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An investigation of domestic tourists' loyalty to a nature-based tourist setting from a relational and transactional perspective at the Victoria Falls World Heritage site

Jane Musole Kwenye
The University of Montana

AN INVESTIGATION OF DOMESTIC TOURISTS' LOYALTY TO A NATURE-BASED TOURIST SETTING FROM A RELATIONAL AND TRANSACTIONAL PERPECTIVE AT THE VICTORIA FALLS WORLD HERITAGE SITE

By

Jane Musole Kwenye

BSc Forestry, Copperbelt University, Zambia, 2005
MSc Environmental and Natural Resources Economics, University of Birmingham, United Kingdom, 2008

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Sandy Ross, Dean of The Graduate School
Graduate School

Dr. Wayne Freimund, Chair
Department of Society and Conservation

Dr. Norma Nickerson
Department of Society and Conservation

Dr. Keith Bosak
Department of Society and Conservation

Dr. Douglas Dalenberg
Department of Economics

Dr. Jeffrey Bookwalter
Department of Economics

Abstract

Kwenye, Jane, PhD, Spring 2015 Forest and Conservation Sciences

An investigation of domestic tourists' loyalty to a nature-based tourist setting from a relational and transactional perspective at the Victoria Falls World Heritage site

Chairperson: Dr. Wayne Freimund

It is a common belief that Zambian citizens would prefer to vacation in other countries rather than visiting their own natural tourist settings. The primary goal of this study was to understand how to foster loyal relationships between Zambian domestic tourists and a natural setting by investigating factors that influence domestic tourists' loyalty to the Victoria Falls World Heritage site. Destination loyalty was the central concept employed in this study and was examined from both a relational and transactional perspective. Place attachment constituted the relational variable, while satisfaction, service quality and perceived value were the transactional variables.

Data for this study were collected at the Victoria Falls World Heritage site using on-site self-administered surveys between August 26 and September 10, 2014. A total of 1,060 domestic visitors participated in the survey for a 92% response rate. Findings of this study showed that to foster loyal relationships, both the transactional and relational antecedents of loyalty are fundamental. This study concludes that to extend our theoretical understanding of destination loyalty, examining its predictors from both a transactional and relational approach is valuable. Thus, to foster domestic tourists' predisposition to revisit a nature-based tourist setting, practitioners and policy-makers can consider promoting both the long term relationships in addition to transactional factors that influence loyal relationships. Accordingly, both relational and transactional determinants of loyal relationships - service quality at the settings, perceived value of the visit to the setting, satisfaction with the visit to the setting, attachment to the setting - need to be enhanced collectively.

Dedicated to the memory of my dad Mr Bernard Kwenye who taught me to always work hard and utilize every opportunity I am accorded to the best of my abilities. I miss you dad.

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Chapter 1 Introduction

Destination loyalty, a concept that centers on lasting relationships between tourists and destinations has gained significance in the tourism literature (Zhang et al., 2014). Loyal tourists return to a destination repeatedly and encourage other to visit the site as well (Moliner et al., 2007). Developing and sustaining this segment of tourists is of great importance to destinations given the increasingly competitive tourism destination market (Kim, 2010; Yoo, 2011). Academics and practitioners alike concur that tourist loyalty is an integral part of successful tourist destinations (Morais & Lin, 2010; Yuksel et al., 2010). Thus, tourist destination service providers desire to foster destination loyalty because it secures lasting relationships between tourists and the destinations when the tourists are faced with increasingly attractive destination competitive offers (Jamaludin et al., 2012).

Past research reports additional advantages of developing and sustaining a clientele of loyal tourists. In a nature-based tourism context, Weaver & Lawton (2011) indicates that tourists who have lasting relationships with natural tourist settings encourages stable revenues through repeat visitation. This stable revenue can serve as an essential source of operational revenue at the settings, as well, as an incentive for maintaining the setting in a relatively pristine condition so as to stimulate stable tourist flow (Lindberg et al., 1996; Weaver & Lawton, 2011). Additionally, tourists with lasting relationships instigate new customers intakes through positive referrals, thus promoting continuous access to the larger market the tourists are a part of (Kastenholz, 2004). Research also report that loyal visitors to natural settings exhibit enhanced environmental

concern (Vorkin & Riese, 2001), conservation advocacy (Lee, 2001), environmentally responsible behaviors (Vaske & Kobrin, 2001) and stewardship of natural resources (Mitchell et al., 1993). Thus, the need to foster lasting relationships between tourists and natural tourist settings cannot be overstated. To do this an understanding of factors that influence lasting relationships between tourists and natural tourists settings is needed.

Problem statement

An understanding of how to build Zambians' lasting relationships to local natural tourist settings is still poorly understood

Natural settings are a treasure for most if not all countries across the globe. Zambia, a developing country located in Southern Africa is endowed with vast natural resources in terms of land, minerals, lakes, rivers, waterfalls, and wildlife (Thapa, 2012; ZDA, 2013). Despite the vast natural resources, the Zambian economy has heavily relied on copper export revenue (Munuka, 2010).This is primarily because Zambia was colonized for its minerals and at independence the new government inherited an economy that was reliant on copper (Abel & Blaike, 1986; Sinyenda, 2005). However, unstable and volatile copper prices resulted in drastic economic booms and busts, which threatened the country's economy. In response, the Zambian government devised mechanisms for promoting other potential growth sectors in view of boosting the country's economy. Tourism, particularly, sustainable tourism was identified as a potential economic growth sector (FNDP, 2006; RSNDP, 2013; TPZ, 2007).

Given the new focus on tourism, it was observed that Zambians opted to visit other countries during their vacations rather than visiting the natural tourist settings in the

Zambia [1]. This lead to a realization that there was a limited relationship between Zambians and natural tourist settings in their country. In this regard, there has been a strong desire by the Zambian government to promote domestic visits to local natural settings. Despite this desire, there is a poor understanding of how to foster Zambians' relationships to natural settings in the country. At this time, however, there is a lack of research exploring this issue.

Destination Loyalty as a potential tool for fostering Zambians' relationship to the local natural settings still requires investigation

A review of the tourism literature showed that the concept of destination loyalty could be highly applicable to understanding and addressing the Zambian challenge. This is because destination loyalty revolves around stable relationships that visitors have with the destination (Morais & Lin, 2010).The relationships are revealed by visitors' intentions to return to the destination repeatedly and their willingness to recommend the destination to others. Past research has shown that loyal visitors are more likely to appreciate their relationship with the destination and develop stewardship with the area (Mitchell et al., 1993). Loyal visitors also act as free word of mouth advertising agents that informally bring networks of friends, relatives and other potential visitors to the destination (Chi, 2005; Oppermann, 2000). Given its focus on tourist-destination relationships, the concept of destination loyalty serves as a potential tool for addressing the Zambian challenge.

[1] This perspective was particularly highlighted during preliminary interviews that the researcher conducted with Tourism stakeholders in Lusaka and Livingstone, in January 2014

The concept of destination loyalty has been widely studied in the tourism literature. The importance of understanding, predicting and influencing tourists' intentions to patronize specific destinations has led researchers to examine the concept of destination loyalty (Chi, 2005; Chi, 2012; Chi & Qu, 2008; Jamaludin et al., 2012; Kim, 2010; Lee, 2001; Lee et al., 2007; Mat Som et al., 2012; Oppermann, 2000; Prayag & Ryan, 2012; Yuksel et al., 2010; Yoon & Uysal, 2005; Zhang et al., 2014). Destination loyalty however, has generally been studied from a transactional perspective (Campon et al., 2013). This approach focuses on transactional antecedents of destination loyalty. The major setback of this approach is that it is limited in explaining why visitors choose to return to a particular destination repeatedly. Past studies suggest that this limitation can be addressed by examining destination loyalty from a relational perspective (Choi & Cai, 2012). While examining destination loyalty from both a relational and transactional approach provides promise for extending our theoretical understanding of destination loyalty, studies exploring this approach are rare in the extant literature.

Addressing the Zambian Challenge and Limitations in Current Knowledge

To provide an understanding of how to foster Zambian domestic tourists' lasting relationships to a nature-based tourist setting, this study examined the concept of destination loyalty. Particularly, the study investigated factors that influence domestic tourists' loyalty to a nature- based tourist setting. To address limitations of past destination loyalty research, the study examined factors that influence destination loyalty from both a transactional and relational perspective.

Objective of the study

The primary goal of this study was to provide an understanding of how to foster lasting relationships between Zambian domestic tourists and a nature-based tourist setting. To meet this goal, the study examined factors that influence domestic tourists' loyalty to a nature-based tourist setting. To extend our theoretical understanding of destination loyalty, this study examined factors that influence loyal relationships from both a relational and a transactional approach. A case study of domestic tourists who visited the Victoria Falls World Heritage site in Livingstone, Zambia was used to meet the goal of this study.

Guiding research questions

The following four research questions guided this study:

1) Who are the domestic tourists that visit the Victoria Falls World Heritage site in Livingstone, Zambia? What is the nature of their relationship to the site?

2) Can the concept of destination loyalty help us understanding this relationship? Is the way destination loyalty has been generally studied sufficient to the particular concern we have in Zambia? If not why?

3) Can a relational construct such as place attachment that is used in the natural resource management field be applicable to examining destination loyalty from a relational perspective in addition to the typical transactional approach?

Chapter 2 Literature Review And Conceptual Framework

This chapter provides a review of research that guided the questions addressed in the study. A conceptual framework is presented and the chapter explains how the study's research questions form that framework. The chapter begins with a review of past research on Zambians' relationships to nature, tourism in Zambia and destination loyalty. This review provides an important base of knowledge on which this study was built. Limitations of past research are highlighted. Next, a conceptual framework is presented and the theory that guided relationships examined is discussed. The chapter ends with a discussion of the constructs used in the conceptual framework. In this discussion, past research on the constructs is reviewed and the limitations in knowledge are presented as a basis for the hypotheses tested.

Understanding Zambians' Relationships To Natural Settings

Zambia, a developing country located in Southern Africa is endowed with vast natural resources. The resources include wildlife, rich cultural and natural heritage, abundant water resources and natural watercourses including waterfalls (Sinyenga, 2005). A wealth of natural assets including rivers holding about 35 % of Southern Africa's total natural water resources makes Zambia stands out in Africa (ZDA, 2013). Natural protected areas including national parks and game management areas occupy about 30 % of the country's total land area. Despite, these vast natural resources, Zambians' relationship to these resources leaves much to be desired.

Past research reveals that very few Zambians invest time and effort to visit and relate with nature, particularly natural settings. In a study that looked at residents' perceptions of tourism in the Livingstone area of Zambia, Husbands (1989) reported that Zambians revealed limited interest in visiting nature-based tourist settings. Similarly, in a study that examined nature-based tourism demand in Zambia, Sinyenda (2005) reported that from a total sample of 1,578 foreign and domestic tourists targeted in the study, only 7 % were domestic visitors. The study indicated that few Zambians were visiting nature-based tourist settings in the country. Pope (2005) also reported similar findings when he revealed that in nature-based tourism entities, only 20 % to 30 % of bed nights were filled by domestic tourists.

The findings of past research reinforces the views expressed by tourism stakeholders during preliminary interviews conducted by the researcher in January, 2014[2]. Generally, the stakeholders indicated that Zambians have a limited relationship with nature, particularly nature-based tourist settings. The following excerpts exemplifies this:

> "Zambians generally do not like anything with do with touristic visits to natural settings such as national parks.....when on holiday [vacation] they prefer to go out of the country"
>
> "From a population of about 13 (thirteen) million people, only a few .....I mean very people take time to visit and enjoy our natural treasures when on holiday [vacation]....."

[2]The researcher interviewed 20 tourism stakeholders who were purposively sampled in Lusaka and Livingstone in January, 2014. The purpose of the interviews was to gain in-depth insight on the opportunities, challenges and needs of Zambia's tourism industry/businesses in order to guide the research focus of the current study.

> "Zambians need a complete change in mindset regarding visits to national parks..... The issue of thinking that a visit to the national park or game park is for foreigners should die out.....our plan now is to encourage Zambians to take pride and relate with what we are blessed with..... the natural resources and enjoy the benefits of using these resources."
>
> "Most locals [Zambians] don't visit the country's natural tourist attractions...for example.. national parks, even though these resources are meant to benefit them....we need to have patriotic local tourists..... people who appreciate and make use of our very own natural treasures.....we are making efforts to encourage them to begin to do that."

The preceding excepts suggest a perception that domestic nature based tourism is overly limited within the broad Zambian population. However, when the actual tourism sector is analyzed, we find that domestic tourists to the Mosi-oa-Tunya National Park was approximately 49 % of visitation in the first three quarters of 2013 (ZTB, 2014). In 2013, out of a total of 152, 952 visitors to the Victoria Falls World Heritage site, 100,983 were Zambian residents (NHCC, 2013). Thus, there is an important domestic tourism segment that is already enjoying the benefits of at least some nature-based tourist settings in Zambia. This segment can be used to explore avenues of fostering the broader citizenry's lasting relationships to nature-based settings.

The Zambian government's current desire is to foster domestic visits to local nature-based tourist setting. Governmental support and effort to boost domestic visits to natural tourist settings is reflected in the Tourism Policy of Zambia, TPZ (2007); the 2014 marketing plan for the Zambia Tourism Board[3], ZTB (2014a) and the Tourism Strategic Plan, MTA (2013). Despite this desire however, how to foster Zambians' lasting relationships to the local nature-based tourist settings is still poorly understood. At this

[3] The Zambia Tourism Board is a government funded institution that is responsible for promoting and marketing the country's tourism/tourist attractions.

time, there is a lack of research exploring this issue. Additionally, the characteristics of the segment of domestic tourists who visit nature-based tourist settings is still poorly understood. In a study that focused on nature based tourism demand in Zambia, Sinyenda (2005) provided scant information on the characteristics of domestic tourists given the study's emphasis on international tourists. Thus, the question of who constitutes domestic visitors to local nature-based tourist settings in the country still remains an issue that requires further investigation.

Tourism in Zambia

The tourism industry in Zambia is largely focused on its core products such as parks, wildlife, natural and cultural heritage (MTA, 2013). The country's major tourist attraction is the Victoria Falls which is the largest in the world and is located on the Zambezi River between Zambia and Zimbabwe. In addition to the natural and cultural heritage, the country also boasts of tremendous peace and tranquility, all of which are a recipe for tourism growth (Sinyenda, 2005). By virtue of its natural and cultural endowments, the peacefulness and friendliness of its people, Zambia undoubtedly has significant potential for tourism growth (Cattaneo, 2007). Despite this potential however, the country's success in exploiting this potential appears limited and still fragile (Munuka, 2010). Particularly, the tourism potential has not been exploited in order to revive an economy that has been heavily reliant on copper export revenues for more than three decades.

Zambia's reliance on copper export revenues has resulted in economic booms and busts, given the unstable and volatile copper prices. The country has been susceptible to

external shocks that have been precipitated by falling international purchasing power of copper. This has led to the country's poor economic performance during the last two decades. The unstable copper prices however, gave the Zambian government renewed impetus toward diversification of the economy. Tourism was therefore, identified as a potential economic growth sector of the country. The sector was reclassified from a social sector to an economic sector (TPZ, 2007). Zambia's long-term vision for tourism is to ensure that it becomes one of the top five tourist destination of choice in Africa by 2030 (MTA, 2013). The country's tourism mission is to facilitate and promote sustainable tourism for environmental, social and economic development (RSNDP, 2013).

Tourism is an important sector for various countries across the globe. Its importance can be viewed from the economic, as well as, the environmental sustainability perspective. Economic contributions from the sector include generation of income and tax revenue, and job creation. In Zambia, annual direct tourism earnings were US$240 million in 2012 with the sector contributing 2.1 % to Gross Domestic Product (MTA, 2013). The tourism sector also created 44, 292 jobs in the same year.

In addition to economic contributions, tourism, particularly, nature-based tourism has potential to foster sustainable behaviors (Mair & Laing, 2013). It is indicated that tourist experiences at natural settings lead to heightened awareness, appreciation of and reconnection with nature, personal rejuvenation and a realization of personal responsibility for the state of the environment (Ballantyne et al., 2007). Nature-based tourist experiences also activate deeper personal connections that are linked to changes in behavioral intentions related to environmental sustainability (Walker & Moscardo, 2014).

In Zambia, however, an understanding of how to foster loyal relationships is still poorly understood. Thus, the current study explored the following question: Are there models that can help us understand ways of fostering Zambian domestic tourists' lasting relationships to nature-based tourist settings? A review of the literature conducted to address this question showed that the concept of destination loyalty could be highly applicable to understanding and addressing the Zambian challenge. This is because destination loyalty revolves around stable relationships that visitors have with the destination (Morais & Lin, 2010). The relationships are revealed through tourists' revisit intentions and their willingness to recommend the destination to others. Thus, given its focus on tourist-destination relationships, the concept of destination loyalty served as a potential tool for addressing the Zambian challenge.

Understanding Loyalty To Tourist Destinations

The concept of consumer loyalty originates from the marketing field. Repeat purchases and recommendations to others constitute consumer loyalty (Chi, 2005; Yoon & Uysal, 2005). Travel destinations can be considered as products and tourists may revisit or recommend the travel destination to others (Yoon & Uysal, 2005). Thus, tourism researchers have incorporated the concept of consumer loyalty into tourism products and destinations (Alexandris et al., 2006; Baloglu, 2001; Chi, 2012; Chi & Qu, 2008; Han et al., 2011; Jamaludin et al., 2012; Kim, 2010; Lee, 2003; Oppermann, 2000; Prayag & Ryan, 2012; Weaver & Lawton, 2011; Yuksel et al., 2010; Zhang et al., 2014). The degree of tourists' loyalty to a destination is reflected in their intentions to revisit the destination and in their willingness to recommend it to others (Oppermann, 2000). Through such behaviors, tourists demonstrate their lasting relationships to the destination.

Loyalty is a concept that is central to the study of tourist behavior. Understanding predictors of loyalty is fundamental in the design of strategies for tourist entities oriented towards creating and sustaining customer relationships (Velazquez et al., 2011). Relationship building with potential and loyal tourists is an important success factor for tourism destinations (Bigne et al., 2001). Thus, an understanding of factors that influence tourists' decisions to return to a destination repeatedly and recommend it to others is of great concern for destination managers. This concern is primarily driven by the desire to better understand ways of building tourists' lasting relationships to the destination.

Past research congregates around three major advantages of fostering tourist loyalty to a destination. First, loyal tourists provide economic benefits in terms of stable sources of revenue and improved profitability (Weaver & Lawton, 2011). Repeat visitations to the destination result in stable sources of revenue and customer retention leads to profit growth. Past research reports that a 5 % increase in customer retention can generate a profit growth of 25–95 % across a range of industries (Reichheld, 2003; Reichheld & Sasser, 1990).

Second, loyal tourists are likely to recommend the destination to others (Oppermann, 2000). Particularly, they are more likely to act as free word-of mouth (WOM) advertising agents that informally bring networks of friends, relatives and other potential consumers to the destination (Chi, 2005). Past research reports that WOM referrals account for up to 60 % of sales to new customers (Reichheld & Sasser, 1990). Accordingly, Crouch & Ritchie (1999) note that, the fact that certain visitors have experienced a particular destination may enhance its appeal and therefore increase its value to others.

Third, loyal tourists are likely to appreciate their relationship with the destination and develop stewardship with the area (Lee, 2003). Past research reports that loyal visitors to natural settings tend have enhanced environmental concern, (Vorkin & Riese, 2001), conservation advocacy (Lee, 2001), environmentally responsible behavior (Vaske & Kobrin, 2001), and stewardship of natural resources (Mitchell et al., 1993). These studies showed that in addition to the relationships visitors had with the natural settings, they also revealed behaviors that indicated their personal responsibility for the state of the environment. Thus, past research revealed the importance of fostering lasting relationships between tourists and natural settings.

Understanding the measurement of destination loyalty

Loyalty has generally been conceptualized in one of the three following approaches; behavioral, attitudinal, and composite loyalty (Chi, 2005; Jacoby & Chestnut, 1978; Kim, 2010). The behavioral approach reflects behavioral outcomes such as repeat visitations (Choi & Cai, 2012; Jamaludin et al., 2012). This approach has been criticized for failing to explain the antecedent of loyalty (Yoon & Uysal, 2005). The attitudinal approach reflects customers' attempt to go beyond overt behavior and express their loyalty in terms of their strength of affection towards a destination (Zhang et al., 2014).The attitudinal approach has also been criticized given that neither the data collected on attitudinal measures are convincing, nor the survey instruments used to collect the data are psychometrically sound (Pritchard et al., 1992).

The composite approach is an integration of both attitudinal and behavioral approaches (Zhang et al., 2014). It has been argued that tourists who visit and have

loyalty to a particular destination must have a positive attitude toward those destinations (Yoon & Uysal, 2005). While the composite approach seems to be the most comprehensive, it is not necessarily practical (Mechinda et al., 2009). Its limitation lies in the fact that not all the weighting or quantified scores may apply to both the behavioral and attitudinal factors (Yoon & Uysal, 2005). Thus, in the tourism literature, visitors' intentions to return to the same destination, and their intentions to recommend it to others are considered adequate measures for destination loyalty (Chi, 2005; Chi, 2012; Chi & Qu, 2008; Deng & Pierskalla, 2011; Jamaludin et al., 2012; Kozak, 2001; Morais & Lin, 2010).

Past research on destination loyalty, a critique

The desire to gain an understanding of factors that influence tourists' lasting relationships to destinations has motivated past research on destination loyalty. Tourism researchers have proposed and tested relationships among various antecedents of destination loyalty. However, conceptual models that have been suggested in most studies have not be guided by theory (Li & Petrick, 2008). In these studies, the identification of destination loyalty predictors has been merely exploratory. To avoid this limitation, some researchers have provided an understanding of theoretically guided processes through which tourists develop loyalty to destination. Of great significance is Cognitive-Affective Conative Loyalty theory (Han et al., 2011; Oliver, 1997). This theory is based on the premise that customers move from having positive beliefs[4] and

[4] The beliefs arise from cognitive evaluations (Cronin et al., 2000; Eggert & Ulaga, 2002; Gotlieb et al., 1994)

affective attachment/feelings about a service provider to developing strong intentions to purchase preferentially from that provider (Han et al., 2011).

The Cognitive-Affective-Conative Loyalty theory has gained acceptance among loyalty researchers. It also guides tourism researchers in identifying predictors of destination loyalty (Campon et al., 2013). Thus, a number of studies in the tourism literature have proposed and examined various predictors of destination loyalty (Chi, 2005; Chi, 2012; Chi & Qu, 2008; Deng & Pierskalla, 2011; Jamaludin et al., 2012; Kim, 2010; Lee, 2003; Lee et al., 2007; Lee et al., 2007a; Mechinda et al., 2009; Oppermann, 2000; Prayag & Ryan, 2012; Yoon & Uysal, 2005; Yuksel et al., 2010; Zhang et al., 2014). In this review however, the current study primarily focuses on discussing and highlighting limitations of past studies that provided a rationale for the relational and transactional approach used to examine destination loyalty in this study. This discussion follows next.

