empirical results of the SEM of this study. Latent variables, such as social life, financial life and the QoL of hunters engaging in a hunting trip, cannot be measured directly and are therefore measured by indicators in the questionnaire. To examine the relationship between the different life domains, life domains overall and QoL of hunters on a hunting trip, a SEM was used. The latter consisted of two parts: a structural model, describing the relationship between the latent variables, and the measurement model, describing the relationships between latent variables and manifest variables. A theoretical structural model implies a certain form of the covariance matrix of the manifest variables. The regression coefficients, indicating the strength of the relationships between latent variables in a SEM, are estimated to be the values that minimise the difference between the observed and implied covariance matrixes (Blunch, 2008). Latent variables are depicted in SEM as circles, while one-headed arrows depict a relationship between latent variables. Many social scientists view the chi-square test to be an overly strict indicator of model fit, given its power to detect even trivial deviations from the proposed model (Hancock & Mueller, 2010). Mueller (1996) suggests that the chi-square should be divided by degrees of freedom. According to Arbuckle

(2006:535), a chi-square that is divided by degrees of freedom (where values range between 2 and 3) is indicative of an acceptable fit. However, it is good practice to report multiple-fit indices, typically from three broad classes (Hancock & Mueller, 2010:379-380). Mueller (1996) describes values of the comparative fit index (CFI) above 0.80 and a root mean square error of approximation (RMSEA) value should be ≤ 0.10 to be indicative of a good overall fit. Blunch (2008) asserts that models with RMSEA values of 0.10 and larger should not be accepted.

## Results and findings

### Profile of respondents (hunters)

Most of the hunters were male (94%), while 6% were female. The majority of the hunters were married (72%), while 14% were not married. Ten percent were divorced, 3% widowed and 1% were living together. A significant percentage (52%) of the hunters who participated in this study were well educated, having attained either a diploma or a degree, followed by 23% who attained a high school qualification. Six percent had a postgraduate qualification, while 19% had a professional qualification. The respondents' profile is in accordance with previous research that had been conducted by Van der Merwe et al. (2011:3-8) on the demographic profile of hunters in the South African context, which indicated that the majority of hunters were male, married and well educated.

### Reliabilities

The internal consistency was computed for each factor by using the Cronbach's alpha coefficient. According to Pallant (2010:97), a minimum level of 0.70 is recommended for the Cronbach's alpha. However, if a scale has fewer than 10 items (which is frequently the case in tourism research), the mean inter-item correlation for each factor must be calculated and reported, which additionally provides indicators of reliability. As recommended by Pallant (2010:97), the optimal mean inter-item correlation values range from 0.20 to 0.40. Most of the factors had an acceptable reliability and mean inter-item correlation that falls within an acceptable range, as presented in Table 1.

**Table 1: Reliabilities of constructs**

| Constructs | *n* | Cronbach's alpha | Mean-inter-item correlation | Mean | Std. deviation |
|---|---|---|---|---|---|
| Social life | 158 | 0.82 | 0.50 | 4.46 | 0.50 |
| Leisure and recreation life | 158 | 0.60 | 0.33 | 3.69 | 0.77 |
| Financial life | 158 | 0.60 | 0.42 | 1.79 | 0.82 |
| Intellectual life | 158 | 0.77 | 0.40 | 4.13 | 0.58 |
| Travel life | 158 | 0.79 | 0.42 | 4.39 | 0.51 |
| Life domains overall | 158 | 0.92 | 0.70 | 3.83 | 0.87 |
| Quality of life | 158 | 0.82 | 0.45 | 4.54 | 0.50 |

Based on the 5- point Likert scales that were used (mean), hunters rated the following constructs more important: QoL, social life and travel life. However, intellectual life, life domains overall, financial life, and leisure and recreation life were important to a lesser extent, contributing to hunters' QoL as perceived by hunters on a hunting trip.

Sirgy et al. (2011:267) conducted a study that was based on the data of 264 tourists and found that the constructs measuring life domains and QoL had good reliabilities of the Likert scales that were used,

ranging between 0.68-0.80. The reliabilities of the current study might differ from those of Sirgy et al. (2011), as it was applied to a different study population.

## SEM results

Finally, the data of the study were used to test the structural relationship between the seven factors that are displayed in Figure 1. Positive and negative affect were included in each life domain for ease of interpretation of the SEM.