Past approaches of destination loyalty examinations and limitations in past research

Past research congregates around two distinct approaches to understanding loyalty formation: relational and transactional (Garbarino & Johnson, 1999). These approaches reveal differences in customers' proneness for loyalty. That is, customers' loyal relationships may be take up a relational or transactional orientation. Transactional oriented customers develop loyalty based on their knowledge/beliefs and experience with the services/service provider/destination/destination attributes. These beliefs/ knowledge and experience emanates from evaluations of the services/service

provider/destination/destination attributes. Favorable beliefs and experiences result in habitual or deal-oriented consumers (Prichard & Howard, 1997). Repeat purchases of the habitual or deal-oriented consumers constitute the transactional- oriented loyalty (Prichard & Howard, 1997). Habitual or deal-oriented consumers despite repurchasing a product/service lack any attachment to the service provider/destination (Prichard et al., 1992). Typical antecedents of transactional-oriented loyalty include satisfaction, perceived value and service quality (Garbarino & Johnson, 1999).

Relational-oriented loyalty is driven by consumers' attachment/relational bond to the service provider/destination. This relational connection influences consumers' choice of developing loyal relationships (Prichard & Howard, 1997). That is, relational-oriented consumers' choice of repurchasing a product/service is driven by their attachment to the service provider/destination (Prichard et al., 1992). This attachment explains why the consumers decide to repeatedly purchase a particular product or revisit a destination. A typical factor that influences repurchase choices of relational-oriented consumers at tourist destinations is place attachment (Morais & Lin, 2010). The concept of place attachment is considered to be an important construct for exploring the phenomenon that links individuals to certain places (Hernandez et al., 2007; Hidalgo & Hernandez, 2001; Kyle et al., 2003). It is considered as an important part of self which evokes strong emotions that would influence a person's behavior, including loyalty (Brocato, 2006; Lee et al., 2007; Kyle at al., 2003; Simpson & Siquaw, 2008).

Viewed as a multidimensional concept (Gustafson , 2001), place attachment incorporates several aspects of the people-place bonding of affect, emotion, knowledge, beliefs and behaviors in connection with a place (Chow & Healy, 2008). It serves as an

affective link which people develop with an environment (Hildago & Hernandez, 2001). Past research on place attachment stems partly from the environmental problems threatening the existence of places considered important to individuals and society (Sanders et al., 2003). Given the realization that environmental degradation is partly driven by human activities (Halpenny, 2010), increasingly, humans around the world demonstrate heightened understanding of the need for the protection of nature and the conservation of resources (Schultz, 2000; Schultz & Zelezny, 1998). Since environmentally responsible behaviors is accepted as a valuable tool for enhancing sustainability (Ramkissoon et al., 2012), past research efforts have been devoted to identifying and examining factors that influence pro-environmental behavior (Halpenny, 2010). Past studies report that attachment to places fosters pro-environmental behaviors (Vaske & Kobrin, 2001; Ramkissoon et al., 2013). Additionally, past research reports that attachment to natural settings encourages behaviors including enhanced environmental concern, conservation advocacy and stewardship of natural resources (Lee, 2001; Mitchell et al., 1993; Vorkin & Riese, 2001). Thus, given its influence on pro-environmental behaviors, which is a valuable tool for fostering sustainability, examining and therefore, understanding place attachment's influence on loyalty to natural settings is highly valuable. Doing this provides the opportunity to examine destination loyalty from a relational perspective.

While the concept of place attachment has been explored in past destination loyalty research, previous studies emphasized the influence of other antecedents of destination loyalty. Reported predictors and the tested relationships among them provides useful information for understanding the approaches used to examine destination loyalty

in past studies. In a study that focused on visitors to a forest setting, Lee (2003) highlighted the importance of place involvement, service quality, satisfaction and place attachment in influencing loyalty to the forest setting. However, this study did not examine the relationship between satisfaction and place attachment with respect to their influence on destination loyalty. Thus, the study provided a limited understanding of why tourists decided to return to the destination repeatedly. Yuksel et al. (2010) responded to the limitation in Lee's (2003) study. In their study, the researchers tested satisfaction's mediating effect in the relationship between place attachment and destination loyalty. The study provided partial support for the mediating effect of satisfaction. Similarly, Prayag and Ryan (2012) examined the mediating effect of satisfaction in the relationship between place attachment and destination loyalty. Destination image and personal involvement were also included in their model. The study also provided support for the mediating effect of satisfaction in the relationship between place attachment and destination loyalty.

A critical look at these studies showed that they took a transactional approach in examining predictors of destination loyalty. That is, while place attachment, a relational construct was included in their model, the researchers focused on the influence of transactional predictors of destination loyalty. Particularly, the studies reported that satisfaction was a better predictor of destination loyalty relative to place attachment. The studies further asserted that place attachment's influence on destination loyalty was mediated by satisfaction. By using the transactional approach, past studies focused on understanding loyal revisit choice decisions of habitual or deal-oriented tourists who were likely to lack any attachment to the destination. Thus, an understanding of tourists'

loyal purchase choice decisions driven by attachment to the destination was still poorly understood. This limitation can be addressed by examining destination loyalty from a relational perspective. Past studies have since suggested examining destination loyalty from a relational perspective (Choi & Cai, 2012). Studies examining destination loyalty from a relational approach are however, still rare in the tourism literature (Campon et al., 2013).

Given that consumers can take up a transactional or relational orientation to developing loyal relationships (Garbarino & Johnson, 1999), this study examined destination loyalty from both a transactional and relational approach. This approach was adopted in an effort to enhance our understanding of factors that influence tourists' revisit predisposition taking into account relational and transactional loyalty formation orientations. By examining destination loyalty from a transactional and relational approach, both relational and transactional variables were posited to influence destination loyalty. The relational variable was also posited to mediate the transactional variables' influence on destination loyalty. Collectively, both relational and transactional variables were posited to be antecedents of destination loyalty. In this study place attachment was the relational variable, while satisfaction, service quality and perceived value were the transactional variables.

Proposed conceptual framework

This study proposed a conceptual model that builds on Velazquez et al.'s (2011) conceptual model. These authors suggested a conceptual model that included perceived value, service quality, satisfaction, and commitment as antecedents of destination loyalty.

Past studies that have tested the influence of these constructs on loyalty indicate that they are determinants of loyalty (Chi, 2005; Dimitriades, 2006; Lee et al., 2007; Lee et al., 2007a; Kim, 2010). In this study, Velazquez et al.'s (2011) conceptual framework was modified and a conceptual model presented in Figure 2.1 was proposed. The model includes perceived value, service quality, satisfaction, and place attachment as antecedents of destination loyalty.

In the proposed conceptual framework, perceived value and service quality were posited to have indirect effects on destination loyalty through place attachment and satisfaction. Satisfaction was posted to have a direct and indirect effect on destination loyalty through place attachment. Additionally, place attachment was posited to have a direct effect on destination loyalty. Through these relationships, this study examined the predictors of destination loyalty from both a relational and transactional approach. The direct path from place attachment to destination loyalty constituted the relational approach to examining destination loyalty. The direct path from satisfaction to destination loyalty also constituted the transactional approach. The indirect paths from perceived value and service quality to destination loyalty mediated by satisfaction constituted the transactional approach to examining destination loyalty. The indirect paths from perceived value, service quality and satisfaction to destination loyalty mediated by place attachment tested the interplay among the relational and the transactional variables.

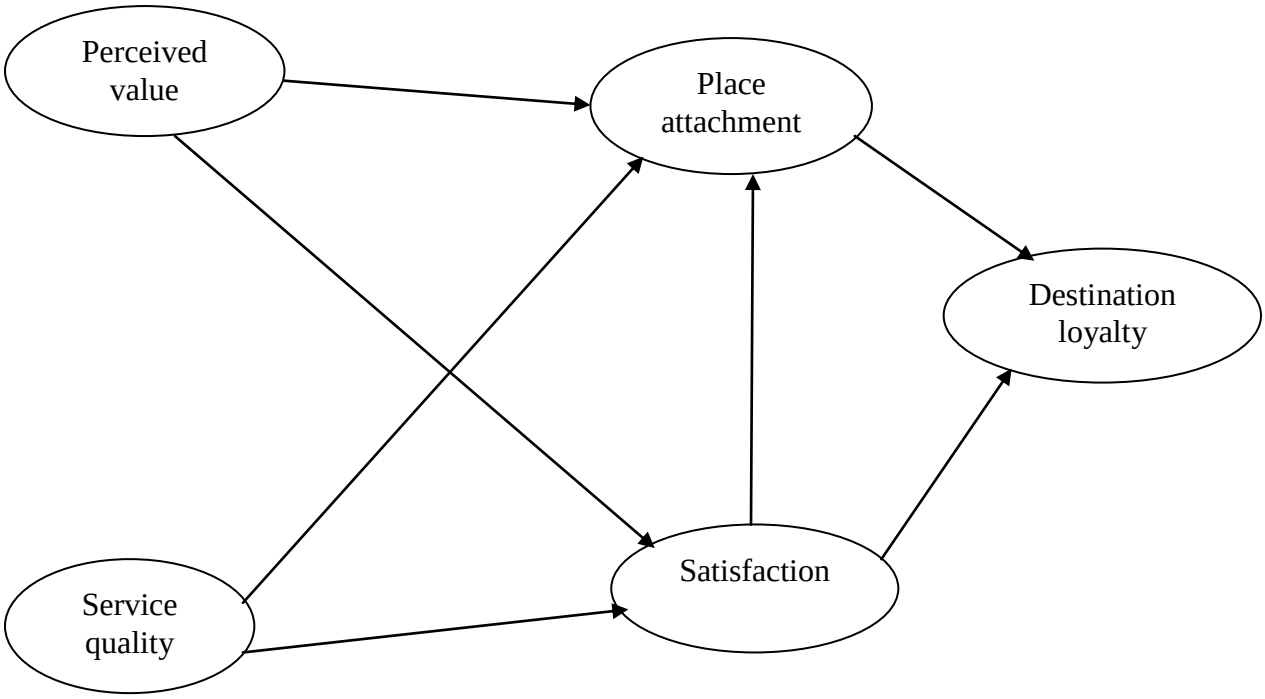

Figure 2.1: Proposed Conceptual Framework

To provide the theoretical basis for the relationships hypothesized in the study's proposed conceptual model, the next section focused on a discussion of the Cognitive -> Affective -> Conative Loyalty theory.

Cognitive-Affective-Conative Loyalty Theory

Past research that has been devoted to explaining the development of loyalty indicates that loyalty is shaped through sequential phases: Cognitive -> Affective -> Conative (Oliver, 1997). This theoretical explanation of loyalty formation has gained acceptance among loyalty researchers in the tourism field. It guides tourism researchers in identifying predictors of destination loyalty (Campon et al., 2013). According to this

theory, customers develop positive beliefs[5] and affective attachment/feelings about a service provider and experience increasing intention to purchase preferably from that provider (Morais et al., 2004). The beliefs that customers develop about the service provider result from cognitive evaluations (Cronin et al., 2000; Eggert & Ulaga, 2002; Gotlieb et al., 1994). Cognitions refer to the belief that the destination is preferable to others based on evaluations of destination attributes and the value received (Choi & Cai, 2012; Lee et al., 2010; Zhang et al., 2014). Thus, perceived value and service quality constitute cognitive variables (Eggert & Ulaga, 2002; Cronin et al., 2000; Lee et al., 2010).

Affective refers to the emotional response or feelings towards the destination (Choi & Cai, 2012; Lee et al., 2010). Past research notes that satisfaction and emotions are affective variables (Cronin et al., 2000; Eggert & Ulaga, 2002). Prior research reveals that place attachment or place bonding is an important part of self and evokes strong emotions (Simpson & Siquaw, 2008). Thus, place attachment is also considered as an affective variable (Simpson & Siquaw, 2008). Conative refers to behavioral intentions related to the destination (Choi & Cai, 2012; Lee, 2003). It encompasses revisit and recommendation intentions which collectively reflect destination loyalty (Chi, 2005) Past research indicates that conative is a function of cognitions and affective (Lee et al., 2010).

Based on the Cognitive -> Affective -> Conative loyalty theory, the current study posited that cognitive variables (perceived value and service quality) can exert a direct

[5] The beliefs arise from cognitive evaluations (Cronin et al., 2000; Eggert & Ulaga, 2002; Gotlieb et al., 1994)

influence on the affective variable (satisfaction), and subsequently an indirect on the conative variable (destination loyalty). Additionally, the study posited that the cognitive variables (perceived value and service quality) can exert a direct influence on the affective variable (place attachment), and subsequently an indirect effect on the conative variable (destination loyalty). Taken together, the current study suggested the application of the Cognitive -> Affective -> Conative Loyalty theory to explain predictors of loyalty to a nature-based tourist setting.

In the next section, the proposed conceptual framework is presented before a discussion of the individual constructs in the model is provided. In discussing the individual constructs, the current study reviews past research and the limitations in knowledge as a basis for suggesting the hypotheses that were tested in the current study.

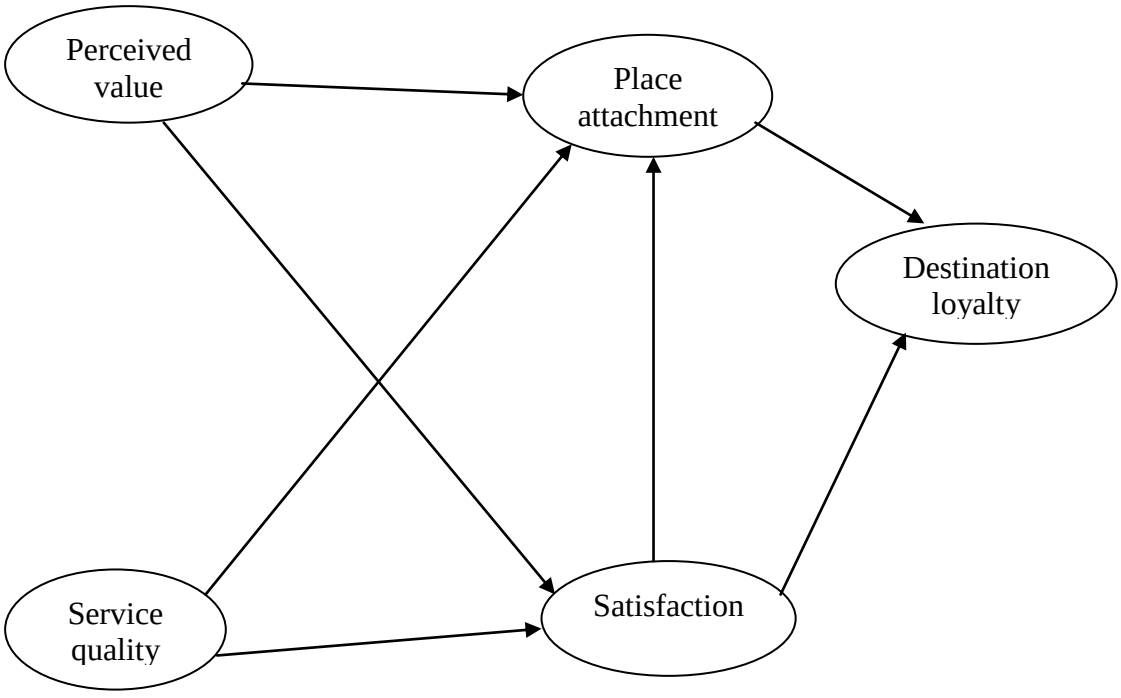

Figure 2.2: Proposed Conceptual Framework

A discussion of model constructs and research hypotheses

In the proposed conceptual model (Figure 2.2), destination loyalty was the ultimate endogenous variable. Service quality, perceived value, satisfaction, and place attachment were hypothesized to be predictors of destination loyalty. Place attachment was hypothesized to mediate destination loyalty's relationship with service quality, perceived value and satisfaction. Place attachment and satisfaction were also posited to have direct influences on destination loyalty. By testing these relationships, destination loyalty was examined from both a transactional and relational perspective. In the next section, a detailed discussion of the relationships that were explored in the current study is provided. Past research and limitations in knowledge as a basis for suggesting the relationships tested in the current study are discussed.

Place attachment

Definition

Most of the early literature on place attachment came from studies in geography (Tuan, 1974) and environmental psychology (Low & Altman, 1992). The quest for a better understanding of the attachment people feel for particular places drives the scientific exploration of this phenomenon (Warzecha & Lime, 2001). In the natural resource management field, place attachment is viewed as a useful tool that helps to understand how people identify themselves with natural settings (Warzecha & Lime, 2001). In the tourism field, research on place attachment stems from the fact that places are venues for visitor experiences (Snepenger et al., 2007) and set the context for interactions between people and the place (Ramkissoon, et al., 2012). Past research

congregates around defining place attachment as a process by which humans form emotional or functional bonds to places (Hidalgo & Hernandez, 2001; Williams & Vaske, 2003; Moore & Graefe, 1994). It reflects the extent to which individuals value and identify with a particular environmental setting (Moore & Graefe, 1994).

Dimensions of place attachment

Place attachment is viewed in terms of two dimensions: place dependence and place identity (Bricker & Kerstetter, 2000; Gross & Brown, 2011; Hou et al., 2005; Moore & Graefe, 2004; Morais & Lin, 2010; Prayag & Ryan, 2012; Warzecha & Lime, 2001; Williams & Vaske, 2003; Williams et al., 1995; Vaske & Kobrin, 2001). Place identity was introduced by Proshansky (1978). It is defined as an emotional bond between an individual and a place visited for specific recreation purposes (Hailu et al., 2005). It reflects the connection between the self and a particular setting consisting of a collection of memories, interpretations, ideas, and related feelings about the physical settings (Proshansky et al., 1983). Place identity also reflects the symbolic importance of a place as a focus of emotions and relations that give meaning to life (Williams & Vaske, 2003). It grows stronger through contact with a place over a longer period of time (Giuliani & Feldman, 1993), and is associated with emotional and symbolic meanings (Moore & Graefe, 1994). Place identity is contributes to individuals' self-identity and helps them structure their experiences with various physical environments (Proshansky, 1978).

Place dependence was introduced by Stokols & Shumaker (1981). It is described as the functional bond to a place fostered by an ability to carry out a specific recreation

activity at that place (Hailu et al., 2005; Williams & Roggenbuck, 1989). Place dependence is determined by two elements: the qualities of a particular place and the relative quality of comparable alternative places (Shokols and Shumaker, 1981). It reflects visitors' awareness of the significance of a place in providing amenities necessary to meet their desired activity needs relative to other alternatives (Kyle et al., 2004; Williams et al., 1992). Place dependence concerns how well a setting serves goal achievement given a range of alternatives (Jorgenson & Stedman, 2001). It also concerns valuing opportunities a setting provides for the fulfillment of specific activity needs relative to other alternatives (Lee, 2003). Place dependence is embodied in a setting's physical characteristics and is highly related to the perception that the setting possesses unique qualities (Williams et al., 1992; Williams & Vaske, 2003). It is therefore, considered to be a function of how well a setting facilitates users' particular activities (Moore & Graefe, 1994).

What is the relationship between place attachment and destination loyalty?

The relationship between place attachment and destination loyalty has been explored in the existing literature. Past research that has explored the relationship between place attachment and destination loyalty reported confounding results. In a study that examined tourists' loyalty to a forest setting, Lee (2003) reported that place attachment had a direct effect on loyalty to a forest setting. The relationship between satisfaction and place attachment with respect to loyalty was not examined in this study. Recent studies that examined this relationship reported that place attachment had an indirect effect on destination loyalty through satisfaction (Prayag & Ryan, 2012; Yuksel et al., 2010). As stated earlier in the chapter, the current study posits that place

attachment has a direct effect on destination loyalty. This is because tourists' accumulation of meaningful destination experiences may progressively engender a growing bond with the destination which may foster repeat visitations. Thus, in this study, the direct effect of place attachment on loyalty to a nature-based tourist setting (i.e. Victoria Falls World Heritage site) was investigated. The following question and hypothesis were examined:

> Does domestic tourists' levels of attachment to a nature-based tourist setting have a direct effect on their loyalty to the setting? The study hypothesized that domestic tourists' level of attachment to the nature-based tourist setting had a direct effect on their loyalty to the setting.

Satisfaction

Definition

Past research congregates around two approaches in defining satisfaction; affective and cognitive. Past studies that employ the cognitive approach define satisfaction as consumers' response to the discrepancy between pre-purchase expectations and post-purchase perceived performance (Fornell, 1992; Deng & Pierskalla, 2011). In this respect, satisfaction is viewed as a relative concept that is judged in relation to a standard (Yuksel & Yuksel, 2001). Previous studies that employ the affective approach define satisfaction as an affective response to a specific consumption experience (Gotlieb et al., 1994). It is viewed as consumers' emotional state after exposure to a consumption experience. Thus, it reflects the degree to which a consumer believes that the possession and / or use of a service evokes positive feelings (Rust & Oliver , 1994). The cognitive

approach has generally been criticized. The critics argue that the measurement of consumer expectations and the selection of appropriate comparative standards remains problematic. Thus, in this study, the affective approach of conceptualizing satisfaction was adapted.

Measurement of satisfaction

Generally, there is no agreement among previous studies on the best way to measure satisfaction (Prayag & Ryan, 2012). However, the literature congregates around two approaches; transaction specific and overall satisfaction (He, 2013). Transaction specific satisfaction refers to how happy a customer is with a specific service encounter (Cronin & Taylor, 1992), where as overall satisfaction is a cumulative construct summing satisfaction with various facets of the service experience (Prayag & Ryan, 2012). Generally, overall satisfaction is considered to be a stable construct rather than transaction-specific satisfaction (Parasuraman et al., 1994). Thus, the current study measured satisfaction using indicators that reflected overall satisfaction.

What is the relationship between satisfaction and destination loyalty?

Tourist satisfaction's effect on future tourist behavior is critical in understanding tourists' purchase behaviors (Baker & Crompton, 2000; Velazquez et al., 2011). Thus, numerous researchers have investigated the relationship between satisfaction and destination loyalty (Chi, 2005; Chi, 2012; Chi & Qu, 2008; Kim, 2010; Lee, 2003; Lee et al., 2007; Jamaludin et al., 2012; Prayag & Ryan, 2012; Yoon & Uysal, 2005; Yuksel et al., 2010). These studies reported that satisfaction has a direct effect on destination

loyalty. As such, satisfaction is considered to be a significant predictor of destination loyalty.

Although past research has investigated the relationship between satisfaction and destination loyalty, this relationship still required further investigation in a nature-based tourism context. Thus, in this study, the direct effect of satisfaction on loyalty to a nature-based tourist setting was investigated. The following question and hypothesis were examined:

> Does domestic tourists' levels of satisfaction with their visit to a nature-based tourist setting have a direct effect on their loyalty to the setting? The study hypothesized that domestic tourists' levels of satisfaction with their visit to the nature-based tourist setting had a direct effect on their loyalty to the setting.

What is the relationship between satisfaction, place attachment and destination loyalty?

The relationship between satisfaction, place attachment and destination loyalty has been explored in the tourism literature. Previous studies that have explored this relationship reported that satisfaction mediated the relationship between place attachment and destination loyalty. These studies indicated that satisfaction was a better predictor of destination loyalty relative to place attachment. However, past studies argue that satisfaction is a necessary but not sufficient predictor of loyalty (Dube et al., 1994; Gitelson & Crompton, 1984; Mechinda et al., 2009). This is because even though tourists are satisfied with their visit to the destination, they may not choose to return to the

destination due to the desire to seek novelty (Mechinda et al., 2009). Hence, satisfaction is considered to be an unreliable predictor of loyalty (Lee, 2001).

Consistent with these studies, place attachment was posited to be a better predictor of destination loyalty relative to satisfaction in this study. This is because tourists' attachment to a destination is likely to cause them to return to the destination repeatedly. Place attachment was hypothesized to mediate the relationship between satisfaction and destination loyalty. Thus, place attachment's mediating effect in the relationship between satisfaction and destination loyalty was investigated in this study. The following question and hypothesis were examined:

> Does domestic tourists' level of satisfaction with their visit to a nature-based tourist setting have an indirect effect on their loyalty to the setting mediated by their level of attachment to the setting? The study hypothesized that domestic tourists' levels of satisfaction with their visit to the nature-based setting had an indirect effect on their loyalty to the setting mediated by their level of attachment to the setting.

Perceived value

Definition

Perceived value has in the recent past been an object of attention by researchers in the tourism field. It provides solid foundations for explaining loyalty and is recognized as a determinant of purchase intentions and behavior (Zeithaml, 1988; Oh, 2000). Perceived value is essential for improving competitive advantage given that tourists are becoming increasingly demanding (Kim, 2010). It is considered as part of a continuous process in

the maintenance of relationships between service providers and customers (Sanchez et al., 2006).

Perceived value has been defined in diverse ways. Zeithaml (1988, p.14) defined it as consumers' global evaluation of the utility of a product according to their perceptions of what they receive and what they give. Using this definition, Zeithaml (1988) identified four diverse meanings of value; (1) value is low price; (2) value is whatever one wants in a product; (3) value is the quality that the consumer receives for the price paid and; (4) value is what the consumer gets for what he or she gives. Building on Zeithaml.'s (1988) definition, McDoughall & Levesque (2000) defined perceived value as a consumer's overall evaluation of what is received and what is given.

Grewal et al. (1998) viewed perceived value in terms of two dimensions: acquisition and transaction value. They defined acquisition value as the perceived net gains from the products or services customers acquire. Transaction value was defined as the perceived psychological satisfaction from getting a good deal. Building on Grewal et al.'s (1998) definition, Parasuraman and Grewal (2000) defined perceived value using four perspectives; acquisition; transaction; in-use; and redemption. Acquisition and transaction value were defined similar to Grewal et al.'s (1998) definitions. In-use value was defined as utility gained from the usage of the product and service. Redemption value was defined as residual gain at the end of the life of the products or the termination of services. Acquisition and transaction were perceived to occur during and immediately following the purchase stage, while in-use and redemption were viewed to occur at a later stage.

While perceived value has been defined in diverse ways, Zeithmal's (1988) definition is the most widely accepted definition (Velazquez et al., 2011). Thus, in this study, the definition offered by Zeithmal (1988) was adapted.

Measurement of perceived value

Perceived value has been operationalized using single item scales (Gallarza & Saura, 2006; Sweeney et al., 1996), as well as, multi-item measures (Cole & Illum, 2006; Moliner et al., 2007; Sanchez et al., 2006; Petrick et al., 2001). Single item scales, which generally measure perceived value in terms of value for money have been criticized (Al-Sabbahy et al., 2004). This is because Perceived Value is considered to be a multi-dimensional construct (Lee et al., 2007). Thus, it has been suggested that perceived value should be measured using multi-item scales (Sanchez et al., 2006; Sweeney & Soutar, 2001; Lee et al., 2007).

Accordingly, Sweeney & Soutar (2001) developed a nineteen item scale of perceived value. Their scale revealed four value dimensions: emotional (e.g. experiential benefits); social (e.g. social benefits); quality/performance (e.g. attributed -related benefits); and value/money (e.g. utilitarian benefits). Based on their findings, the authors argued that multiple value dimensions explained consumer choice better then a single value for money item. Building on Sweeney & Soutar's (2001) study, Sanchez et al. (2006) developed a multi-item scale of perceived value in a tourism context. Functional (e.g. attribute-related or utilitarian benefits), emotional (e.g. experiential benefits), and social (e.g. social benefits) values emerged as dimensions of perceived value in their study. Extending previous studies' multi-item measurement of perceived value, Lee et al.

(2007) developed a three dimensional scale. The value dimensions revealed included; emotional (e.g. experiential benefits); functional (e.g. attribute-related/utilitarian benefits), and overall (e.g. overall benefits). Past research revealed the significance of measuring perceived value using multi-dimensional measures. Thus, in this study, the multi-dimensional measurement of perceived value was adapted.

What is the relationship between perceived value, satisfaction and destination loyalty?

Perceived value has been gaining increased recognition among researchers as one of the influential drivers of customer satisfaction and loyalty (Kim, 2010; Velazquez et al., 2011). It influences consumer choice behavior at the pre-purchase stage and also drives satisfaction and intentions to repurchase at the post-purchase stage (Parasuraman & Grewal 2000). Research on perceived value as it relates to customer satisfaction and loyalty is still rare in tourism studies (Moliner et al., 2007; Petrick & Backman, 2002; Moliner et al., 2007).

Past research that explored the relationship between perceived value, satisfaction and destination loyalty provide confounding results. Some studies reported that perceived value had an indirect affect on destination loyalty through satisfaction (Deng & Pierskalla, 2011, Kim, 2010; Lee et al., 2007). Other studies reported that perceived value had a direct effect on destination loyalty (Chen & Chen, 2010; Petrick, 2004; Petrick et al., 2001). Past research that compared the direct and mediated model revealed that the mediated models were the superior models (Cronin et al., 2000; Eggert & Ulaga, 2002). Thus, in this study, the indirect effect of perceived value on destination loyalty through

satisfaction was investigated. The following research question and hypothesis were examined:

> Does domestic tourists' perceived value of their visit to a nature-based tourist setting have an indirect effect on their loyalty to the setting mediated by their level of satisfaction with their visit to the setting. The current study hypothesized that domestic tourists' perceived value of their visit to the nature-based tourist setting had an indirect effect on their loyalty to the setting meditated by their level of satisfaction with their visit to the site.

What is the relationship between perceived value, place attachment and destination loyalty?

The relationship between perceived value, place attachment and destination loyalty still remains obscure. However, a review of past studies suggests potential linkages among the variables. Specifically, tourists' perceived value of a visit to the destination is likely to influence their perception that a setting possesses unique qualities that meet their specific activity needs (e.g. place dependence). Additionally, their perceived value of the visit to the destination may enable certain behaviors that result in important descriptive meanings to which they may be attached (e.g. place identity). Despite this potential link however, the relationship between perceived value and place attachment still required investigation.

The link between perceived value and destination loyalty as indicated earlier in this chapter has been demonstrated in past research albeit with confounding results (Deng & Pierskalla, 2011; Kim, 2010; Lee et al., 2007; Petrick et al., 2001). Thus, to build on

past research, the indirect relationship between perceived value and destination loyalty mediated by place attachment was investigated in this study. The following question and hypothesis were examined:

> Does domestic tourists' perceived value of their visit to a nature-based tourist setting have an indirect effect on their loyalty to the setting mediated by their level of attachment to the setting. The study hypothesized that domestic tourists' perceived value of their visit to a nature-based tourist setting had an indirect effect on their loyalty to the setting mediated by their level of attachment to the setting.

Service quality

Definition

Service quality has received considerable attention from the academic community and practitioners (Hu et al., 2009). It is considered to be a critical construct given its recognized effect on consumer choice behavior (Cole & Illum, 2006; Dabholkar et al., 2000). Researchers in the marketing field provided the first conceptualization of service quality (Zeithaml, 1988; Parasuraman et al., 1988). Zeithaml (1988, p.3) defined service quality as consumer's overall judgment about the superiority or excellence of a product. Similarly, Parasuraman et al. (1988, p.16) defined service quality as a global judgment concerning the superior nature of a service. While these definitions are prevalent in the market literature, the tourism literature provides a different conceptualization. Particularly, service quality is defined in terms of performance quality (Crompton & Love, 1995). That is, it is defined as the quality of attributes that are under the control of

the service supplier (Crompton & Love, 1995). In this study, the tourism literature's conceptualization of service quality was adapted.

Measurement of service quality

Past research congregates around two measures of service quality; performance-only and expectancy disconfirmation approaches. The performance-only approach utilizes the SERVPERF (Service Quality Performance) measurement scale, while the expectancy disconfirmation approach uses the SERQUAL (Service Quality) measurement scale. The expectancy disconfirmation approach measures service quality as the discrepancy between customers' expectations of the service and their perceptions of the service provided (Gotlieb et al., 1994; Kim, 2010; Oh, 1999; Parasuraman et al., 1988; Zeithmal, 1988). The performance-only approach measures service quality in terms of customers' assessment of service performance (Cole & Illum, 2006; Cronin & Taylor, 1992). Proponents of the performance-only measure of service quality criticize the expectation/disconfirmation approach as being ambiguous and inefficient (Cronin & Taylor, 1992). Previous studies that compared the expectancy/disconfirmation and performance-only approaches reported that the performance-only approach was superior (Crompton & Love, 1995; Cronin & Taylor, 1992). Thus, the current study measured service quality using the performance-only approach.

Dimensions of service quality

In their pioneering work on service quality, Parasuraman et al. (1988) revealed that service quality was comprised of five dimensions: tangibles, reliability; responsiveness; assurance; and empathy. The tangibles dimension included the physical

facilities, equipment and appearance of personnel. Reliability reflected the ability to perform the promised service dependably and accurately. Responsiveness exemplified the willingness to help customers and provide quick service. Assurance epitomized the knowledge and courteousness of employee and their ability to inspire trust and confidence. Lastly, empathy reflected the care and individualized attention provided to customers.

Applying Parasuraman et al.'s (1988) measurement scale to the tourism industry, Fick & Ritchie (1991) noted that the original measure did not adequately cover tangibles factors. The authors indicated that this was probably because facilities tend to be situation-specific in tourism and hence do not lend themselves to inclusion in a generic type of measure. That is, in tourism contexts, there is no process of delivery per se that is addressed by four of the dimensions reported by Parasuraman et al. (1988). Rather the dominant measure is the tangibles dimension (Crompton & Love, 1995). Thus, in the tourism field, Service Quality is generally assessed in terms of the tangibles dimension (Baker & Crompton, 2000; Crompton & Love, 1995; Cole & Illum, 2006). Following the trend in the tourism literature, the current study assessed service quality using measures that reflected the tangibles dimension.

With respect to the tangibles dimension, past research reveals various measures of service quality. For instance, to measure service quality in a forest setting, Lee (2003) used measures that reflected health and cleanliness of settings, conditions of facilities, safety and security, and responsiveness of staff dimensions. Other researchers such as Cole & Scott (2004) measured service quality using measures that reflected ambiance, amenities and comfort dimensions. To measure service quality in a destination context,

Chi (2005) used measures that reflected accessibility, attraction, dinning, shopping, activities and event dimensions.

Generally, past research showed that service quality has been measured using indicators that reflect diverse dimensions. Previous studies provide a justification for this. Particularly, Hu et al. (2009) noted that given that evaluations of service quality are industry/destination specific, the dimensions and indicators used to measure the construct are likely to vary.

What is the relationship between service quality, satisfaction and destination loyalty?

The relationship between service quality, satisfaction and loyalty has been explored in the exiting literature. However, past research reports confounding results. Some studies indicated that service quality had an indirect effect on destination loyalty mediated by satisfaction (Alexandris et al., 2006; Kim, 2010). Other studies reported that service quality had a direct effect on destination loyalty (Petrick, 2004). Past research that compared the direct and mediated models revealed that the mediated model was superior (Cronin et al., 2000; Gotlieb et al., 1994).

Given the confounding results in the existing literature, researchers have suggested further investigations on the relationship between service quality, satisfaction and loyalty (Velazquez et al., 2011). As Velazquez et al. (2011, p.71) puts it, "more in-depth study of these relationships is needed to direct marketing efforts towards variables with the greatest influence on subsequent behaviors in order to achieve consumer loyalty". Thus, to address this research call, the indirect relationship between service

quality and destination loyalty mediated by satisfaction was investigated in this study. Particularly, the mediating effect of satisfaction in the relationship between service quality and destination loyalty was examined. The following research question and hypothesis were explored:

> Does domestic tourists' perceptions of service quality at a nature-based tourist setting have an indirect effect on their loyalty to the setting mediated by their level of satisfaction with the visit to the setting? The study hypothesized that domestic tourists' perceptions of service quality at a nature-based tourist setting had an indirect effect on their loyalty to the setting mediated by their level of satisfaction with the visit to the setting.

What is the relationship between service quality, place attachment and destination loyalty?

The relationship between service quality, place attachment and destination loyalty has rarely been investigated in the tourism literature. Past research that has attempted to explore this relationship used the case of a forest setting and a skii resort. Using the case of a skii resort, Alexandris et al. (2006) investigated the relationship between service quality, place attachment and loyalty. The researchers provided empirical evidence on the indirect effect of service quality on loyalty to a ski resort mediated by place attachment. Similarly, using a forest setting, Lee (2003) revealed the mediating effect of place attachment in the relationship between service quality and loyalty. Past research provide empirical support for the mediating effect of place attachment in the relationship between service quality and loyalty. However, this relationship still required investigation in a

nature-based tourism context. Thus, to build on past studies, the mediating effect of place attachment in the relationship between service quality and destination loyalty was examined in this study. The following research question and hypothesis were examined:

> Does domestic tourists' perceptions of service quality at a nature-based tourist setting have an indirect effect on their loyalty mediated by their level of attachment to the setting? The study hypothesized that domestic tourists' perceptions of service quality at a nature-based tourist setting had an indirect effect on their loyalty mediated by their level of attachment to the setting.

Chapter Summary

In this chapter, a review of past research was conducted on: Zambians' relationship to natural settings, tourism in Zambia and the limitations of past approaches/ research in exploring the factors that influence tourists' destination loyalty. Past research showed that Zambians have a poor relationship with the country's nature-based tourist settings. However, an understanding of how to foster this relationship still remains poorly understood in Zambia. A review of the literature showed that the concept of destination loyalty could be highly applicable to addressing the Zambian problem. However, the way this concept has generally been studied in past research may not be sufficient to the particular concern in Zambian. Thus, studying destination loyalty from both a relational and transactional perspective could be highly applicable to addressing the Zambian challenge while extending our theoretical understanding of destination loyalty.

Based on past research and the findings of the researcher's preliminary interviews, the primary goal of this study was to gain an understanding of how to foster

loyal relationships between Zambian domestic tourists and a natural setting, by particularly investigating factors that influence domestic tourists' loyalty to a nature-based tourist setting. To meet this goal, this study examined domestic tourists' loyal relationships from both a relational and transactional perspective. In this study transactional constructs included service quality, perceived value and satisfaction, while the relational construct was place attachment.

Past research also revealed that there is scant information on the segment of domestic tourists that visit nature-based tourist settings in the Zambia. Thus, another goal of this study was to provide a detailed profile of Zambian domestic tourists that visited the study site used in this study. This study site was the Victoria Falls World Heritage. Details of this study site and the methods used to explore the study's research questions are provided in the next chapter.

Chapter 3 Research Methods

This chapter presents the methods used to collect and analyze the data in the current study. The chapter begins with a description of the study site followed by a discussion of the study population. Next, the procedure for determining the sample size used in the study is provided. Thereafter, the procedure used to develop, pretest and administer the survey is presented. The chapter ends with a discussion of the data analysis techniques used in the study.

Descriptions of study site

The study site for this study was the Victoria Falls World Heritage site. The Victoria Falls World Heritage site is situated in the Mosi-oa-Tunya National Park, which covers an area of 66 km^2 (25 sq mil). Located in the Livingstone town, Zambia's tourist capital, Victoria Falls World Heritage site is a natural resource treasure of the Republic of Zambia, as well as, the country's major tourist attraction. It is endowed with the spectacular Victoria Falls, which is one of the seven natural wonder of the world. The Zambezi River, which is more than 2 kilometers (1.25 miles) wide at this point plunges 108m (354 feet) into a narrow chasm and noisily down a series of basalt gorges. When the water is in full flood in February and March, it forms the world's largest sheet of falling water. During this period the falls generates mists that can be spotted from more than a dozen miles away. The mists sustain a rain forest-like ecosystem adjacent to the falls. In addition to the flora, Victoria Falls World Heritage site is endowed with fauna, particularly baboons.

A variety of trails around the site leads to various view point of the water falls in a natural setting. A steep track to the banks of the great Zambezi river enables tourists to view a huge whirlpool call the Boiling point. The local name for the spectacular Victoria falls is Mosi-oa-Tunya which means the 'Smoke That Thunders'. The custodian and manager of the Victoria Falls World Heritage site is the National Heritage Conservation Commission.

The Victoria Falls World Heritage site was used as the study site for this study based on two considerations. First, it is a nature-based tourist setting in Zambia. Second, it attracts domestic tourists in relatively large numbers annually. According to the Victoria Falls World Heritage Site Annual Report, NHCC (2013), domestic tourists to the site constituted 66 % of the total number of tourists in 2013. Based on these considerations Victoria Falls World Heritage site was a highly valuable and appropriate study site.

Description of study population

Given the research goals of this study, the target population was Zambian domestic tourists who visited the Victoria Falls World Heritage site in Livingstone, Zambia. The target sample consisted of adult domestic tourists who were aged 18 years and above.

Procedure for determining sample size

Sample size is a critical issue for any statistical analysis. Generally, there is no correct sample size in the absolute sense, however, larger samples are usually preferable

(Anderson & Gerbing, 1988; Singleton & Straits, 2010). Since this study used Structural Equation Modeling (SEM) with Maximum Likelihood (ML) estimation to address its primary research goal, tenets for determining sample size when using SEM with ML estimation were taken into account. Past research has addressed the sample size issue for the SEM technique. As such, despite the lack of an absolute criteria on the correct sample size, there are a number of factors that impact the sample size requirements. These include model misspecification, model size, departures from normality and estimation procedures (Hair et al., 2010).

When using SEM with the maximum likelihood estimation (ML), a sample size of 100 to 150 is acceptable. However, a ratio of 10 respondents per each estimated parameter is recommended in order to meet the requirement of model size. If the data have violations of multivariate normality, the ratio of respondents to parameters should increase to a ratio of 15 respondents for each estimated parameter. Generally, a sample size of 250 or greater is recommended to enable stability of the fit indices when using SEM with the ML estimation method (Yoon, 2002). To determine the sample size for this study, the confidence interval approach was used (Burns & Bush, 1995; Chi, 2005). To obtain a 95% desired accuracy at the 95% confidence level, the formula used and the resulting sample size was:

$$n = \frac{z^2(p*q)}{e^2} = \frac{1.96^2(0.5*0.5)}{0.05^2} = 385$$

Where:

n = sample size

z = standard error associated with the chosen level of confidence (95%)

p = estimated variability in the population 50%

q = (1-p)

e = acceptable error ±5% (desired accuracy 95%)

Generally onsite surveys receive higher response rates compared to mail surveys (Chi, 2005). Thus, the response rate was set at 50%. Having assumed a response rate of 50 % and an unusable rate of 10 %, the computed sample size was 963 (385/.4). Thus, the minimum targeted sample size for the study was 963.

Survey instrument development and pretest procedures

The survey instrument for this study was developed using procedures recommended in past research (De Vellis, 1991). The initial survey instrument was developed based on extensive literature reviews and the goals of the study. The survey instrument was reviewed for refinement by the five member dissertation committee and the staff of Victoria Falls World Heritage. The survey instrument was also pretested on 55 domestic tourists who visited the Victoria Falls World Heritage site between August 5 and August 10, 2014. Reliability assessment of the measurement scales using data from the pretest showed that the measures were reliable (see appendix 7). The final survey instrument was developed after the pretest.

Survey instrument structure

The survey instrument consisted of three parts. The first part included questions that asked about the respondent's travel characteristics. The second part included

questions that focused on the measurement scales of the constructs in the study's proposed conceptual framework. The third and final part of the survey included questions that asked about the respondents' demographic characteristics. Also included in this section were questions that focused on the spending characteristics of the respondents.

In this section of the chapter a discussion of the measurement scales used to measure the constructs in the study's proposed conceptual framework is provided. The discussion focuses on approaches and indicators used to measure the constructs in past research and how the constructs were measured in this study.

Perceived value

Perceived value has generally been measured using unidimensional (Gallarza & Saura, 2006; Sweeney et al., 1996), as well as, multi-dimensional measures (Cole & Illum, 2006; Moliner et al., 2007; Petrick et al., 2001; Sanchez et al., 2006). However, unidimensional measures which focus on value for money have been criticized (Al-Sabbahy et al., 2004). These criticisms have been driven by assertions that perceived value is a multi-dimensional construct (Lee et al., 2007). Thus, past research suggests that perceived value should be measured using multi-dimensional measures (Lee et al., 2007; Sanchez et al., 2006; Sweeney & Soutar, 2001). Indicators used to measure perceived value in past research generally reflected emotional, social, functional/value/money and quality/performance dimensions (Lee at al., 2007; Sanchez et al., 2006; Sweeney & Soutar, 2001). In a destination loyalty context, Lee et al., (2007) used measures that reflected emotional; functional and overall value dimensions. Perceived value was measured using twelve indicators adapted from Lee et al. (2007). The twelve indicators

were measured using a five point Likert scale ranging (1) = Strongly Disagree to (5) = Strongly Agree. Details of these measurement items are provided in Appendix 1.

Service quality

Past research reports diverse measures and dimensions of service quality. For instance, infrastructure, safety/security, hygiene/sanitation, conditions of natural environments, consumer protection and accessibility were identified by Handszuh (1995). Attractions, amenities, access and ancillary services dimensions are also important (Cooper et al.,1998). Using a forest setting, Lee (2003) revealed measures that reflected dimensions including; health and cleanliness, settings, conditions of facilities, safety and security, and responsiveness of staff. There are diverse measures and dimensions of service quality because evaluations of service quality tend to be industry/site specific (Hu et al., 2009).

The current study measured service quality using ten measures that reflected accessibility, amenities and conditions of facilities dimensions. These indicators were a combination of adapted measures from past research (Lee, 2003; Chi, 2005; Cole & Scott, 2004) and site specific measures. The indicators were measured using a 5-point Likert scale ranging from (1) = Very Poor to (5) = Very Good. Details of these measurement items are provided in Appendix 1.

Satisfaction

Past research congregates around two approaches for measuring satisfaction. Some studies used single item measures (Chi, 2012; Chi & Qu, 2008; Prayag & Ryan , 2012), while others employed multi-item measures (Kim, 2010; Lee, 2003; Lee et al.,

2007; Yoon & Uysal, 2005; Yuksel et al., 2010). Although single item measures have been used in previous studies, multi-item measures are recommended. This is because multi-item measures produce greater variability (differences among respondents) and are more reliable (Hair et al., 2010). Thus, a multi-item approach was used for measuring satisfaction. Satisfaction was measured using three indicators adapted from past studies (Back, 2001; Han et al., 2011). A 5-point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree was used to measure the indicators. Details of the measurement items are provided in Appendix 1.