**Table 2: Standardised regression weights**

| Latent variables | β-weights[1] | Sig[2] |
|---|---|---|
| Social life ---> Life domains overall | 0.76 | 0.000 |
| Leisure and recreation life ---> Life domains overall | 0.33 | 0.144 |
| Financial life ---> Life domains overall | -0.25 | 0.182 |
| Intellectual life ---> Life domains overall | 0.17 | 0.110 |
| Travel life ---> Life domains overall | 0.24 | 0.000 |
| Life domains overall ---> QoL | 0.74 | 0.000 |

[1] Standardised regression weights (estimates)
[2] $p \leq 0.001$

### The relationship between social life and life domains overall

In Table 2, the standardised regression weights (β) indicate that social life as a life domain had a statistically significant relationship with life domains overall with regard to hunters on a hunting trip; the results, therefore, do not provide support for $H^1$. Thus, according to the hunters who completed the questionnaire, it is very important to socialise with other hunters, as this contributes to their QoL. Hammit et al. (1989:503) support this relationship of social life, which means that hunting conditions and social companionship are very important factors to hunters who are on a hunting trip.

### The relationship between leisure and recreation life and life domains overall

The β-weights in Table 2 indicate that leisure and recreation life (H2) as a latent variable obtained a non-statistical relationship with life domains overall, thus providing support for $H^2$. However, it is still important to report this relationship, as this will contribute to literature in the field of tourism management. A study by Leiss (1979) found that people who experienced satisfaction or dissatisfaction with a leisure/recreation nature experience also rated the programmes, services and facilities during the total leisure experience, but did not link the nature experience to life domains and how this might affect their QoL, thereby contradicting the findings of this study.

### The relationship between financial life and life domains overall

Financial life (β-weights) in Table 2 ($H^3$) had a non-statistically significant relationship with life domains overall, supporting $H^3$. Hunting that is conducted at hunting destinations is one of the major contributors to economic growth (Van der Merwe & Saayman, 2007:184). Although hunters spend money on a hunting trip, they might feel bad (negative affect) for spending too much money while on a hunting trip, such as hunting additional animals which they might not have planned for.

### The relationship between intellectual life and life domains overall

Intellectual life (β-weights) provides support for $H^4$ and obtained a non-statistically significant relationship in Table 2 on life domains overall, thus supporting $H^4$. Hunters might have felt that they gained more hunting experience on the hunting trip and that they learned something new on the hunting trip. Research has indicated that the development of hunting skills (intellectual

life) is one of the most important factors in hunting (Radder, 2001; Mulder, 2011; Andersen et al., 2010:459).

**The effect of the relationship between travel life and life domains overall**

In Table 2, travel life as a life domain (β-weights) had a statistically significant effect on life domains overall, thus contradicting $H^5$. According to Schwabe et al. (2001:132), as well as Whitten and Bennett (2002:209), hunters view their hunting trip as valuable. According to Komppula and Gartner (2013:176), hunters may be regarded as travelling special-interest experts who are involved with hunting-related activities such as biltong and trophy hunting, and are novice travellers to hunting destinations. A study that was conducted by Neal et al. (1999:157) confirms that a travel trip is able to influence an individual's life in general. Hunters reported that it felt good to break away from their daily routines to travel to their hunting destinations and that the hunting trip engendered feelings of satisfaction with their travel life in general. Research on travel and well-being (QoL) often focuses on travel satisfaction or feelings that are experienced on a travel trip (De Vos et al., 2012). Travel can affect a person's QoL, namely the positive or negative affect that is experienced during travel itself as a leisure activity; travel facilitates the process of engagement in leisure activities, thereby improving the QoL of an individual.

**The relationship of life domains overall on QoL**

This factor failed to provide support for $H^6$. Life domains overall (depicted in Table 2, β-weights) had a positive statistically significant relationship with QoL. The hunters' responses indicated that their perception was that the overall hunting trip had improved their QoL. Most tourism activities take place at the tourism destination and people travel to meet their intrinsic and extrinsic needs, participating in leisure activities and enriching themselves with preserved memories for years to come, thereby enhancing their QoL (Uysal et al., 2012:669).

Correlation coefficients in Table 3 are used to describe the strength and direction of the linear relationship between variables (Pallant, 2010:128). To interpret the strength of the relationships between the r-values, Cohen (1988:79-81) suggests the following guidelines: 0.50 to 1.0, large; 0.30 to 0.49, medium; and 0.10 to 0.29, small.

**Table 3: Correlation coefficients between life domains**

| Latent variables | r-value |
|---|---|
| Social life <--> Leisure and recreation life | 0.39[2] |
| Social life <--> Financial life | 0.36[2] |
| Social life <--> Intellectual life | 0.39[2] |
| Leisure and recreation life <--> Financial life | 0.66[3] |
| Leisure and recreation life <--> Intellectual life | 0.41[2] |
| Financial life <--> Intellectual life | 0.36[2] |
| Travel life <--> Financial life | 0.30[2] |
| Travel life <--> Social life | 0.27[1] |
| Travel life <--> Intellectual life | 0.58[3] |
| Travel life <--> Leisure and recreation life | 0.42[2] |

[1] Small correlation
[2] Medium correlation
[3] Large correlation

In Table 3, a medium positive correlation was found between social life, leisure and recreation life, financial life, and intellectual life, while a large correlation was found between leisure and recreation life and financial life. A medium correlation

between leisure and recreation life and intellectual life was observed. On the other hand, financial life had a medium positive correlation with intellectual life, while travel life had a medium correlation with financial life and social life, and a large correlation with intellectual life. Thus, the relationships between the majorities of the life domains were medium to large.