Place attachment

Place attachment has generally been measured using indicators that reflect two dimensions; place dependence and place identity (Bricker & Kerstetter, 2000; Moore & Graefe, 1994; Morais & Lin, 2010; Prayag & Ryan, 2012; Williams & Vaske, 2003). Place dependence measures focus on the functional bonds that individuals have with the place (Williams & Roggenbuck, 1989). Measures that reflect place identity focus on individuals' emotional attachment to the place (Moore & Graefe, 1994). Place attachment in this study was measured using eight measures adapted from previous studies (Moore & Graefe, 1994; Williams & Roggenbuck, 1989; Williams & Vaske, 2003). The indicators were measured using a 5-point Likert ranging from (1) = Strongly Disagree to (5) = Strongly Agree. Details of these measurement items are provided in Appendix 1.

Destination loyalty

Past research measured destination loyalty using measures that reflected revisit intentions and recommendation intentions dimensions (Chi, 2012; Chi & Qu, 2008; Deng

& Pierskalla, 2011: Kim, 2010; Jamaludin et al., 2012; Lee et al., 2007; Prayag & Ryan, 2012: Zhang et al., 2014). Measures reflecting the revisit intention dimension focused on tourists' propensity to revisit the destination. Indicators reflecting the recommendation intentions dimension focused on tourists' propensity to recommend the destination to others. Destination loyalty in this study was measured using six measures adapted from past studies (Chi, 2005; Chi & Qu, 2008; Lee, 2003). A 5-point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree was used to measure the indicators. Details of these measurement items are provided in Appendix 1.

Survey administration procedure

This section of the chapter details the procedure that was used to collect data for the current study. A description of the sampling procedure used is provided followed by discussions of the data collection procedure.

Sampling

The target population for this study was sampled by selecting every available respondent after a random start (which included day of the week and time of day). This approach is appropriate in instances where a sampling frame is unavailable (Lee, 2003). The random start was determined by selecting every second available domestic tourist upon commencing the data collection. In instances where potential survey respondents travelled in a group, an individual with the most recent birthday was asked to participate in the survey. Respondents were sampled at three different spots in the area. The three sampling spots were exit points from the Victoria Falls World Heritage site. Given that

respondents were sampled after they had visited the site, the three sampling spots were appropriate sampling spots.

Data collection Procedures

An on-site self-administered survey was used to collect data for the current study. Data were collected from domestic tourists who visited the Victoria Falls World Heritage site in Livingstone, Zambia, between August 26 and September 10, 2014. The data collection period was chosen because it provided the opportunity to obtain a representative sample of both Livingstone and non-Livingstone residents. The researcher administered the survey with the help of two data collection assistants. The researcher trained the assistants on how to administer the survey before conducting the on-site surveys. Information provided to the assistants during the training included the overall goal of the study, purpose of the survey, anonymous nature of the survey, description of the questionnaire items and the criteria for including potential respondents in the survey.

Potential respondents were approached and asked to participate in the survey after they had visited the Victoria Falls World Heritage site. Prior to requesting potential respondents to participate in the survey, the nature and importance of the study, as well as, the goal of the survey was explained to them. Additionally, the respondents were informed of the anonymous nature of the survey. Thereafter, potential respondents were asked to participate in the survey. When respondents accepted to take part in the survey, they were handed a questionnaire and asked to fill it out. A total of 1,150 domestic tourists were requested to fill out the questionnaire of which 1,060 accepted, giving a response rate of 92%. On average the respondents took eight - ten minutes to complete the questionnaire. The survey was conducted from August 26 to September 10 and

constituted a total of 15 sampling days (Table 3.1). In the first and second week of the data collection period, sampling of respondents was random in terms of time of the day, while in the third and final week, sampling was random in terms of time of the day and day of the week.

Table 3.1: On-site sampling dates and number of surveys

Date	Number of Surveys
08/26/15	75
08/27/15	72
08/28/15	72
08/29/15	72
08/30/15	72
08/31/15	72
09/01/15	72
09/02/15	72
09/03/15	72
09/04/15	72
09/05/15	72
09/06/15	74
09/07/15	71
09/08/15	70
09/10/15	50
Total	1060

Data analysis procedures

Descriptive statistics

Descriptive statistics were computed to understand the characteristics of the sample. Descriptive analysis were performed on the sample's demographic and spending characteristics and the measurement scales of the constructs. Frequency distributions of respondents' travel characteristics were also analyzed.

Reliability and Validity assessment

Reliability and validity tests were conducted to assess the quality of the measures used in the study. Two approaches were used to assess the reliability of the measures used in this study: Cronbach's alpha and composite reliabilities assessments. Cronbach's alpha coefficient (α) is based on the average correlations or covariances of the items (Lee, 2003). An alpha coefficient of 0.7 or above is considered accepted as a good indication of reliability (Yoon, 2002). The study computed the composite reliability values to complement the alpha coefficient results. This is recommended in that alpha's coefficients are said to be the lower limit of the true reliability. This is because alpha assumes all indicators have identical centrality similar to constraining all the loadings to be equal (Acock, 2013). The suggested cut-off value for good composite reliability is 0.7 (Chi, 2005; Hair et al., 2010). Previous studies, however, indicate that a composite reliability of 0.5 or above is considered reasonable (Lee, 2001).

To assess the validity of the measurement scales in this study, content and construct validity were examined. Content validity is the extent to which the evidence suggests that the measurement items represent the concept of interest (Johnson & Christensen, 2004). To ensure the content validity of the measures, an in-depth review of the literature was conducted. This was done to enable the inclusion of an adequate and representative set of items reflecting the respective constructs of interest. The measures were reviewed by the five member dissertation committee and the staff at Victoria Falls World Heritage site. The measures were also pretested on 52 domestic tourists at the Victoria Falls World Heritage site.

Construct validity was measured through convergent validity and discriminant validity assessments. Convergent validity was assessed using tests of statistical significance of indicator loadings, as well as, assessments of composite validity (CR) and average variance extracted (AVE) estimates. Statistically significant indicator loadings and higher values of CR and AVE were indicative of convergent validity. The suggested threshold values for CR and AVE are 0.7 and 0.5 respectively (Hair et al., 2010; Kim, 2010). However, some scholars indicate that a CR value of 0.5 is considered reasonable (Lee, 2001). Discriminant validity, another measure of construct validity was also assessed by examining the inter-construct correlations, as well as, comparing AVE values with squared correlation of a pair of latent constructs. Lower inter-construct correlations that do not exceed 0.85 and AVE values that exceed the squared correlation of a pair of latent constructs indicate discriminant validity of the measures (Hair et al., 2010; Kim, 2010; Kline, 1998).

Structural Equation Modeling

The properties of the constructs in the study's conceptual model and the research hypotheses were tested using Structural Equation Modeling (SEM). The Maximum Likelihood (ML) method was used for estimation (Byrne, 1998; Hair et al., 2010; Kline, 1998). The estimations were done using Stata 13.0. SEM is designed to evaluate how well the proposed conceptual framework that contains observed indicators and hypothetical constructs aligns with the sample data (Acock, 2013; Kline, 1998; Stevens, 2002). The hypothetical model in the current study was designed to measure structural relationships among unobserved constructs that were set up on the basis of relevant

theories and prior empirical research and results. Thus, the SEM procedure was an appropriate technique for testing the conceptual model.

In this study, the two-step SEM estimation process recommended by Anderson & Gerbeing (1988) was employed. The two-step SEM process involves testing the fit and construct validity of the measurement model in the first step and then testing the structural model in the second step once the measurement model was validated. A two-step SEM process is recommended in that valid structural theory tests cannot be conducted using poor measures (Hair et al., 2010). SEM is characterized by two distinct components; the measurement model and the structural model.

The measurement model specifies a series of relationships that suggest how measured variables represent a latent construct (Hair et al., 2010; Thompson, 2004). It is evaluated using Confirmatory Factor Analysis (CFA). The role of CFA is to verify the underlying factor structure of the measurement model. Prior to testing the overall measurement model, each construct in the model was analyzed separately. The psychometric properties of the constructs were evaluated by examining the standardized indicator loadings, the construct validity and the average variance extracted estimates (Hair et al., 2010). When each construct had an acceptable fit based on goodness of fit statistics and construct validity measures, the overall measurement model was assessed.

The structural model is the hypothesized model that describes relationships among the latent constructs (Hoyle, 1995). The model relates each construct to other constructs by providing path coefficients for each of the structural paths (i.e. research hypotheses). Each estimated path coefficient is tested for its respective statistical

significance for the hypothesized relationships using the standard errors and calculated z-statistics (Acock, 2013; Bollen, 1989; Byrne, 1998; Hair et al., 2010). In the structural model, a specific structure between latent endogenous and exogenous constructs is hypothesized and the measurement model for latent endogenous and exogenous constructs is determined (Hair et al., 2010). The model is estimated with maximum likelihood (ML). Standardized z tests are used to test the statistical significance of the path coefficients.

Evaluation of Measurement and Structural Models

When evaluating the measurement and structural models using overall goodness of fit statistics, at least one absolute fit index and one incremental fit index, in addition to the chi-squared statistic should be examined (Hair et al., 2010). Thus, absolute and incremental fit indices were used to assess the measurement and structural models in this study. The absolute fit indices directly assess how well a structural equation model reproduces the sample data (Whittaker, 2003). Commonly used fit indices include the chi-squared statistic, the Standardized Root Mean Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA) (Byrne, 1998; Hair et al., 2010; Chi, 2005).

The chi-squared statistic is the Likelihood Ratio Test that is used to test the closeness of fit between the model implied covariance matrix and the sample covariance matrix (Byrne, 1998). The SRMR is a measure of how close we come to reproducing each correlation among the observed variables on average (Acock, 2013).The RMSEA measures how well a model aligns with the population by taking into account the error of approximation in the population (Byrne, 1998; Hair et al., 2010; Stevens, 2002). Overall,

absolute fit indices provide the most basic assessment of how well theory fits reality (Hair et al., 2010).

The incremental fit indices measure the proportionate improvement in fit by assessing how well the estimated model fits relative to some alternative baseline model (Hair et al., 2010). The typical baseline comparison is the null model in which all the observed indicator variables are uncorrelated (Acock, 2013; Byrne, 1994). Commonly used incremental fit indices include the comparative fit index (CFI), and the Tucker Lewis Index (TLI) (Byrne, 1998; Chi, 2005; Hair et al., 2010). CFI compares the hypothesized model with a baseline model that assumes that there is no correlation among the observed indicator variables (Acock, 2013).The TLI index is a comparison of the normed Chi-squared values for the hypothesized model and the baseline model (Hair et al., 2010). Both CFI and TLI values range between 0 and 1 with higher values indicative of a greater improvement in fit (Hair et al., 2010; Stevens, 2002). Overall, incremental fit indices measure the proportionate improvement in fit by comparing the hypothesized model with a more restricted, nested baseline model.

In addition to assessing the overall goodness of fits statistics, evaluation of the measurement model included assessment of construct validity. Construct validity assessment included convergent validity and discriminant validity examinations. Convergent validity was assessed by tests of indicator statistical significance, and composite reliabilities (CR) and average variance extracted (AVE) estimates. Statistically significant indicator loadings and higher values of CR and AVE were indicative of higher convergent validity. The suggested threshold values for CR and AVE are 0.7 and 0.5 respectively (Fornell & Larcker,1981: Kim, 2010). However, some scholars indicate that

a CR value of 0.5 is reasonable (Lee, 2001). Discriminant validity, another measure of construct validity was assessed by examining the inter-construct correlations, as well as, comparing AVE values with squared correlation of a pair of latent constructs (Byrne, 1998; Hair et al., 2010). Lower inter-construct correlations that do not exceed 0.85 and AVE values that exceed the squared correlation of a pair of latent constructs provide evidence of construct validity (Kim, 2010; Kline, 1998).

Chapter 4 Understanding the Victoria Falls World Heritage site domestic tourists

In chapter two, a review of past research showed that information on domestic tourists that visit natural based tourist setting in Zambia is scant. Thus, this study examined the characteristic of domestic tourists who visited the Victoria Falls World Heritage site in Livingstone, Zambia. In this chapter, results of the characteristics of domestic tourists who visited the Victoria Falls World Heritage are presented. Descriptive analysis results of the domestic tourists' demographic, travel, residency and spending characteristics are presented.

Understanding domestic tourists demographic and residency characteristics

Where do the domestic tourists come from?

Figure 4.1 displays results of the residency profile of the survey respondents. The results show that the majority of the respondents were non-Livingstone residents (61 %, N= 1,060). These respondents came from 42 different towns across Zambia (see Appendix 6). The 42 towns were spread across all the ten provinces in the country. The top three towns where non-Livingstone residents came from were Lusaka, Ndola and Kitwe. Results of this study indicate that Lusaka provides the greatest number of domestic tourists to the Victoria Falls World Heritage site (28 %) followed by Ndola (4 %) and Kitwe (3 %; N = 650) (see appendix 6).

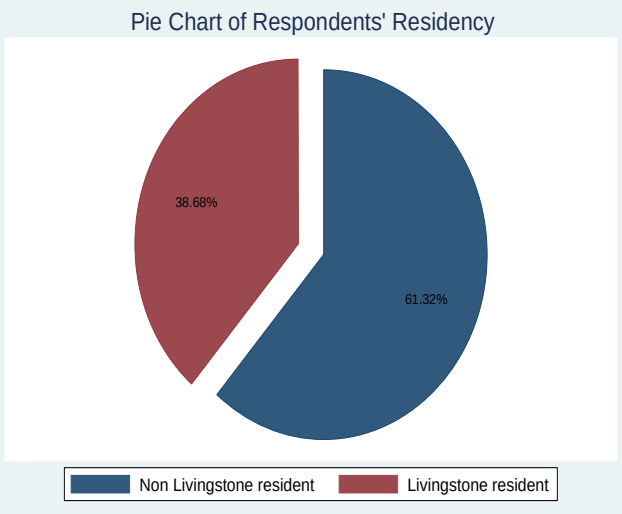

Figure 4.1: Respondents' residency

Figure 4.2 displays results of the respondents' residency by gender. Results of the respondents' residency by gender showed that for both males and females, the majority of the respondents were non-Livingstone residents (61 %, N = 1,060). This finding suggested that Victoria Falls World Heritage was an attractive nature-based tourist setting for both male and female non-Livingstone residents.

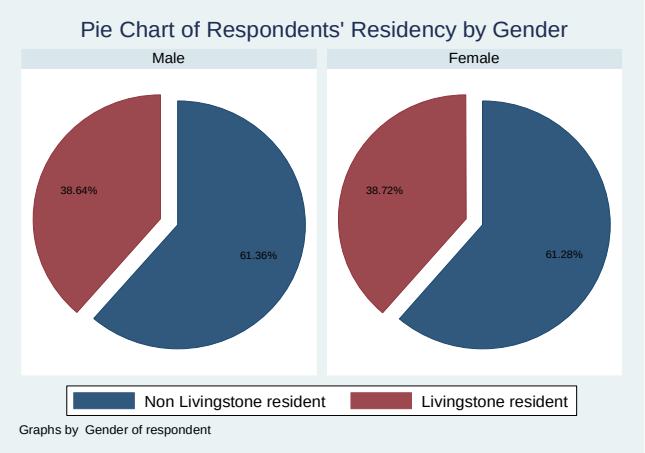

Figure 4.2: Respondents' residency by gender

What is the gender and age composition of the respondents?

Figure 4.3 displays results of the gender distribution of the respondents. The majority of the respondents were males (57 %, N= 1,060). The gender distribution results suggest that the male domestic tourists were more inclined to visit the Victoria Falls World Heritage site relative to the females.

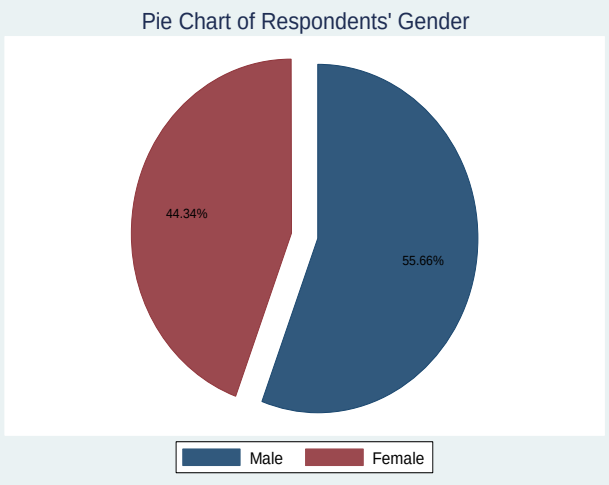

Figure 4.3: Respondents' gender

Results of respondents' age distribution are displayed in Figure 4.4. The results showed that the majority of the respondents were young. Particularly, more than half of the respondents were below 40 years (79 %, N= 1,057). The results showed that respondents' whose age ranged between 50 and 60 were only 5 percents of the respondents. The results of this study indicated that the majority of domestic tourists who visited the Victoria Falls World Heritage site were mostly below 40 years.

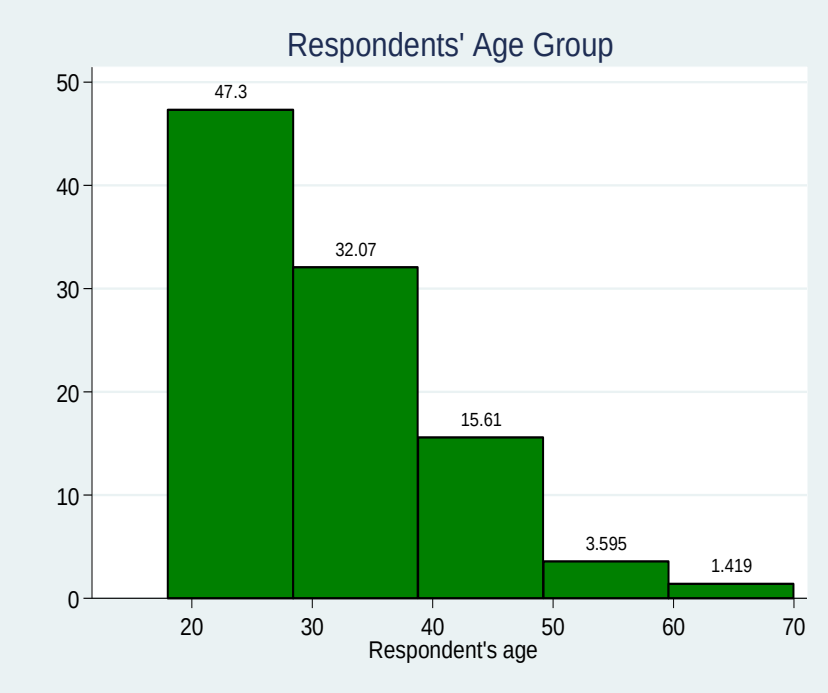

Figure 4.4: Respondents' age group

What are the educational and income level characteristics of the domestic tourists?

Figure 4.5 displays results of the highest educational level of the respondents. The results show that the majority of the respondents had a college/university diploma (46 %, N =1.057). Respondents with a secondary education level were also fairly in the majority (28 %). Only 7 percent of the respondents had education level beyond bachelors' degree. Overall, the results of this study suggest that the majority of domestic tourists who visited the Victoria Falls had some form of tertiary education.

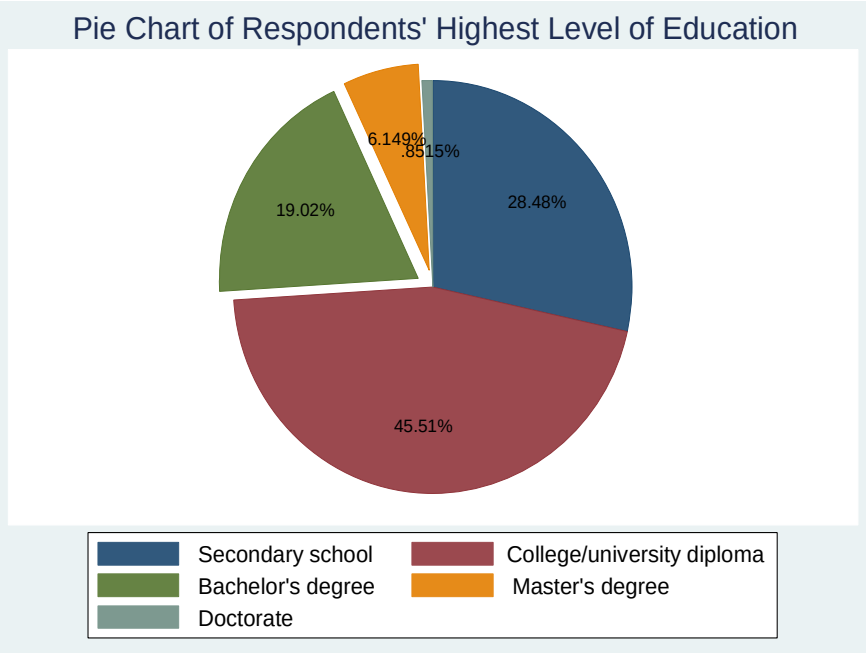

Figure 4.5: Respondents' education levels

Figure 4.6 displays results of respondents' annual household income. The results showed that the majority of the respondents earned less that Kr 60, 000 (58 %, 1,056). Respondents who earned between Kr 60,000 and Kr 179, 999 were the second highest group (23 %) Only 8 percent of the respondents earned Kr 420,000 or more. The results indicated that the majority of the domestic tourists who visited the Victoria Falls World Heritage site were the low income earning Zambian citizenry.

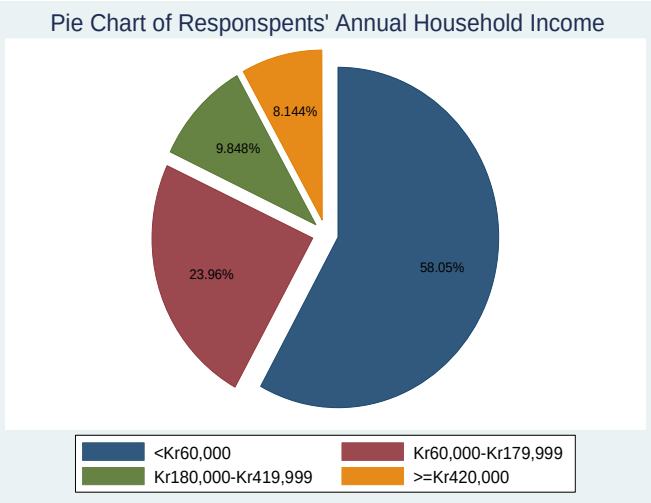

Figure 4.6: Respondents' annual household income

Understanding domestic tourists' relationships to the Victoria Falls World Heritage site and travel characteristics

In next section results of the respondents' relationships to the Victoria Falls World Heritage site are presents. Also presented in this section are the results of the travel characteristics of the results.

What is nature of the domestic visitors' relationship to the Victoria Falls World Heritage site?

Figure 4.7 displays results of respondents' visit type. The results showed that the majority of the respondents were repeat visitors to the Victoria Falls World Heritage site. Particularly, more than half of the respondents were repeat visitors (71 %, 1,060). Domestic tourists' propensity to return to the site repeatedly revealed their loyal relationships to the site. Thus, the results of this study showed that the majority of the

domestic tourists who visited the Victoria Falls World Heritage site had loyal relationships to the site.

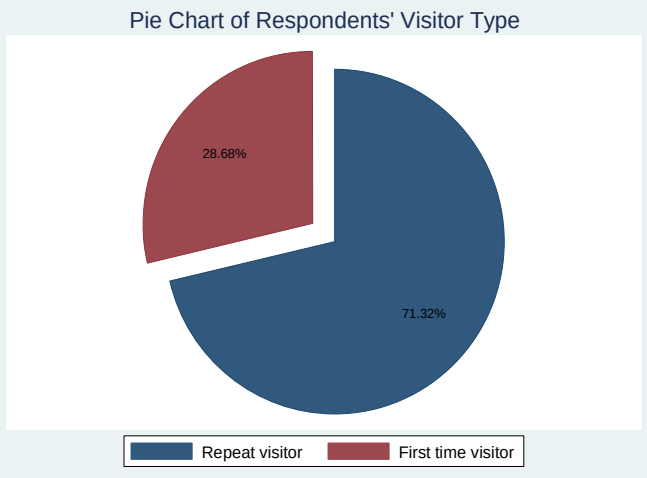

Figure 4.7 Respondents' visit type

Results of this study also showed that the majority of the repeat visitors to the Victoria Falls World Heritage site had been visiting the site for quite a long time (see Figure 4.8). Particularly, over 30% of the repeat visitors have been visiting the site for more than 10 years (N= 756). The many years that these repeat visitors have been visiting the site yet again showed their loyal relationships to the site.

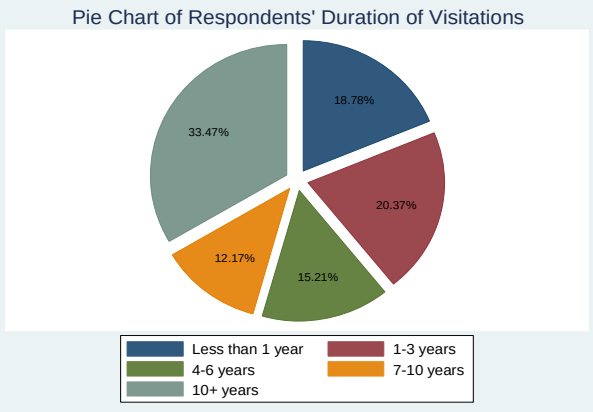

Figure 4.8: Respondents' visitation duration

Results of this study also showed that the majority of the repeat visitors have also been visiting the Victoria Falls World Heritage site regularly (see. Figure 4.9). Particularly, the results showed that the majority of the respondents had visited the site for more than ten 10 times (37 %, N = 756). This finding yet again revealed the domestic tourist' loyal relationships to the site.

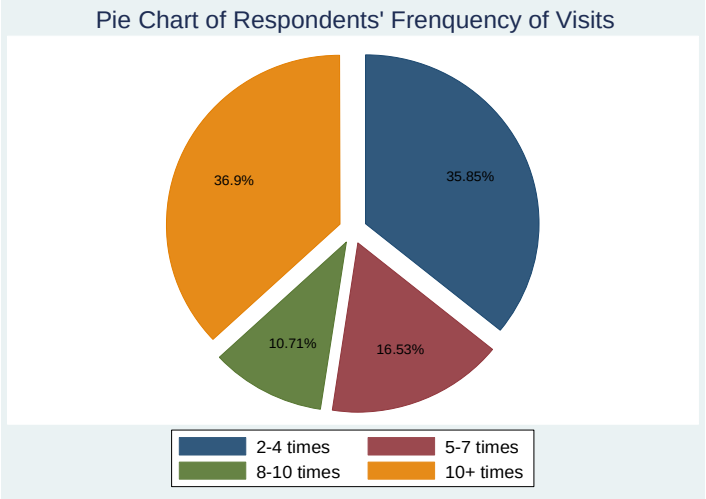

Figure 4.9: Respondents' frequency of visitations

What is the travel group composition of domestic tourist who visit the Victoria Falls World Heritage site?

Figure 4. 10 displays results of the travel group composition of respondents. The results showed that the majority of the respondents traveled to the Victoria Falls World Heritage site with family (41 %, N = 1,060). The results also showed that 30 percent of the respondents traveled with friends, while only 5 percent traveled to the site alone. The results of this study suggested that the majority of the domestic tourists who visited the Victoria Falls World Heritage site traveled with either family or friends.

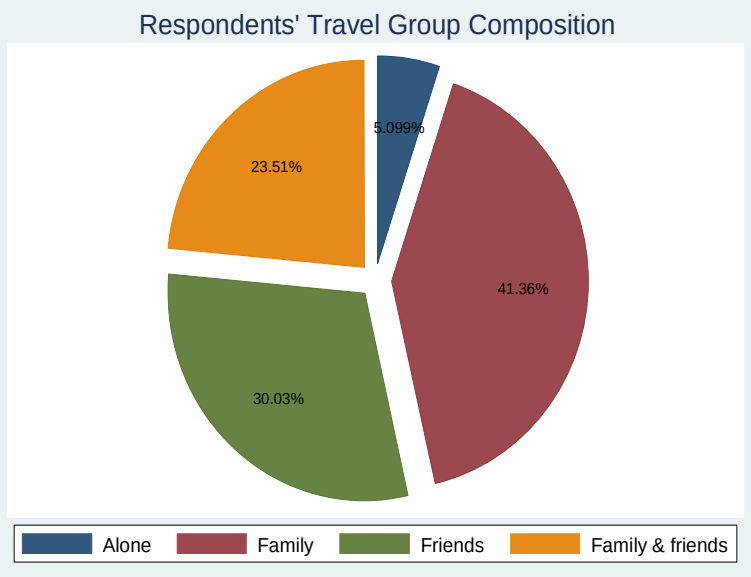

Figure 4.10: Respondents' travel group composition

What is the primary purpose of domestic tourists' visit to Livingstone?

Figure 4.11 displays results of non- Livingstone residents' primary purpose of visiting Livingstone. The results showed that the majority of the respondents were visiting Livingstone for holiday and / or pleasure (54 %, N= 650). The results also showed that 22 percent of the respondents were visiting the town for business/professional. Fairly close to this group of visitors were respondents who travelled to Livingstone to visit family and friends (21 %). Only 1 percent of the respondents were traveling to Livingstone for shopping. The results of this study indicated that the majority of the domestic tourists visited Livingstone for holiday and / or pleasure.

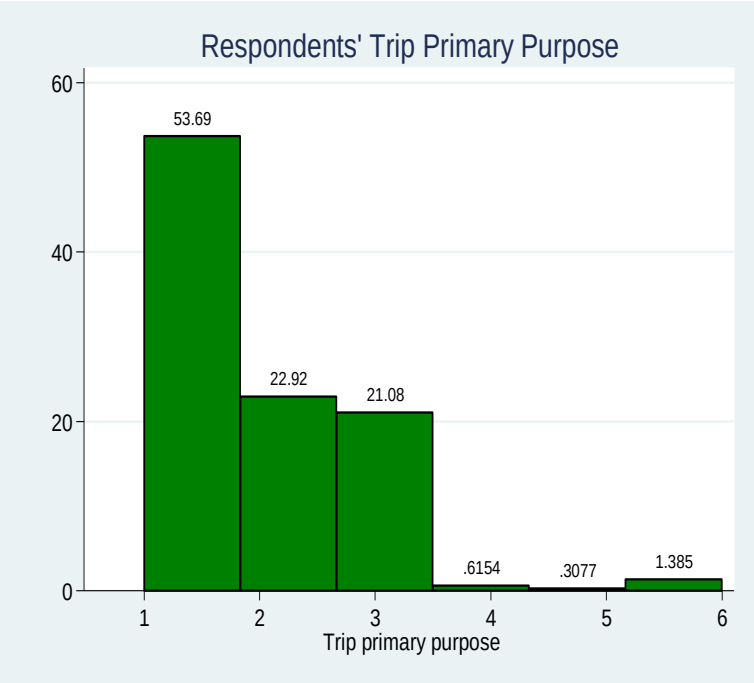

Figure 4.11 Respondents' primary trip purpose

Note: 1 = Holiday / pleasure; 2 = Business / professional work; 3 = Visiting family & friends; 4 = Church conference, 5 = Shopping; 6 = Educational tour

How long do domestic visitors stay in Livingstone?

Figure 4.12 displays results of the respondents' trip duration in Livingstone. The results showed that on average, the majority of the respondents spent between 3 to 4 nights in Livingstone (36 %, N= 650). The results also showed that 14 percent of the respondents spent more than 7 nights in Livingstone. Overall, the results of this study indicated that the majority of the domestic tourists who visited Livingstone spent on average 3 to 4 nights on average.

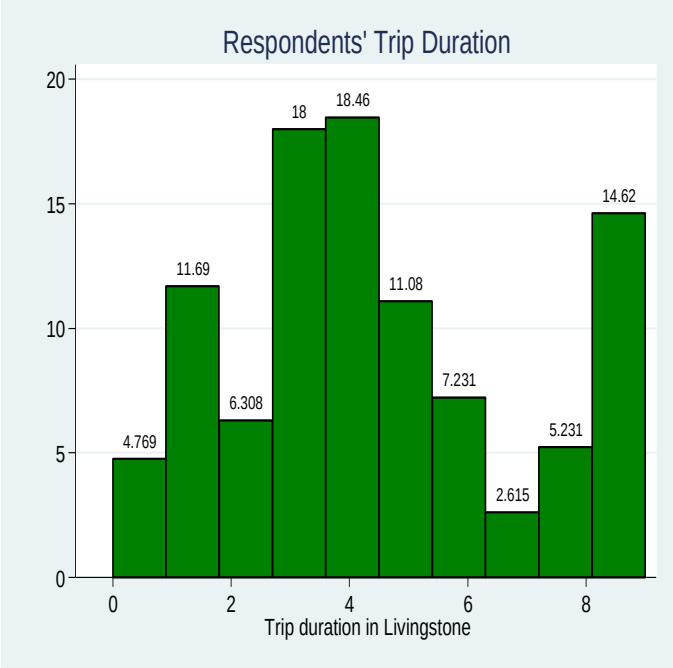

Figure 4.12 Respondents' trip duration in Livingstone

Understanding domestic tourists' spending characteristics in Livingstone

Table 4.1 presents descriptive analysis results of respondents' spending characteristics. The results showed that respondents spent between Kr 200 and Kr 1,250 on accommodation per person per day. In terms of food expenses, the results showed that the respondents spent between Kr10 and Kr 250 per person per day.

Table 4.1: Descriptive statistics of respondents' spending characteristics

Variables	No. of cases	Mean	SD	Min	Max
Accommodation	499*	292.87	129.60	200	1250[6]
Food	571	89.74	54.00	10	250
Tourism	625	169.15	199.95	10	3000
Shopping	444	448.29	434.90	100	3000

* The spending characteristics are per person per day.

Results of this study also showed that respondents spent between Kr 10 and Kr 3,000 on tourism activities per person per day. In terms of shopping expenses, the results showed that respondents spent between Kr 10 and Kr 3000 per person per day. The results of this study suggested that domestic tourists made meaningful contributions to the Livingstone economy through their spending on accommodation, food, tourism and shopping.

[6] 1USD = Kr 7.1

Chapter 5 Understanding predictors of domestic tourists' loyal relationships to the Victoria Falls World Heritage site

To provide an understanding of factors that influence domestic tourists' loyal relationships to the Victoria Falls World Heritage site, this study examined destination loyalty from both a relational and transactional perspective. In this chapter, results of the factors that influence domestic tourists' loyalty to the Victoria Falls World Heritage site are presented. Based on the conceptual framework presented in chapter two, this chapter reports the influence of service quality, perceived value, satisfaction and place attachment as predictors of domestic tourists' loyalty to the Victoria Falls World Heritage site. The chapter begins with results of preliminary data examination. Next, descriptive analysis results are presented. Thereafter, results of reliability and validity assessments are reported. Next, Confirmatory Factor Analysis results are presented. The chapter ends with results of the Structural Equation Modeling.

Understanding the quality of the data: Preliminary examinations

Prior to conducting Structural Equation Modeling, a necessary initial step is examining the quality of the data. In this study, data was examined through outlier detections, missing values evaluations and testing multivariate assumptions. A discussion of the data examination results follows next.

Outliers detection assessment results

The task of identifying outliers in multivariate data has generally been computationally intensive (Weber, 2010). However, effective and less computationally intensive ways of detecting outliers have been suggested in past research. Among such approaches is the Blocked Adaptive Computationally Efficient Nominators (BACON) algorithm proposed by Billor et al. (2000). The BACON algorithm provides an efficient, easier and faster way of detecting outliers in multivariate data using Stata (Weber, 2010). To detect multivariate outliers in this study, the BACON algorithm was used. As shown in appendix 3.1, no observations could be designated as multivariate outliers.

Missing values assessment results

Missing data is a potentially serious issue in Structural Equation Modeling (SEM). This is because it can have a profound effect on calculating the input data matrix and estimating the model (Chi, 2005; Schreiber et al., 2006). Additionally, it complicates the use of SEM given that remedying it using some of the available approaches reduces the sample size (Hair et al., 2010). Commonly used methods for remedying missing data include: complete case approach (known as listwise deletion); all available approach (known as pairwise deletion); and imputation techniques (e.g. mean substitution) (Chi, 2005; Hair et al., 2010; Schreiber et al., 2006). The complete case deletion is an approach where the respondent is eliminated if missing data on any variable (Hair et al., 2010). The all available approach is where all non-missing data are used (Chi, 2005). Imputation techniques, particularly the mean substitution approach involves replacing the missing

values for a variable with the mean of that variable from all valid responses (Hair et al., 2010).

Pairwise deletion although easy to implement using any program is not recommended. This is because it inflates the fit statistics when the missing data exceeds 10 % (Hair et al., 2010; Schreiber et al., 2006). The mean substitution approach despite providing all cases with complete information also has shortcomings. The shortcomings include depressing observed correlations and distorting the actual distribution of the data (Hair et al., 2010).

Given a large sample size with less than 10 % randomly missing data, the listwise deletion approach tends to be unproblematic (Hair et al., 2010: Schreiber et al., 2006). In the current study, missing values on each of the measures was below 1%. Additionally, missing data for the total sample less that 3 % (see appendix 3.2). Thus, to remedy missing data in this study, the listwise deletion approach was used.

Multivariate normality assessment results

Multivariate normality is a fundamental assumption when using SEM. This is because its violation increases the likelihood of rejecting a proposed model (Lee, 2003). It can also invalidate statistical hypothesis testing by inflating the chi-squared statistic (Hair et al., 2010). Although data exhibiting non-normality can have serious effects in small samples (i.e. fewer than 50), its detrimental effects diminishes when sample sizes reach 200 observations or more (Hair et al., 2010). As such, when data deviates from the multivariate normality assumption, large sample sizes are needed (Schreiber et al., 2006). Particularly, the ratio of respondent to parameters needs to increase. Past research

recommend a ratio of 15 respondents per each estimated parameter in the model (Hair et al., 2010).

To assess univariate and multivariate normality assumptions in this study the Shapiro-Wilk and Doornek-Hensen normality tests were used. Assessment results showed that the data deviated from univariate and multivariate normality (see appendix 3.4 & 3.5). However, given that the study's sample size provided a ratio of 28 respondents per each estimated parameter in the model, the detrimental effects of non-normality was diminished (Hair et al., 2010; Schreiber et al., 2006). As such, no data transformations were conducted.

Descriptive analysis of measurement scales

In chapter three, the current study presented the measurement scales that were used to measure the constructs in the study's conceptual model. The constructs are service quality, perceived value, satisfaction, place attachment and destination loyalty. In the proceeding section, descriptive analysis results of the measurement scales for the constructs are reported.

Descriptive analysis results of perceived value

The perceived value construct was measured using twelve indicators. A five point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree was used to measure these indicators. Descriptive statistics results of these measures are presented in Table 5.1. The results showed that mean scores of all the twelve items were above 3.5 (2.5 mid-point). This finding indicated that perceived value measures were evaluated

positively by the respondents. The mean scores of the twelve measures ranged from 3.86 (SD = 1.01) to 4.36 (SD = 0.77).

Table 5.1: Descriptive statistics of perceived value measures

Perceived value	Mean	Standard Deviation
The choice to visit Vic. Falls* was the right decision	4.36	0.77
Visiting Vic. Falls made me feel better	4.35	0.80
Visiting Vic. Falls gave me pleasure	4.32	0.89
Overall, visiting Vic. Falls was valuable	4.26	0.78
Overall, visiting Vic. Falls was worth it	4.25	0.85
Compared to other tourism destinations, Vic. Falls is a good value for money	4.17	0.82
I obtained good results from visiting Vic. Falls	4.17	0.83
After visiting Vic. Falls my image of Vic. Falls was improved	4.03	0.99
The value of visiting Vic. Falls was more that what I expected	4.02	0.99
Compared to travel expenses, I got more satisfaction from visiting Vic. Falls	3.96	0.92
Visiting Vic. Falls was reasonable prices	3.91	1.08
While visiting Vic. Falls I received good service	3.86	1.01

* Vic. Falls refers to Victoria Falls World Heritage site

Descriptive analysis results of service quality

The service quality construct was measured using ten indicators. To measure the ten indicators, a 5-point Likert scale ranging from (1) = Very Poor to (5) = Very Good was used. Descriptive statistics results of the measures are presented in Table 5.2. The results showed that all the ten measures had mean scores above 3.07 (mid-point 2.5). This

finding indicated that the respondents evaluated the service quality indicators positively. The mean scores of the ten measures ranged from 3.08 (SD = 1.05) to 3.95 (SD = 0.90).

Table 5.2: Descriptive statistics of service quality measures

Service quality	Mean	Standard Deviation
Availability of site maps	3.95	0.90
State of the road on the site	3.93	0.90
State of trails around the site	3.90	0.88
Cleanliness of toilets	3.86	0.87
Cleanliness of recreation areas	3.85	0.91
Availability of place to sit and rest	3.78	1.13
Availability of parking spaces	3.71	0.97
Availability of rain coats/ umbrellas	3.31	1.07
Availability of favorable restaurants	3.22	1.01
Availability of interpretation services	3.08	1.05

Descriptive analysis results of satisfaction

The satisfaction construct was measured using three indicators. A five-point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree was used to measure the indicators. Descriptive analysis results of the measures are resented in Table 5.3. The results showed that all the three indicators had mean scores greater than 4.35 (mid-point 2.5). This finding indicated that the respondents expressed high satisfaction with their visit to Victoria Falls World Heritage site. The mean scores of the three measures ranges from 4.35 (SD = 0.77) to 4.46 (SD = 0.67).

Table 5.3: Descriptive statistics of satisfaction measures

Satisfaction	Mean	Standard Deviation
Overall, I am happy about my experience at Vic. Falls	4.46	0.67
As a whole, I really enjoyed my visit to Vic. Falls	4.42	0.67
Overall, I am satisfied with my experience at Vic. Falls	4.35	0.77

Descriptive analysis results of place attachment

The place attachment construct was measured using eight indicators. To measure the eight indicators, a five-point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree was used. Descriptive statistics results of the measures are presented in Table 5.4. The results showed that all the mean scores for the eight measurement items were above 3.86 (mid-point 2.5). This finding indicated that the respondents expressed high levels of attachment to the Victoria Falls World Heritage site. The mean scores for the eight measures ranged from 3.88 (SD = 1.07) to 4.36 (SD = 0.83).

An evaluation of the descriptive statistics results for the eight measures showed that indicators that reflected emotional attachment were rated more highly than those that reflected functional bonds. The mean scores of the indicators that reflected emotional attachment ranged from 4.09 (SD = 1.03) to 4.36 (SD = 0.83), while those that reflected functional bonds ranged from 3.87 (SD = 1.07) to 3.93 (SD = 1.09). These results showed that the respondents were more emotionally attached to the Victoria Falls World Heritage site relative to their functional bond to the site.

Table 5.4: Descriptive statistics of place attachment measures

Place attachment	Mean	Standard Deviation
Vic. Falls is special to me	4.36	0.83
Vic. Falls means a lot to me	4.33	0.88
I identify strongly with Vic. Falls	4.19	0.99
I am very attached to Vic. Falls	4.09	1.03
Visiting Vic. Falls is more important to me than visiting any other place	3.93	1.09
I get more satisfaction out of visiting Vic. Falls than any other place	3.92	1.04
I enjoy visiting Vic. Falls than any other place	3.88	1.07
I wouldn't substitute any other area for the type of experience I get at Vic. Falls	3.87	1.07

Descriptive analysis results of destination loyalty

The study measured the destination loyalty construct using six indictors. The six indicators were measured using a five-point Likert scale ranging from (1) = Strongly Disagree to (5) = Strongly Agree. Descriptive statistics results of the six measures are presented in Table 5.5. The results showed that the mean scores for the six measures were above 4.10 (mid-point 2.5). This finding indicated that the respondents highly expressed loyalty to the Victoria Falls World Heritage site. The mean scores of the six measures ranged from 4.11 (SD = 0.94) to 4.56 (SD = 0.65).

Table 5.5: Descriptive statistics for destination loyalty measures

Destination loyalty	Mean	Standard Deviation
I intend to revisit Vic. Falls again	4.56	0.65
Intend to share my positive experiences t Vic. Falls with others	4.53	0.65
I intend to recommend Vic. Falls to others	4.52	0.66
I intend to revisit Vic. Falls with others who have never visited the site before	4.46	0.71
I intend to say positive things about Vic. Falls	4.44	0.73
My next recreation trip will most likely be to Vic. Falls	4.11	0.94

Evaluating the quality of measurement scales: Reliability and Validity tests

The quality of the measurement items should be examined prior to conducting Structural Equation Modeling. This assessment reveals the extent to which the indicators of the latent constructs are free from the biasing effects of measurement errors (Kline, 1998). Reliability and validity tests are used to assess the quality of the measures. The proceeding section reports results of the reliability and validity assessments conducted in this study.

Reliability assessment results

In this study, one of the approaches used to assess the reliability the measurement scales was the Cronbach's coefficient alpha (α). Cronbach's alpha is based on the average correlations or covariances of the measurement items (Lee, 2003). An alpha coefficient of 0.7 or above is considered accepted as a good indication of reliability (Yoon, 2002). Cronbach's alpha coefficient reliability results are presented in Table 5.6 and appendix 4.

Table 5.6: Results of measures' reliability (Cronbach's Alpha)

Measurement Scale	Number of items	Cronbach's Alpha (α)
Perceived Value	12	0.86
Place Attachment	8	0.84
Satisfaction	3	0.82
Service Quality	10	0.81
Destination Loyalty	6	0.77

Results reported in Table 5.6 showed that the alpha coefficients for the measures of the five constructs ranged from 0.77 - 0.86. These alpha coefficients were above the recommended 0.7 cut-off value (Hair et al., 2010). The results provided support for the internal consistency among the observed indicators of the constructs. The alpha coefficients results indicated that the measurement scales were reliable and suitable for further analysis.

Another approach used to assess reliability in the current study was evaluating the composite reliability. Composite reliability values were computed and used to complement the alpha coefficient results. The suggested cut-off value for good composite reliability is 0.7 (Chi, 2005; Hair et al., 2010). Previous studies however, indicate that a composite reliability of 0.5 or above is considered reasonable (Lee, 2001). Composite reliability values were computed for all the measures. All the composite values were above the suggested cut-off value. Details of these results are presented in the Confirmatory Factor Analysis section of this chapter and appendix 5.

Validity Assessment of the Measurement Scales

To assess the validity of the measurement scales used in this study, the content and construct validity were assessed. To assess content validity in this study, an in-depth review of the literature was conducted. This was done to enable the inclusion of an adequate and representative set of items that reflected the constructs. The survey instrument was also reviewed by my five member dissertation committee and staff at the National Heritage Conservation Commission. Additionally, the survey instrument was pretested on 55 domestic tourists at the Victoria Falls World Heritage site.