**Model fit indices**

The model in Figure 1 yielded a chi-square, divided by degrees of freedom value of 2.54 which is, according to Arbuckle (2006), indicative of an acceptable fit. However, it is good practice to report multiple-fit indices, typically from three broad parsimonious classes (Hancock & Mueller, 2010). The seven-factor model produced a relatively acceptable CFI of 0.70 and the RMSEA value yielded an acceptable value of 0.09.

**Managerial implications**

Firstly, based on the findings above, it is evident that a hunting trip has a positive impact on the QoL of hunters as depicted in life domains. Therefore, product owners should be aware of sources of positive and negative affect in the life domains and reduce the sources of negative affect, thus enhancing the QoL of hunters.

From a product owner's point of view (for example, owners of hunting farms or nature reserves), it is important to concentrate on the intangible advantages when focusing on marketing strategies for hunters to declare that hunting is more than hunting an animal; it enhances hunters' overall sense of well-being (QoL).

Product owners need to emphasise the rewards of a hunting trip such as stress release, breaking away from daily routine, spending time with friends, being close to nature and time to recharge. Product owners need to realise that they are not only selling the actual hunt (tangible), but also a total hunting experience (intangible), which is a key factor in any wildlife tourism product.

Secondly, product owners must provide opportunities for hunters to socialise (social life) with other hunters and hunting companions. This has implications for product development and, in particular, rest camp accommodation, as well as hunting package development. Research that has been conducted by Van der Merwe et al. (2011:5) maintains that the majority of hunting groups consist of four hunters, thus confirming that hunters prefer not to hunt alone and that they like to socialise while on a hunting trip. Game farm owners must not intervene too much with hunters after the day's hunting, but leave them alone during the evenings while they spend time around the campfire as friends. Furthermore, they can provide hunters with additional socialising activities such as sunset trips at viewpoints or visits to beautiful locations on the game farm or nature reserve.

Thirdly, the entire hunting trip (travel life) plays a significant role in the hunting experience and overall QoL of a hunter. Product owners must therefore strive to assist hunters in arranging their hunting trip, making it as easy as possible for them by providing integrated information material such as road directions; documentation required such as hunting licences or permits and health requirements, for example in a malaria area; information regarding the area being visited, including attractions in the area; and information regarding the hunting destination or ranch and fire-arm legislation. This necessary background will contribute to a memorable hunting trip. Make sure that the hunters fully understand what is included in the daily fees and prices for the animals to be hunted, for example TAX, permits, skinner and trackers. Hunters do not like surprises such as aspects that need to be paid, but were not specified in their communication with product owners.

**Conclusions**

This study has focused on the impact of a hunting trip on hunters' QoL as measured by life domains. The main findings of the research have indicated that the following

life domains, namely social life and travel life, exert a positive impact on the QoL of hunters. Although empirical evidence is limited on this topic, this research contribution is a valuable addition to the literature on hunting, tourism and QoL. The main contributions of the research are twofold: Firstly, it makes a contribution to the current literature concerning hunters and secondly, it identifies the intangible aspects of hunting that may be used by hunting product owners in marketing a hunting destination. Hunting as an activity has the ability to impact positively on the QoL of hunters and therefore on their overall sense of well-being.

From a QoL perspective, enhancing the QoL of hunters on a hunting trip will benefit the hunting industry in the long term, thereby creating a positive word-of-mouth and repeat business for an inordinate length of time. From the point of view of the product owners of hunting destinations, this research will enable them to develop hunting products and services that contribute to the QoL of hunters.

**Limitations of the study and future research**

As with all research studies, the limitations of this study need to be indicated. The data were collected by making use of a convenient sampling technique of hunters who accessed the measurement instrument via the website of the South African Hunters and Game Conservation Association. Thus, there is a limited ability to generalise the results of the study in comparison to studies that make use of larger study populations.

Suggestions for further research would be to conduct research on hunters who are members of another related hunting association, such as the National Confederation of Hunters Association of South Africa, in obtaining a larger response rate. Furthermore, incorporating international hunting associations such as those in Finland (Finnish Hunters' Association) and the United States of America (American Hunting Association), where hunting forms largely part of leisure hunting activities, will broaden the scientific knowledge of scholars as well as product owners of hunting destinations. It would be of additional interest to conduct further research related to this study on various market segments in the hunting sector of the tourism industry by including biltong, trophy and recreational hunters. The findings of such a study would equip product owners of hunting destinations with the necessary marketing tools to enhance hunters' QoL and thereby reap the resultant benefits.

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