To assess construct validity, convergent validity and discriminant validity of the measures was examined. Convergent validity was assessed by examining the composite reliability (CR) and average variance extracted (AVE) estimates. Results provided support for the convergent validity of the measures. Details of these results are presented in the Confirmatory Factor Analysis section of this chapter and appendix 5.

Construct validity was also assessed by examining the discriminant validity of the constructs. Discriminant validity was examined by assessing the inter-construct correlations, as well as, comparing AVE values with squared correlation of a pair of latent constructs (Byrne, 1998; Hair et al., 2010). Results provided support for the discriminant validity of the constructs. Thus, construct validity was verified. Details of the results are presented in the Confirmatory Factor Analysis section that follows next and appendix 5.

Confirmatory factor analysis

Structural Equation Modeling (SEM) is characterized by two distinct components; the structural model and the measurement model. The structural model is the hypothesized model that describes relationships among the latent constructs (Hoyle, 1995).This model is discussed in the structural equation modeling section of this chapter. In this section, the chapter focuses on a discussion of the measurement model. The measurement model specifies how measured variables represent a latent variable that is not measured directly (Hair et al., 2010; Thompson et al., 2004). This model is evaluated using Confirmatory Factor Analysis (CFA). CFA tests how well measured variables represent the latent constructs. It provides evidence on how well the theoretical justification of the constructs aligns with the actual data (Chi, 2005; Hair et al., 2010).

In the measurement model all constructs are considered exogenous variables. Thus, the construct have correlational relationships represented by a two headed curved arrow linking the constructs in the model (Hair et al., 2010). The overall measurement model for the current study was hypothesized as shown in Figure 5.1.

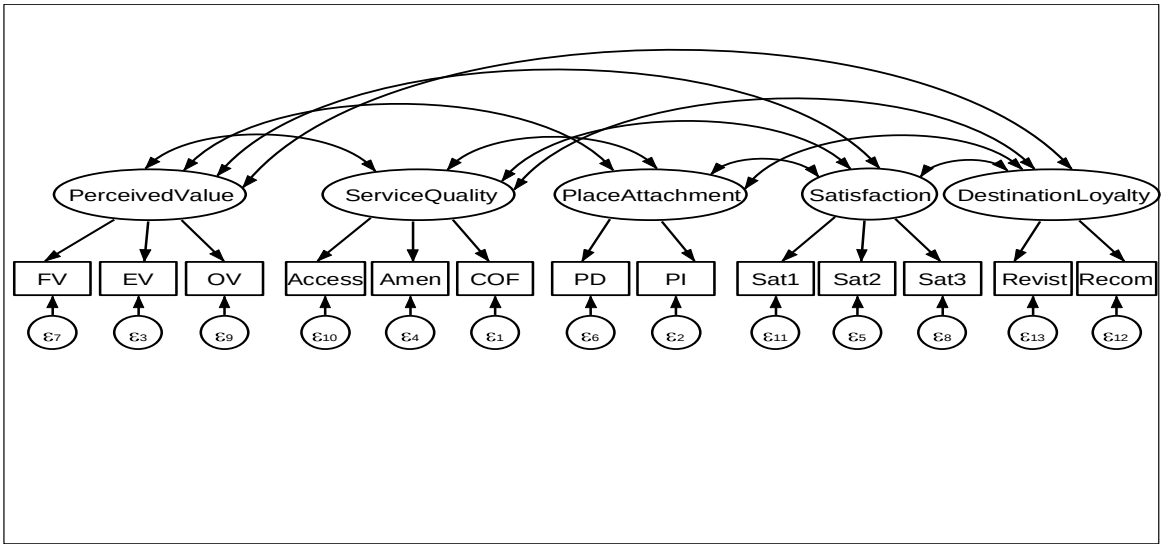

Figure 5.1: Hypothesized Overall Measurement Model

Prior to testing the overall measurement model, each construct in the model was evaluated separately. This was done to ensure that the constructs were correctly specified before using them in the overall measurement model. CFA was used to examine the factor structures of the constructs. Evaluations of the factor structure of the constructs was done by examining goodness of fit statistics and construct validity. CFA tests for the perceived value, service quality, satisfaction and destination loyalty construct provided support for the underlying factor structures of the constructs (see appendix 5).

Prior to providing support for the place attachment factor structure, the initial factor structure construct was re-specified by correlating the error terms of measurement items 7 and 8 of the place identity scale. Indicators 7 was "Victoria Falls World Heritage site means a lot to me", while indictor 8 was "Victoria Falls World Heritage site is special to me". Measurement error covariances tend to derive from characteristics specific to either the items or to the respondents (Aish & Joreskog, 1990). On one hand, if the error covariances reflect item characteristics then they may represent a small omitted factor.

On the hand other, if they represent respondent characteristics, they may reflect bias such as yea/nay-saying and social desirability among others (Aish & Joreskog, 1990). Another factor that may trigger correlated errors is a high degree of overlap in item content. Such redundancy occurs when an item although worded differently essentially asks the same question (Byrne, 1998). This factor compromises construct validity (Hair et al., 2010).

In the case of the correlated errors of the place attachment measures reported in this study, item characteristics and overlap in the item content of the two indicators was unlikely. This is because past research provide theoretical and empirical evidence on the distinctiveness of the two indicators (Warzecha & Lime, 2001; Williams & Vaske, 2003). Thus, the error covariance may have reflected respondent characteristics. Given that the two indicators were measures of the place identity dimension, they both involved a focus on emotional bond between individuals and the place visited (i.e. Victoria Falls World Heritage site). As such, it was likely that what was unique about indicator 7 with respect to place identity was related with indicator 8. Hence, allowing the correlation of the error variances of this pair of indicators made conceptual sense. Moreover, this pattern of correlation is likely given that indicator 7 and 8 were measured using the same method (self-report) and were obtained from the same informant (domestic tourists) (Kline, 1998). Results of CFA tests provided support for the re-specified factor structure of the place attachment construct (see appendix 5).

To maintain model parsimony in the number of variables used in the overall measurement model and SEM analysis, summated scales were generated for the perceived value, service quality, place attachment and destination loyalty constructs. The summated scales were generated by pooling individual observed variables (items) into a

single composite measure. That is, individual variables representing the three subscales of the constructs were combined and the average score of the variables was created. Summated scales help to overcome the measurement error inherent in all measured variables (Chi, 2005). They also provide a way of representing the multi-aspects of a concept in a single measure. Summated scales provide the ability to obtain a more "well-rounded" perspective of a concept while maintaining model parsimony (Hair et al. 2010).

Accordingly, three composite variables were created and used as manifest variables for the perceived value construct: functional value (mean = 3.97, SD = 0.69); emotional value (mean = 4.23, SD = 0.72), and overall value (mean = 4.21, SD = 0.62). Three composite variables were also created and used as manifest variables for the service quality construct: conditions of facilities (Mean = 3.89, SD = 0.66), accessibility (Mean = 3.83, SD = 0.77), and amenities (Mean = 3.35, SD = 0.78). In the case of the place attachment construct, two composite variables were created and used as manifest variables: place identity (Mean = 4.24, SD = 0.72), and place dependence (Mean = 3.90, SD = 0.88). Two composite variables were also created and used as manifest variables for the destination loyalty construct: recommendations (Mean = 4.50, SD = 0.56), and revisit intentions (Mean = 4.38, SD = 0.57).

The generated manifest variables were used as indicators of the perceived value, service quality, place attachment and destination loyalty constructs in the evaluation of the overall measurement model, as well as, the structural equation modeling analysis. Three indicators that were to measure the satisfaction construct also served as the manifest variables for the construct in the evaluation of overall measurement model and the structural equation modeling analysis

Confirmatory factor analysis for the overall measurement model

With the five constructs appropriately specified based on the confirmatory factor analysis reported in the preceding section, the overall measurement model was tested next. The overall measurement model described the nature of the relationship between the constructs and the manifest variables that measured the constructs. CFA was used to test the overall measurement model. This was done in order to develop evidence that the manifest variables were actually measuring the respective underlying constructs.

In this section of the chapter, results of the evaluation of the overall measurement model are presented. First, an outline of the factor structure of the model is presented followed by results of the factor structure assessment. Assessment of the overall measurement model included goodness of fit statistics and construct validity evaluations.

Understanding the factor structure of the overall measurement model

The overall measurement model consisted of five constructs and thirteen manifest variables. The five constructs were perceived value, service quality, satisfaction, place attachment, and destination loyalty. Perceived value, service quality and satisfaction were each measured by three manifest variables. Place attachment and destination loyalty were each measured by two manifest variables. Each of the thirteen observed variables was directly affected by a unique observed error. Each error was specified to be uncorrelated with other errors. The constructs had correlational relationships represented by a two headed curved arrow connecting the constructs in the model (see Figure 5.2).

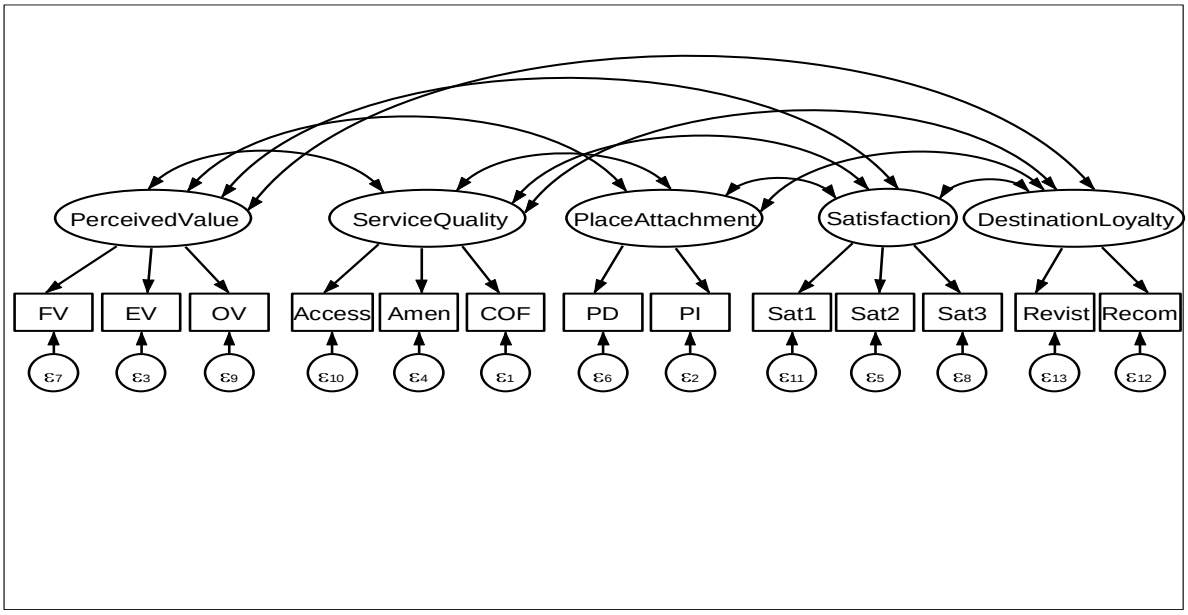

Figure 5.2: Hypothesized Overall Measurement Model

Note: Full names for all the 13 observed variables are provided in Table 5.8

Examining the factor structure of the overall measurement model

Examining the factor structure of the overall measurement model was done through assessments of the goodness of fit statistics and the construct validity. In the next section, results of the goodness of fit assessments are provided. Thereafter, results of the construct validity assessments are presented.

Evaluating the factor structure using goodness of fit statistics

Results of the goodness-of-fit statistics are reported in Table 5.7. The chi-square (χ^2) value was statistically significant (χ^2 = 133.07, df =55) at $\rho < 0.001$ indicating that the predicted model did not match the observed model. This outcome was expected given the problems associated with the chi-squared statistic. The chi-squared statistic tends to be sensitive to sample size, model complexity and departures from multivariate normality

(Cole & Scott, 2004; Hair et al., 2010; Hu et al., 2009; McDonald & Hu, 2002). Thus, additional fit indices were also examined to assess overall model fit.

Additional fit indices examined showed that the overall measurement model represented a well fitting model to the data. RMSEA was 0.04 and within the suggested 0.08 cut-off value for an acceptable model fit (Acock, 2013; Kim, 2010). The SRMR value was 0.03 and within the suggested less than 0.1 cut-off value for a well fitting model (Hair et al., 2010; Kline, 1998). Both the RMSEA and SRMR values were consistent in suggesting an acceptable model fit. The CFI and TLI values were 0.98 and 0.97 respectively. These values were above the recommended 0.90 cut-off value for a well fitting model (Hu & Bentler, 1999; Kim, 2010). Collectively, the goodness of fit statistics provided support for the factor structure of the overall measurement model.

Table 5.7: Goodness of fit indices for Overall Measurement Model

Chi-square ($\chi 2$)	133.07 (df =55, p <0.001)
RMSEA	0.04
SRMR	0.03
CFI	0.98
TLI	0.97
N	1054

Evaluating the validity of the Overall Measurement Model

Given the acceptance of the factor structure of the model based on goodness of fit statistics, an evaluation of construct validity followed next. To examine construct validity, convergent validity and discriminant validity of the measures were assessed. Convergent validity was examined through tests of the statistical significance of the indicator loadings, as well as, composite reliability (CR) and average variance extracted (AVE) assessments. Discriminant validity was assessed by examining the inter-construct correlations, as well as, comparing AVE values with squared correlation of a pair of latent constructs.

Convergent validity assessment results

Convergent validity assessment included examining tests of the statistical significance of the indicator loadings, as well as, composite reliability (CR) and average variance extracted (AVE) assessments. In the proceeding section, results of the statistical significance of the indicator loadings are presented. Thereafter, results of the CR and AVE assessments are provided.

Results of statistical significance tests of indicators loadings, CR and AVE values

Indicator loadings, z-statistics, composite reliabilities and average variance extracted are provided in Table 5.8. The indicator loadings ranged from 0.62 to 0.82 and were all significant at the $\rho < 0.001$ level. The significant indicator loadings provided evidence of convergent validity. This finding showed that all the manifest variables were significantly related to their specified latent variables. These results also revealed the

importance of the manifest variables as indicators of their respective constructs (Hair et al. 2010). The CR and AVE estimates were also above the suggested 0.7 and 0.5 cut-off values respectively (see Table 5.8). This finding also provided empirical evidence for the convergent validity of the measures.

Table 5.8: Indicator loadings, z-statistics, CR and AVE estimates for the Overall Measurement Model

Construct dimensions & Indicators loadings	Std	z- statistic	CR	AVE
Perceived value			0.79	0.63
Functional value	0.62	26.91		
Emotional value	0.81	46.14		
Overall value	0.81	46.41		
Service quality			0.72	0.56
Accessibility	0.68	28.04		
Condition of facilities	0.70	28.50		
Amenities	0.66	25.85		
Place attachment			0.67	0.59
Place dependence	0.65	20.66		
Place identity	0.77	23.34		
Satisfaction			0.82	0.66
Experience satisfaction at Vic Falls	0.75	41.84		
Visit enjoyment at Vic Falls	0.82	51.92		
Happy with experience at Vic Falls	0.76	43.06		

Construct dimensions & Indicators loadings	Std	z- statistic	CR	AVE
Destination loyalty			0.66	0.59
Revisit intentions	0.65	17.32		
Recommendations	0.76	18.65		

Results of discriminant validity assessment

Discriminant validity of the constructs was also assessed to examine construct validity. It was assessed by comparing the AVE values with the square of the correlations between each pair of constructs, as well as, examining the inter-construct correlations. Discriminant validity is established when the AVE values exceed the squared correlations of a pair of constructs (Hair et al., 2010). It is also achieved when the inter-construct correlations do not exceed 0.85 (Kim, 2010). The correlation matrix of the constructs is provided in Table 5.9. The inter-construct correlations ranged from 0.17 to 0.54 and were below the suggested 0.85 cut-off value. The AVE estimates for each of the constructs exceeded the square of the correlations between each pair of the constructs. These results provided support for the discriminant validity of the five constructs and validated the overall measurement model.

Table 5.9 Correlation matrix for the Overall Measurement model constructs

	Perceived Value	Service Quality	Satisfaction	Place Attachment	Destination Loyalty
Perceived Value	1.00	0.19	0.29	0.10	0.06
Service Quality	0.44	1.00	0.16	0.24	0.02
Satisfaction	0.54	0.40	1.00	0.21	0.18
Place Attachment	0.32	0.49	0.46	1.00	0.14
Destination Loyalty	0.25	0.17	0.42	0.3	1.00

Note: Values below the diagonal are correlation estimates among constructs, diagonal elements are construct variances, and values above the diagonal are squared correlations.

Summary of the model structure assessment results

Results of the goodness of fit statistics and construct validity provided support for the factor structure of the overall measurement model. This finding demonstrated that the manifest variables were actually measuring the respective underlying constructs. The results also showed that the measurement model demonstrated an acceptable fit to the data. Given that adequate measurement and construct validity was established, it was suitable to proceed to testing the structural model. Thus, results of structural equation modeling analysis and hypotheses tests are presented next.

Structural Equation Modeling

Prior to testing the structural model, the measurement model was tested in order to establish measurement and construct validity. This approach followed the two- step Structural Equation Modeling (SEM) process proposed by Anderson & Gerbing (1988). The two-step SEM process involves testing the fit and construct validity of the measurement model in the first step. In the second step the structural model is tested once the measurement model is validated. A two-step SEM process is essential in that valid structural theory tests cannot be conducted using poor measures (Hair et al., 2010). Thus, before the structural model could be tested, the measurement model had to be validated. Given the validation of the overall measurement model as demonstrated in the preceding section, the proceeding section focuses on the structural model.

The hypothesized structural model consisted of five constructs and thirteen manifest variables (see Figure 5.8). The five constructs were perceived value, service quality, satisfaction, place attachment and destination loyalty. Perceived value and service quality were the exogenous variables, while place attachment, satisfaction and destination loyalty constituted the endogenous variables. A total of thirteen indicators (six for exogenous variables and seven for endogenous variables) were used to measure the five constructs

To gain an understanding the factors that influence domestic tourists' loyalty to the Victoria Falls World Heritage site from both a transaction and relational perspective, seven hypotheses were tested. The seven hypotheses included the following;

1. Domestic tourists' level of attachment to Victoria Falls World Heritage site has a direct effect on their loyalty to the site.

2. Domestic tourists' level of satisfaction with their visit to the site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site.

3. Domestic tourists' level of satisfaction with their visit to the site has a direct effect on their loyalty to the site.

4. Domestic tourists' perceptions of service quality at the site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site;

5. Domestic tourists' perceptions of service quality at the site has an indirect effect on their loyalty to the site mediated by their level of satisfaction with the visit to the site.

6. Domestic tourists' perceived value of their visit to the site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site.

7. Domestic tourists' perceived value of their visit to the site has an indirect effect on their loyalty to the site mediated by their level of satisfaction with the visit to the site.

The seven hypotheses tested seven relationships among perceived value, service quality, satisfaction and place attachment as predictors of destination loyalty. These relationships are shown in Figure 5.3 below.

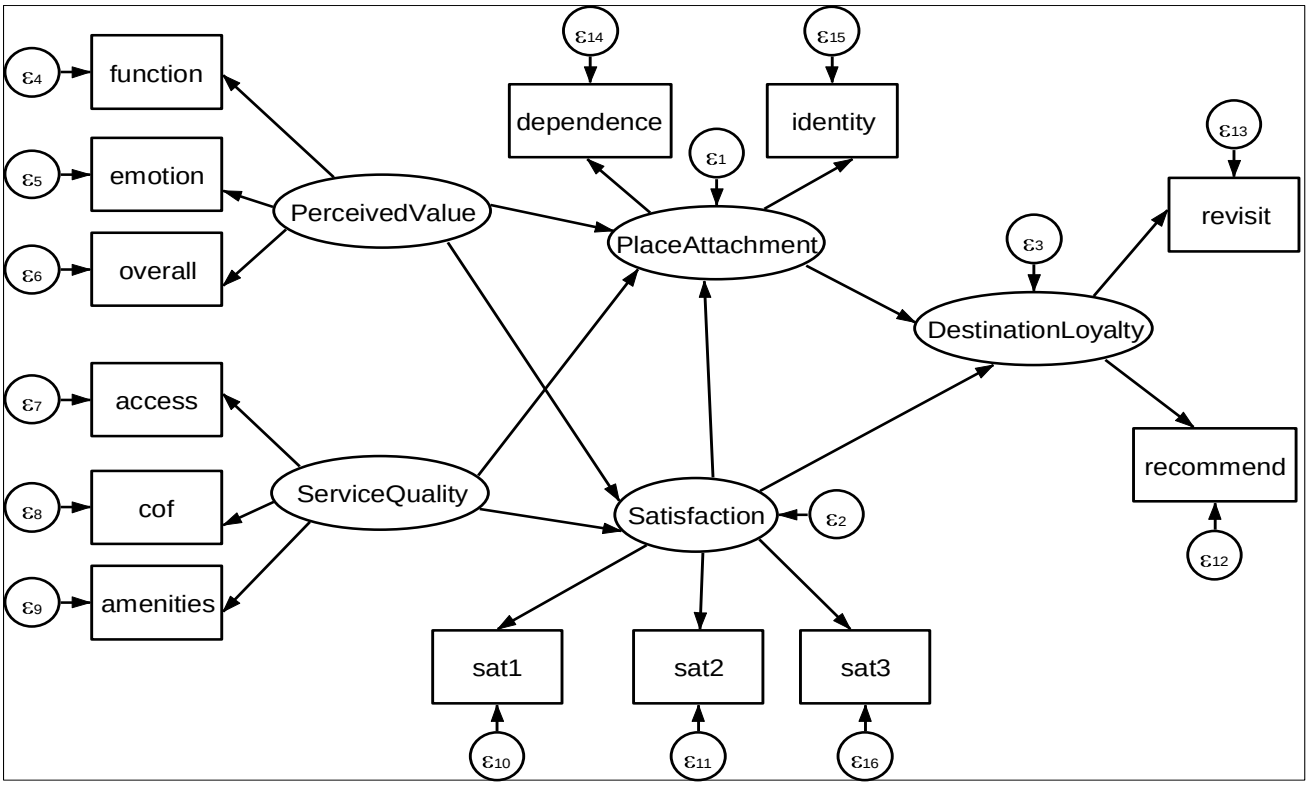

Figure 5.3: Hypothesized Structural Model

Results of the evaluation of the structural model

Prior to testing the seven hypotheses, the fit of the structural model was examined. This was done in order to assess the extent to which the model aligned with the data. The fit of the model was examined by assessing the goodness of fit statistics. Results of the goodness of fit statistics are reported in Figure 5.4. The chi-square (χ^2) value for the model was statistically significant ($\chi^2 = 146.84$, df = 57, $\rho < 0.001$) indicating a poor fit to the data. However, given the sensitivity of the chi-squared statistic to large sample sizes, additional fit indices were also examined to assess model fit. RMSEA was 0.04 and within the suggested cut-off value of 0.08 for an acceptable model fit (Acock, 2013; Kim, 2010). The SRMR value was 0.03 and within the suggested less than 0.1 cut-off value for a well fitting model (Hair et al., 2010; Kline, 1998). CFI was

0.98, while TLI was 0.97. These goodness of fit indices were above the suggested 0.9 cut-off value for a well fitting model (Hu & Bentler, 1999; Kim, 2010). Collectively, the goodness-of fit statistics were consistent in suggesting that the hypothesized model fit the data fairly well.

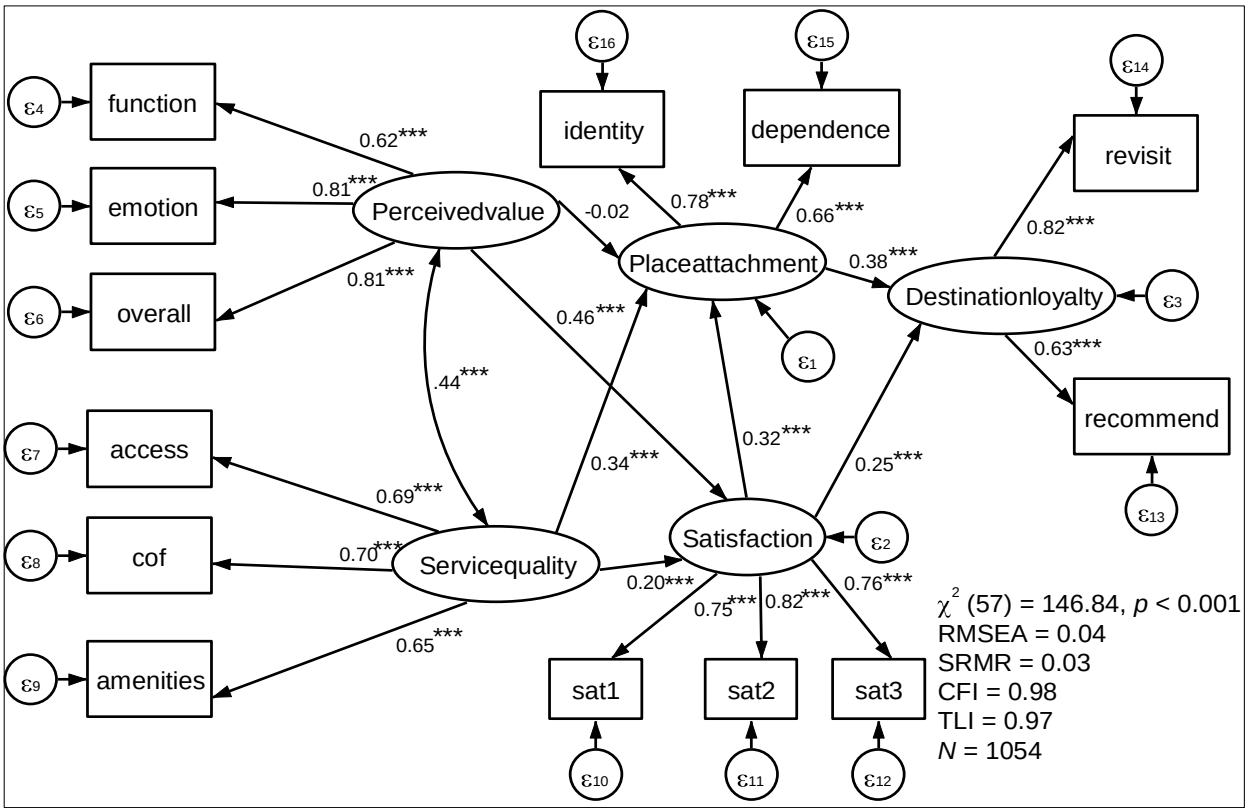

Figure 5.4: Structural Equation Modeling Results

Results of the evaluation of proposed relationships

Given that the structural model provided an acceptable fit to the data, the next task was to evaluate the proposed structural relationships in the model. These relationships were evaluated by testing the proposed seven hypotheses. Results of the hypotheses tests are presented next.

Hypothesis tests results

Results of structural equation modeling analysis using Stata 13.0 were utilized to test the hypotheses. The z statistics associated with the estimated parameter coefficients were used to test the hypotheses. Results of the seven hypotheses tests are presented in Table 5.10

Table 5.10 Summary of hypothesis testing results

Hypothesis	Hypothesized path	Std Loadings	Z-statistic	Results
H1	PA -> DL	0.38	8.69***	Supported
H2	SAT -> PA -> DL	0.12	5.22***	Supported
H3	SAT -> DL	0.25	5.24***	Supported
H4	SQ -> PA -> DL	0.13	5.48***	Supported
H5	SQ -> SAT -> DL	0.05	3.52***	Supported
H6	PV -> PA -> DL	-0.01	-0.33	Not supported
H7	PV -> SAT -> DL	0.11	4.80***	Supported

*** $p < 0.001$.
Note: PV= Perceived value; SQ= Service quality; SAT= Satisfaction; PA= Place attachment; DL= Destination loyalty

Results of the factors that influenced domestic tourists' loyalty to the Victoria Falls World Heritage site from both a transactional and relational perspective are reported next.

Hypothesis 1: Domestic tourists' level of attachment to the Victoria Falls World Heritage site has a direct influence on their level of attachment to the site

The structural path between place attachment and destination loyalty in the structural model was significant ($\beta = 0.38$, $z = 8.69$) at $\rho < 0.001$. This finding provided support for hypothesis 1. The results showed that domestic tourists' level of attachment to the site had a direct influence on their loyalty to the site. This finding demonstrated that domestic tourists' level of attachment to the site was a significant predicator of their loyalty to the site.

Hypothesis 2: Domestic tourists' level of satisfaction with their visit to Victoria Falls World Heritage site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site

In the structural model, the structural path between satisfaction and destination loyalty mediated by place attachment was significant ($\beta = 0.12$, $z = 5.22$) at $\rho < 0.001$. This finding provided support for hypothesis 2. Domestic tourists' level of satisfaction with their visit to the site had a significant indirect effect on their loyalty to the site through their level of attachment to the site. This finding revealed the significant mediating effect of place attachment in the relationship between domestic tourists' satisfaction with the visit to the site and their loyalty to the site.

Hypothesis 3: Domestic tourists' level of satisfaction with their visit to Victoria Falls World Heritage site has a direct effect on their loyalty to the site

The structural path between satisfaction and destination loyalty in the structural model was significant ($\beta = 0.25$, $z = 5.24$) at $\rho < 0.001$. This finding provided support

for hypothesis 3. Domestic tourists' level of satisfaction with their visit to site had a significant direct effect on their loyalty to the site. This finding showed that domestic tourists' satisfaction to the site was a significant predictor of their loyalty to the site.

Hypothesis 4: Domestic tourists' perceptions of service quality at Victoria Falls World Heritage site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site

In the structural model, the structural path between service quality and destination loyalty mediated by place attachment was significant ($\beta = 0.13$, $z = 5.48$), at $\rho < 0.001$. This finding provided support for hypothesis 4. Domestic tourists' perception of service quality at the site had a significant indirect effect on their loyalty to the site through their level of attachment to the site. This finding demonstrated the significant mediating effect of place attachment in the relationship between domestic tourists' perceptions of service quality at the site and their loyalty to the site.

Hypothesis 5: Domestic tourists' perceptions of service quality at Victoria Falls World Heritage site has an indirect effect on their loyalty to the site mediated by their level of satisfaction with their visit to the site

The structural path between service quality and destination loyalty mediated by satisfaction was significant ($\beta = 0.05$, $z = 3.52$), at $\rho < 0.001$. This finding provided support for hypothesis 5. Domestic tourists' perception of service quality at the site had a significant indirect effect on their loyalty to the site through their level of satisfaction with their visit to the site. This finding revealed the significant mediating effect of

satisfaction in the relationship between domestic tourists' perceptions of service quality at the site and their loyalty to the site.

Hypothesis 6: Domestic tourists' perceived value of their visit to Victoria Falls World Heritage site has an indirect effect on their loyalty to the site mediated by their level of attachment to the site

In the structural model, the structural path between perceived value and destination loyalty mediated by place attachment was not statistically significant (β = -0.01, z = -0.33). This finding did not provide support for hypothesis 6. Domestic tourists' perceived value of their visit to the site did not have a significant indirect effect on their loyalty to the site through their level of attachment to the site. This finding did not provide support for the mediating effect of place attachment in the relationship between domestic tourists' perceived value of their visit to the site and their loyalty to the site.

Hypothesis 7: Domestic tourists' perceived value of their visit to Victoria Falls World Heritage site has an indirect effect on their loyalty to the site mediated by their level of satisfaction with their visit to the site

The structural path between perceived value and destination loyalty mediated by satisfaction was significant (β = 0.11, z = 4.80), at $\rho < 0.001$. This finding provided support for hypothesis 7. Domestic tourists' perceived value of their visit to the site had a significant indirect effect on their loyalty to the site through their level of satisfaction with their visit to the site. This finding revealed the significant mediating effect of satisfaction in the relationship between domestic tourists' perceived value of their visit to the site and their loyalty to the site.

Evaluation of the explanatory power of the model

To evaluate the explanatory power of the model, the study evaluated the squared multiple correlation (R^2) of the endogenous variables. Endogenous variables in the model were satisfaction, place attachment and destination loyalty. Results of the (R^2) values for these constructs are reported in Table 5.11.

Table 5.11 R-squared Values for Endogenous Variables

Variable	**R^2 (%)**
Satisfaction	32
Place attachment	29
Destination loyalty	30

Results of this study showed that 32 percent of the variance in satisfaction was explained by the variance in perceived value and service quality. The results also showed that 29 percent of the variance in the place attachment was explained by the variance in perceived value, service quality and satisfaction. Furthermore, the results indicated that 30 percent of the variance in the destination loyalty was explained by the variance in satisfaction and place attachment.

Chapter 6 Discussions, Implications, Conclusions and Recommendations

The primary purpose of this study was to understand how to improve Zambians' connections to natural settings. To better do this, the concept of destination loyalty was highly valuable. Particularly, the study investigated factors that influence domestic tourists' loyalty to a nature-based tourist setting- the Victoria Falls World Heritage site. While destination loyalty has been explored in previous studies, past research lacked an emphasis on the influence of relational predictors of loyal relationships given their focus on transactional predictors. To extend our understanding of destination loyalty, this study focused on both transactional and relational predictors of destination loyalty.

To gain an understanding of domestic tourists that visited the Victoria Falls World Heritage site, this study analyzed the characteristics of domestic visitors to the site. Thereafter, the study sought to understand the nature of the domestic tourists' relationship to the site. To better do this, this study extended past destination loyalty research by examining both transactional and relational predictors of destination loyalty. The study particularly investigated whether place attachment, a concept widely used in the natural resource management field, could be applicable to examining destination loyalty from a relational perspective in addition to the typical transactional approach. Transactional predictors of destination loyalty consisted of service quality, perceived value and satisfaction.

This chapter discusses the results of the study, beginning with what was learned about the domestic tourist themselves. Implications of these results for theory,

management and policy are also discussed in this chapter. The chapter also presents the limitations of the study, suggestions for further research and concluding remarks. The next section discusses the key characteristics of domestic tourists that visited the Victoria Falls World Heritage site.

Understanding characteristics of Victoria Falls World Heritage site domestic visitors

The majority of the respondents indicated that they return to the Victoria Falls World Heritage site repeatedly. Additionally, most of these repeat visitors had been visiting the site for ten or more years and had frequent visits. Past research reports that the frequency of visits to the setting increases dependence on the setting and ultimately leads to emotional attachment with the area (Moore & Graefe, 1994). Thus, domestic tourists' frequency of visits to the Victoria Falls World Heritage site has potential to foster relational connections to the site. The relational connections are fundamental for promoting their loyal relationships to the site.

Findings of this study also showed that the majority of the respondents were below the age of 40. The age composition of the respondents was consistent with that of the broader Zambian citizenry. Past research reports that more than half of the Zambian population is below the age of 40 (De Wulf, 2015). Results of this study also showed that majority of the domestic tourists were visiting Livingstone for holiday purposes. This finding suggested that Livingstone, the tourist capital of Zambia, served a preferable holiday destination for the majority domestic tourists that visited the Victoria Falls World Heritage site.

Understanding predictors of domestic tourists' loyalty to the Victoria Falls World Heritage site

The transactional path

To examine predictors of destination loyalty from a transactional perspective, this study examined the influence of service quality, perceived value and satisfaction on domestic tourists loyalty to the Victoria Falls World Heritage site. The study posited that service quality and perceived value had indirect effects on destination loyalty mediated by satisfaction. Satisfaction was posited to have a direct effect on destination loyalty. Figure 6.1 presents the transactional path examined in this study.

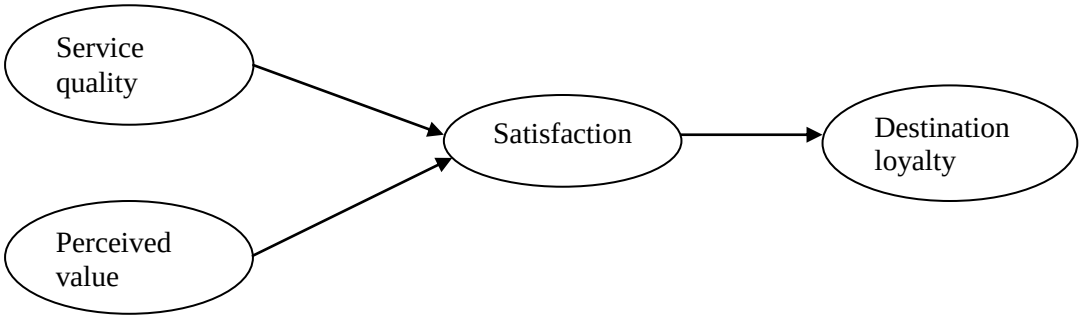

Figure 6.1: Transactional paths used to examine destination loyalty

Results of this study showed that all the transactional predictors of destination loyalty shown in Figure 6.1 had significant influences on domestic tourists' loyalty to the Victoria Falls World Heritage site. Particularly, the results showed that domestic tourists' perceptions of service quality at the site and the perceive value of their visit to the site had indirect effects on loyalty to the site through satisfaction. Consistent with the Cognitive-Affective-Conative Loyalty theory that guided this study, these results

indicated that domestic tourists moved from making cognitive evaluations about their visit to the site to favorable feelings about their visit to the site. Consequently, this led to increased intention to return the Victoria Falls World Heritage site repeatedly. Besides perceived value and service quality, satisfaction was also found to have a significant effect on destination loyalty.

Consistent with past destination loyalty studies albeit in different settings (Chi & Qu, 2008; Deng & Pierskalla, 2011; Jamaludin et al., 2012; Kim, 2010; Lee at l., 2007; Prayag & Ryan, 2012; Yoon & Uysal, 2005; Yuksel et al., 2010; Zhang et al., 2014), results of this study provided empirical support for the importance of transactional predictors of destination loyalty. Particularly, the study showed that perceptions of service quality at the site, perceived value of the visit to the site and satisfaction with the visit to the site are important determinants of destination loyalty. Thus, to promote loyalty relationships, results of this study suggest the importance of addressing transactional predictors of destination loyalty. This is consistent with previous studies that note that some consumers develop loyalty from a transactional orientation (Garbarino & Johnson, 1999). Thus, the importance of transactional predictors of destination loyalty remains high.

The relational path

This study also investigated whether place attachment a concept widely used in the natural resource management field could be applicable to examining destination loyalty from a relational perspective. To do this, the study examined the influence of place attachment on domestic tourists loyalty to the Victoria Falls World Heritage site. A

relational path was suggested that posited that place attachment had a direct effect on destination loyalty. Figure 6.2 graphically presents this relational path.

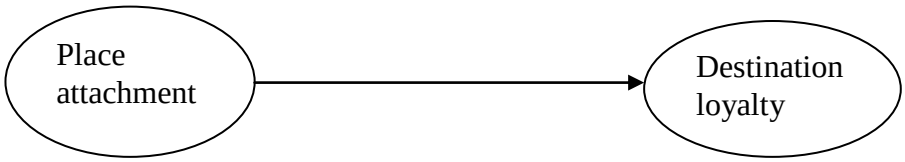

Figure 6.2: Relational path used to examine destination loyalty

Results of this study showed that place attachment had a significant influence on domestic tourists' loyalty to the Victoria Falls World Heritage site. This finding indicated that attachment to the site was an important predictor of destination loyalty. Past research reports that some consumers develop loyal relationships from a relational orientation (Garbarino & Johnson, 1999). Therefore, results of this study highlighted the importance examining destination loyalty from a relational perspective. This study demonstrates the utility of place attachment for understanding tourists' revisit choice decisions. Particularly, the study showed that domestic tourists' emotional and functional attachment to the setting were important predictors of their loyalty to the site.

An improved model of destination loyalty

To extend our theoretical understanding of destination loyalty, this study examined predictors of domestic tourists' loyalty to the Victoria Falls World Heritage site from both relational and transactional perspective. To do this, this study proposed and tested a conceptual framework which included relational and transactional predictors of destination loyalty. The relational predictor was place attachment while service quality, perceived value and satisfaction constituted the transactional predictors. Through the

proposed conceptual framework, it was posited that perceived value and service quality had indirect effects on destination loyalty mediated by place attachment and satisfaction. Satisfaction was posited to have a direct and indirect effect on destination loyalty mediated by place attachment. Place attachment was posited to have a direct effect on destination loyalty. Through these paths (relationships), this study examined the predictors of destination loyalty from both a relational and transactional perspective. The direct path from place attachment to destination loyalty constituted the relational approach to examining destination loyalty. The transactional approach included the direct path from satisfaction to destination loyalty, as well as, the indirect paths from perceived value and service quality to destination loyalty mediated by satisfaction. The interplay among the relational and transactional predictors was investigated by examining the indirect paths from perceived value, service quality and satisfaction to destination loyalty mediated by place attachment. Figure 6.3 graphically represents the proposed improved model of destination loyalty.

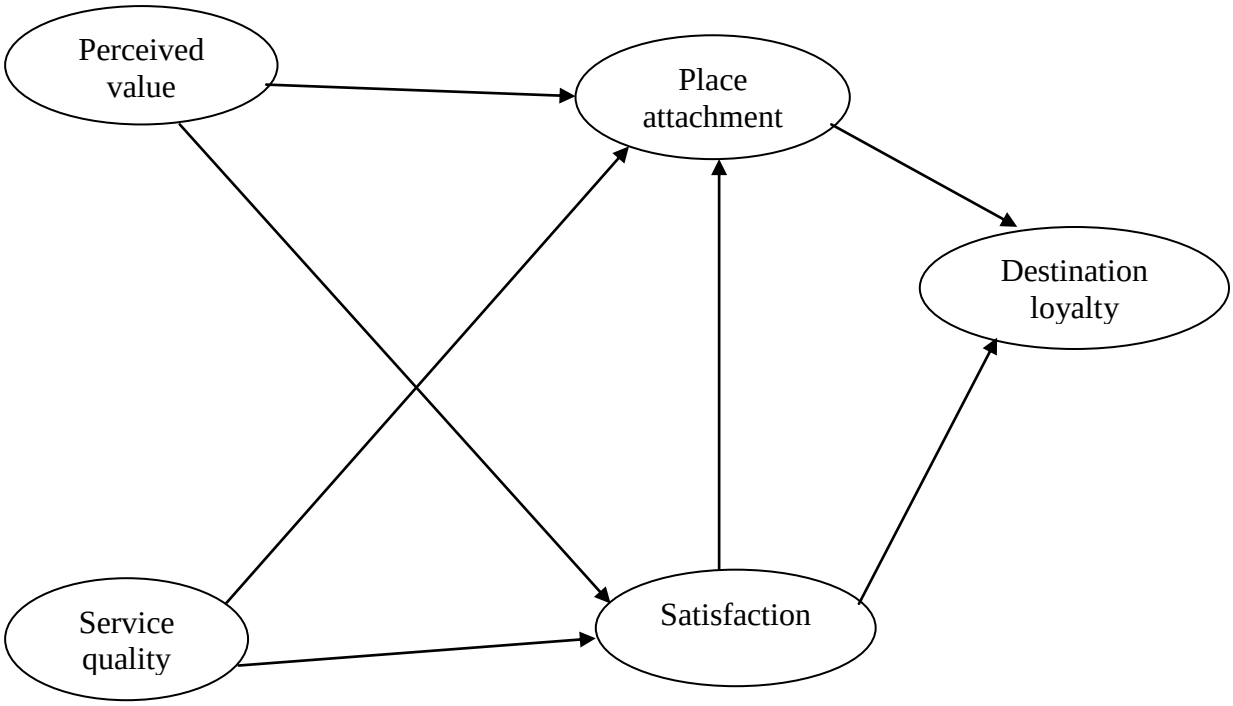

Figure 6.3: Improved model of destination loyalty

Theoretical implications

Results of this study showed that both transactional and relational predictors are important in fostering destination loyalty. Particularly, the findings indicated that to promote domestic tourists' loyalty to the Victoria Falls World Heritage site, it is valuable to address both transactional and relational antecedents. Specifically, domestic tourists' perceptions of service quality at the site, perceived value of their visit to the site, satisfaction with the visit to the site and their attachment to the site are important determinants of fostering this loyal relationship.

The relationships among predictors of destination loyalty as demonstrated in this study highlights the importance of understanding both transactional and relational variables in promoting destination loyalty. Thus, an emphasis on transactional predictors

which is evident in past destination loyalty studies (Deng & Pierskalla, 2011; Kim, 2010; Jamaludin et al., 2012; Lee at l., 2007; Prayag & Ryan, 2012; Yoon & Uysal, 2005; Yuksel et al., 2010) appears to limit the understanding of determinants of destination loyalty. Thus, by examining both the relational and transactional predictors in the improved model of destination loyalty, this study extended our theoretical understanding of destination loyalty. Particularly, it enhanced our understanding of factors that influence domestic tourists' transactional, as well as, relational-oriented loyalty to the setting. Given that consumers can take up a transactional or relational orientation to developing loyal relationships (Garbarino & Johnson, 1999), the finding of this study provided valuable tools for fostering both transactional and relational-oriented loyal relationships.

From a transactional perspective, results of this study showed that when domestic tourists to the Victoria Falls World Heritage site are provided with high service quality at the site and feel that the visit to the site is economically fair, they are more likely to be satisfied with their visit to the site. In turn the satisfied domestic tourists are more likely to return to the site, as well as recommend it to others. This finding is consistent with past research albeit in a different setting (Kim, 2010).

From a relational perspective, it can be noted that when domestic tourists are attached to the Victoria Falls World Heritage site, they are more likely to return to the site and recommend it to others. This finding suggested that place attachment was an important construct in understanding destination loyalty to the Victoria Falls World Heritage site. That is, domestic tourists' relational connections to the site influenced their loyalty to the site. These relational connections developed through both functional and

emotional bonds to the site. Thus, the results of this study reinforced assertions by past scholars that place attachment is a bond between people and places based on cognition and affect (Stedman, 2002). In this regard, the importance of the site in providing features and conditions that facilitate users' specific activities, as well as, the emotional / symbolic meaning assigned to the site are important determinants of domestic tourists' attachment to the site. Thus, this study provides empirical support for past studies that argued that the site attributes and emotional connections lead to feelings of belongingness (Poira et al., 2004).

To measure place attachment in this study, indicators used in past studies with different cultural settings were employed. The findings of this study suggested that measures of place attachment did transcend cultural differences of respondents. However, , while respondents rated measures of the emotional dimension of place attachment more highly than the measures of the functional dimension, two of the emotional measures i.e. "Vic. Falls[7] is special to me" and "Vic. Falls means a lot to me" had the lowest factor loadings. Additionally, these two measures had correlated error terms. This finding suggested the need to examine the extent to which the measures of place attachment did transcend cultural differences using other settings.

Results of the interplay among the relational and transactional predictors showed that when domestic tourists to the Victoria Falls World Heritage site are provided with high service quality at the site and are satisfied with their visit to the site, they are more likely to be attached to the site. In turn the attached domestic tourists are more likely to

[7] Vic. Falls refers to Victoria Falls World Heritage site

return to the site and recommend it to others. Given the role both the relational and the transactional variables played in the improved model of destination loyalty, it can be noted that addressing relational and transactional paths collectively is fundamental to promote destination loyalty. While both the transactional and the relational variables used in this study were fundamental predictors of destination loyalty, the findings of this study invites additional questions that can be used to extend our theoretical understanding of destination. For instance, can constructs such as activity involvement or destination image extend the improved destination loyalty model proposed in this study to enhance our theoretical understanding of destination loyalty? If so, would they most enhance the transactional, relational or combined ways of developing relationships to destinations? Such inquires call for further research to examine the extent to such constructs can extend our understanding of relational and transactional predictors of destination loyalty.

Managerial implications

This study revealed that important predictors of destination loyalty included perceptions of service quality at the site, perceived value of the visit to the site, satisfaction with the visit to the site and attachment to the site. That is, when domestic tourists are provided with high service quality at the site and feel that the visit is economically fair, they are more likely to be satisfied with their visit and in turn more likely to return to site repeatedly. Thus, to promote destination loyalty, practitioners and policy makers could benefit from devising mechanisms that enhance the service quality at the site and the value of the visit to the site. For instance, in order to enhance service quality at the site, the practitioners can improve the conditions of the trails, the road, and the cleanliness of recreation areas and restrooms. Additionally, practitioners can provide

adequate maps so as to ease the accessibility of various recreation areas around the site. Ensuring that the site has adequate areas to sit and rest during the visit to the site can also enhance the quality of facilities provided at the site. To enhance the perceived value of the visit to the site, the practitioners and policy makers can devise entry fees to the site that are economically fair. Doing this has potential to enhance the visits' value for money. Setting entry fees that are economically fair is particularly important given that for some consumers, value means low price (Zeithaml, 1988).

Place attachment to the Victoria Falls World Heritage site influenced domestic tourists' loyalty to the site. It was measured by indicators that reflected place dependence and place identity. Place dependence has a functional meaning associated with the opportunities a setting affords for fulfillment of specific activity needs in comparison to other similar or competitive places (Williams et al., 1992). Specific functions and conditions of the place are necessary for the fulfillment of the specific activity needs (Williams & Vaske, 2003). These functions or conditions are embedded in the physical characteristics of the place (Williams & Vakse, 2003). In the case of the Victoria Falls World Heritage site, these physical aspects include the trails, the various view points and the resting areas at the upstream among others. To enhance domestic tourists' functional attachment to the site, the practitioners can strive to provide the opportunity to fulfill visitors' activity goals. This can be done by providing facilities necessary for promoting visitors' activities at the site. For example, provision of 'safe to walk on' trails can meet the activity needs of visitors that like to hike at the site. Additionally, provisions of adequate and safe view points of the Victoria Falls can meet the activity needs of visitors that like to view the Falls from various points at the site.

Place identity another dimension of place attachment measured in this study has an emotional meaning and refers to the symbolic importance of a place as a repository for emotions and relationships that give meaning and purpose to life (Williams & Vaske, 2003). It is a component of self-identity that increases feelings of belongingness and results in developing emotional attachment to a specific place (Williams et al., 1992). To encourage the development of domestic tourists' emotional attachment to the Victoria Falls World Heritage site, practitioners can strive to create an environment where domestic tourists feel very welcome at the site. This can be done by providing services in printed or oral form that informs the tourists of how welcome they are each time they visit the site. Creating a welcoming and friendly environment at the site can be fundamental in that the manner in which domestic tourists are welcomed at the site has potential to activate a sense of belongingness. Ultimately, this is critical for the formation of emotional attachment and promotion of long-term relationships to the site.

Practitioners can also foster domestic tourists' emotional attachment to the site by devising avenues through which constant interpersonal with the tourists that visit the site is maintained. This can be done through emails or social media such as Facebook, Twitter among others. For instance, information about the certain events at the site and any promotional offers that the site may have at such period of the year can be conveyed to the domestic tourists through these communication avenue. By striving to keep constant interpersonal communication with the domestic tourists, practitioners can foster the tourist' relational connection to the site. This is in turn can promote long-term relationships between the domestic tourists and the site.

Practitioners can also strive to promote domestic tourists' ability to identity with the site. This can done by developing programs/activities/events in which domestic tourists are involved. For instance, the practitioners can plan events during certain periods of the year in which the tourists can actively participate in. Such events can include for example cleaning tasks at the site or educational awareness about the resources the site is endowed with. Engaging the domestic tourists in such activities/events can cause them to identify with the site and ultimately develop long-term relationships to the site.

Another avenue for activating domestic tourists' emotional attachment to the site is an emphasis on the how special the Victoria Falls World Heritage site is. Communicating how special or unique the site is can be done through marketing messages or written and oral messages at the site. For instance, written messages at the site can take the form of "welcome home and enjoy the thrill of a visit to our very own Victoria Falls World Heritage site." An emphasis of how special the site is can activate emotional attachment to the site and ultimately repeat visits to the site which are critical for promoting long-tem relationships.

Limitations and Recommendations For Future Research

As is typical in any research project, the current study was not short of limitations. First, while place attachment as a measure of relational connection between the domestic tourists and the Victoria Falls World Heritage site was an important predictor of domestic tourists' loyalty to the site, the study did not investigate the processes that led to these relational connections. Thus, an understanding of these processes still remains unclear. Further research can extend on this study by investigating the underlying processes that

lead to the relation connection. Particularly, a qualitative study using interviews can help uncover this processes. An understanding of these processes can be useful in view of devising mechanisms that can harness domestic tourists' attachment to the natural setting.

Second, to measure place attachment in this study, indicators used in past studies with different cultural settings were employed. The findings of this study suggested that measures of place attachment did transcend cultural differences of respondents. However, a critical look at other results including descriptive statistics, factors loadings and error terms of the measures suggested the need to examine the extent to which these measures did transcend cultural differences. For instance, while the emotional measures were rated highly relative to the functional measures, two emotional measures, i.e. Vic. Falls is special to me" and "Vic. Falls means a lot to me "had the lowest factor loadings. These two measures also had correlated error terms. Thus, the findings of this study suggest further research that can examine the extent to measures of place attachment transcend cultural differences.

Third, while this study revealed the importance of both relational and transactional predictors of destination loyalty, other factors such as activity involvement or destination image discussed in past research can have potential to extend our theoretical understanding of destination loyalty. Therefore, future research can extend the improved model proposed in this model by including and thereby examining the influence of such constructs.

Fourth, data for this study were obtained from domestic tourists at the Victoria Falls Heritage site. However, since the relationships reported in this study were

associated more with the domestic tourists than with the place, future research can build on this study by employing the model used in this study on other natural settings in Zambia and beyond. Additionally, the model can also be used on other kinds of consumers. Doing this can help to provide an understanding of the ways these consumers relate to other natural settings in the country.

Fifth, the characteristics of domestic tourists who visited the Victoria Falls World Heritage showed that they did develop loyal relationships to site. Past research shows that loyal visitors to natural setting tend to support behaviors that foster sustainability. Thus, to gain an understanding of the relationship between loyalty to a natural setting and sustainable behaviors, future research can examine the relationship between the two factors. Such an investigation can be valuable in an effort to identify and devise mechanisms that promote sustainable behaviors.

Sixth, in order to examine loyal relationships between domestic tourists and the Victoria Falls World Heritage, this study used cross sectional data. Thus, it was impossible to analyze the potential time-lag effects on the relationships established. Further research can build on this study by using longitudinal data to examine the relationships explored in the current study. Undertaking a longitudinal study can extend our understanding of factors that influence relational, as well as, transactional-oriented loyalty to the site.

Conclusions

To foster loyal relationships, both transactional and relational antecedents of destination loyalty are fundamental determinants. However, it is worth noting that

transactional antecedents' influence on the formation of these loyal relationships is mediated by the relational variable. Particularly, place attachment, a measure of the relational connection between visitors and the natural setting is critical in mediating satisfaction and perceptions of service quality's influence on the formation of the loyal relationships. Notwithstanding the revealed interplay among the transactional and the relational variables, this study has shown that both transactional and relational variables are significant determinants of fostering loyal relationships between domestic tourists and the nature-based tourist setting (i.e. Victoria Falls World Heritage site).

To promote domestic tourists' loyalty to the Victoria Falls World Heritage site, enhancing both transactional and relational variables collectively can be highly valuable. Particularly, devising mechanisms that enhance domestic tourists' perceptions of service quality at the site, the perceived value of the visit to the site, satisfaction with the visit to the site and attachment to the site is fundamental. That is, when domestic tourists receive high service quality at the site and feel the visit to the site is economically fairly, they are more likely to be satisfied with their visit to the site. Additionally, when the domestic tourists are both satisfied and attached to the site, they more likely to return to the site and recommend the site to others. Overall, given that consumers can take up a transactional or relational orientation to developing loyal relationships, this study provides promise for identifying and devising mechanisms that can foster both transactional and relational-oriented loyal relationships.

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Appendices

Appendix 1: Survey instrument

Victoria Falls World Heritage site domestic visitors' survey

Name of interviewer.....Date of interview.....

Do you reside in Livingstone?

No ❑ Yes ❑ (skip to **question 5)**

I. The following questions are about your trip to Livingstone

1. From which town did your current trip to Livingstone commence?_____

2. What mode of transportation did you use for this current trip?

❑Bus ❑ Plane ❑ Vehicle ❑Taxi ❑Train ❑Other, please specify_____

3. How long will you spend in Livingstone on this current trip?

❑less than ½ day ❑full day ❑1 night ❑2 nights ❑3 nights ❑4 nights ❑5 nights

❑6 nights ❑7 nights ❑more than 7 nights

4. What is the PRIMARY purpose of this current trip? (Select only one)

❑Holiday/pleasure ❑Business/professional work ❑Visiting family and friends ❑Shopping

❑Other, please specify_____

II. The following questions are about your visit to Victoria Falls World Heritage site

5. Is this your first visit to Victoria Falls World Heritage site?

❑No ❑Yes (Skip to **question 7**)

6. a) How many times have you visited Victoria Falls World Heritage site including this current trip?

❑2-4 times ❑5-7 times ❑8-10 times ❑More than 10 times

b) For how long have you been visiting Victoria Falls World Heritage site?

❑Less than 1 year ❑1-3 years ❑4-6 years ❑7-10 years ❑More than 10 years

7. Which of the following best describes the composition of your travel group?

❑Alone ❑Family ❑Friends ❑Family and Friends

❑Other, please specify_____

III. Next are questions about your perceptions and impressions regarding this visit to Victoria Falls World Heritage site

8. Please circle the number that best represents your agreement with the statements below:

	Strongly Disagree	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
1. Visiting Victoria Falls World Heritage site was reasonably priced	1	2	3	4	5
2. Compared to travel expenses, I got reasonable quality from visiting Victoria Falls World Heritage site	1	2	3	4	5
3. Compared to other tourism destinations, Victoria Falls World Heritage site is a good value for the money	1	2	3	4	5
4. While visiting Victoria Falls World Heritage site, I received good service	1	2	3	4	5
5. Visiting Victoria Falls World Heritage site gave me pleasure	1	2	3	4	5
6. Visiting Victoria Falls World Heritage site made me feel better	1	2	3	4	5

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
7. After visiting Victoria Falls World Heritage site, my image of Victoria Falls World Heritage site was improved	1	2	3	4	5
8. The choice to visit Victoria Falls World Heritage site was the right decision	1	2	3	4	5
9. I obtained good results from visiting Victoria Falls World Heritage site	1	2	3	4	5
10. Overall, visiting Victoria Falls World Heritage site was valuable	1	2	3	4	5
11. Overall, visiting Victoria Falls World Heritage site was worth it	1	2	3	4	5
12. The value of visiting Victoria Falls World Heritage site was more than what I expected	1	2	3	4	5

9. Please circle the number that best represents your rating of services and facilities for Victoria Falls World Heritage site.

Please rate the following	Very poor	Poor	Fair	Good	Very Good
1. Availability of parking spaces	1	2	3	4	5
2. Availability of site maps	1	2	3	4	5
3. Cleanliness of toilets	1	2	3	4	5
4. Cleanliness of recreation areas	1	2	3	4	5
5. State of trails around the site	1	2	3	4	5
6. State of the road on the site	1	2	3	4	5
7. Availability of rain coats/umbrellas	1	2	3	4	5

Please rate the following	Very poor	Poor	Fair	Good	Very Good
8. Availability of interpretation services	1	2	3	4	5
9. Availability of favorable restaurants	1	2	3	4	5
10. Availability of places to sit and rest	1	2	3	4	5

10. Please circle the number that best represents your level of agreement with each statement below

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. Visiting Victoria Falls World Heritage site is more important to me than visiting any other place	1	2	3	4	5
2. I get more satisfaction out of visiting Victoria Falls World Heritage site than any other place	1	2	3	4	5
3. I wouldn't substitute any other area for the type of experience I get at Victoria Falls World Heritage site	1	2	3	4	5
4. I enjoy visiting Victoria Falls World Heritage site than any other place	1	2	3	4	5
5. I am very attached to Victoria Falls World Heritage site	1	2	3	4	5
6. I identify strongly with Victoria Falls World Heritage site	1	2	3	4	5

	Strongly Disagree	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
7. Victoria Falls World Heritage site means a lot to me	1	2	3	4	5
8. Victoria Falls World Heritage site is special to me	1	2	3	4	5
9. I intend to revisit Victoria Falls World Heritage site again	1	2	3	4	5
10. I intend to revisit Victoria Falls World Heritage site with other visitors who have never visited the site before	1	2	3	4	5
11. My next recreation trip will most likely be to Victoria Falls World Heritage site	1	2	3	4	5
12. I intend to say positive things about Victoria Falls World Heritage site	1	2	3	4	5
13. I intend to recommend Victoria Falls World Heritage site to others	1	2	3	4	5
14. I intend to share my positive experiences at Victoria Falls World Heritage site with others	1	2	3	4	5

11. Please circle the number that best represents your level of agreement with each statement below:

	Strongly Disagree	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
1. Overall, I am satisfied with my experience at Victoria Falls World Heritage site	1	2	3	4	5
2. As a whole, I really enjoyed my visit to Victoria Falls World Heritage site	1	2	3	4	5
3. Overall, I am happy about my experience at Victoria Falls World Heritage site	1	2	3	4	5

12. In daily living how likely are you to regularly do the following:

Please circle your response	**Not at all likely**	**Unlikely**	**Neither likely nor unlikely**	**Likely**	**Very likely**
1. Conserve water	1	2	3	4	5
2. Conserve energy	1	2	3	4	5
3. Purchase environmentally friendly products	1	2	3	4	5
4. Recycle	1	2	3	4	5

13. When you travel how likely are you to seek out the following :

Please circle your response	**Not at all likely**	**Unlikely**	**Neither likely nor unlikely**	**Likely**	**Very likely**
1. Locally owned accommodation	1	2	3	4	5
2. Locally grown food	1	2	3	4	5
3. Locally made crafts and arts	1	2	3	4	5

IV. The following questions are about yourself

14. What is your gender?

❑Male ❑Female

15. What is your age? _____years

16. Which of the following best describes your annual household income?

❑Under Kr60,000 ❑Kr60,000-179,999 ❑Kr180,000-419,999 ❑ Kr420,000 and above

17. Which of the following best describes your highest level of education?

❑ Less than Primary school ❑ Primary school ❑ Secondary school
❑College/university diploma ❑Bachelor's degree ❑Master's degree
❑Doctorate

V. Please answer the following questions if you DO NOT reside in Livingstone.

18. How many people are in your travel group on this current trip to Livingstone?

_____

19. Approximately how much have you (including all persons in your travel group) planned to spend on;

Accommodation (per day) Kr_____ Food (per day) Kr _____

Tourism activities (Total) Kr _____ Shopping (Total) Kr _____

20. When you travel to Livingstone, how important are the following aspects.
(Please circle the number that best represents your agreement with the statements.)

	Not at all important	Unimportant	Neither unimportant nor important	Important	Very important
1. Excellent service in a restaurant	1	2	3	4	5
2. Reasonably priced food	1	2	3	4	5
3. Reasonably priced accommodation	1	2	3	4	5
4. Excellent service in a lodging facility	1	2	3	4	5

For official use only: Survey ID_____

THANK YOU!

Appendix 2: Victoria Falls World Heritage site domestic visitors data sheet

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Name of interviewer.....
Date......

Livingstone Resident

Non-Livingstone Resident

Upfront refusal to survey

Appendix 3: Outliers, Missing value, Multivariate normality tests results

Appendix 3.1: Results of Multivariate outlier detection

```
. bacon pv1 pv2 pv3 pv4 pv5 pv6 pv7 pv8 pv9 pv10 pv11 pv12 sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10 pa1 pa2 pa3 pa4 pa5 pa6 pa7 pa8 dl1
>  dl2 dl3 dl4 dl5 dl6 sat1 sat2 sat3 env1 env2 env3 env4 localwellbeing1 localwellbeing2 localwellbeing3, generate (out dist) replace
> percentile(0.5) version (1) c(4)

Total number of observations:       1024
   BACON outliers (p = 0.50):          0
      Non-outliers remaining:       1024
```

Appendix 3.2:Results of Summary statistics of missing data for model constructs

Variable	No. of cases	Mean	S.D	Missing Data	
				No.	Percent (%)
Perceived value					
pv1	1054	3.92	1.08	6	0.57
pv2	1060	3.95	0.92	0	0.00
pv3	1060	4.17	0.82	0	0.00
pv4	1060	3.86	1.01	0	0.00
pv5	1057	4.32	0.89	3	0.28
pv6	1060	4.35	0.80	0	0.00
pv7	1060	4.03	0.99	0	0.00
pv8	1060	4.36	0.77	0	0.00
pv9	1060	4.16	0.83	0	0.00
pv10	1060	4.26	0.77	0	0.00
pv11	1059	4.25	0.85	1	0.09
pv12	1060	4.01	0.99	0	0.00
Service quality					
sq1	1059	3.71	0.97	1	0.09
sq2	1060	3.95	0.90	0	0.00
sq3	1058	3.89	0.87	2	0.19
sq4	1060	3.85	0.91	0	0.00
sq5	1060	3.90	0.88	0	0.00
sq6	1059	3.93	0.90	1	0.09
sq7	1059	3.31	1.07	1	0.09
sq8	1060	3.08	1.06	0	0.00
sq9	1060	3.23	1.01	0	0.00

Variable	No. of cases	Mean	S.D	Missing Data	
				No.	Percent (%)
sq10	1059	3.78	1.13	1	0.09
Place attachment					
pa1	1058	3.93	1.09	2	0.19
pa2	1060	3.92	1.04	0	0.00
pa3	1060	3.86	1.07	0	0.00
pa4	1059	3.88	1.07	1	0.09
pa5	1060	4.09	1.03	0	0.00
pa6	1059	4.19	0.99	1	0.09
pa7	1056	4.33	0.88	4	0.38
pa8	1056	4.36	0.83	4	0.38
Destination loyalty					
dl1	1058	4.57	0.65	2	0.19
dl2	1056	4.46	0.71	4	0.38
dl3	1056	4.12	0.94	4	0.38
dl4	1059	4.44	0.73	1	0.09
dl5	1057	4.52	0.66	3	0.28
dl6	1060	4.52	0.65	0	0.00
Satisfaction					
sat1	1057	4.35	0.77	3	0.28
sat2	1058	4.42	0.67	2	0.19
sat3	1059	4.46	0.67	1	0.09

Appendix 3.3: Results of Summary of cases with missing data

No. of Missing Data per Case	No. of Cases	Percent of sample (%)
0	1, 039	98.019
1	9	0.008
2	4	0.004
3	3	0.003
4	4	0.004
6	1	0.000
Total	1, 060	100

Appendix 3.4: Results of Univariate Normality Tests

```
. swilk pv1 pv2 pv3 pv4 pv5 pv6 pv7 pv8 pv9 pv10 pv11 pv12 sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10 pa1 pa2 pa3 pa4 pa6 pa7 pa8 dl1 dl2
>  dl3 dl4 dl5 dl6 sat1 sat2 sat3 env1 env2 env3 env4 localwellbeing1 localwellbeing2 localwellbeing3

                    Shapiro-Wilk W test for normal data

    Variable |   Obs        W           V         z       Prob>z
-------------+--------------------------------------------------
         pv1 |  1054    0.93668     41.898     9.270     0.00000
         pv2 |  1060    0.94914     33.828     8.741     0.00000
         pv3 |  1060    0.95487     30.016     8.444     0.00000
         pv4 |  1060    0.95911     27.194     8.199     0.00000
         pv5 |  1057    0.93103     45.750     9.489     0.00000
         pv6 |  1060    0.93570     42.765     9.323     0.00000
         pv7 |  1060    0.97000     19.954     7.430     0.00000
         pv8 |  1060    0.93073     46.068     9.507     0.00000
         pv9 |  1060    0.96205     25.241     8.014     0.00000
        pv10 |  1060    0.95220     31.793     8.587     0.00000
        pv11 |  1059    0.93523     43.041     9.338     0.00000
        pv12 |  1060    0.96839     21.020     7.560     0.00000
         sq1 |  1059    0.98797      7.996     5.160     0.00000
         sq2 |  1060    0.98134     12.411     6.252     0.00000
         sq3 |  1058    0.98763      8.213     5.227     0.00000
         sq4 |  1060    0.98461     10.232     5.773     0.00000
         sq5 |  1060    0.98287     11.395     6.040     0.00000
         sq6 |  1059    0.97950     13.623     6.483     0.00000
         sq7 |  1059    0.99803      1.309     0.668     0.25200
         sq8 |  1060    0.99951      0.325    -2.791     0.99738
         sq9 |  1060    0.99829      1.140     0.325     0.37245
        sq10 |  1059    0.98393     10.677     5.878     0.00000
         pa1 |  1058    0.99079      6.117     4.495     0.00000
         pa2 |  1060    0.99126      5.816     4.370     0.00001
         pa3 |  1060    0.99276      4.812     3.900     0.00005
         pa4 |  1059    0.99231      5.108     4.048     0.00003
         pa6 |  1059    0.97129     19.078     7.319     0.00000
         pa7 |  1056    0.94919     33.675     8.728     0.00000
         pa8 |  1056    0.95577     29.318     8.384     0.00000
         dl1 |  1058    0.92166     52.013     9.808     0.00000
         dl2 |  1056    0.91977     53.175     9.862     0.00000
         dl3 |  1056    0.98055     12.892     6.345     0.00000
         dl4 |  1059    0.94932     33.674     8.729     0.00000
         dl5 |  1057    0.93971     39.997     9.156     0.00000
         dl6 |  1060    0.93400     43.893     9.387     0.00000
        sat1 |  1057    0.92894     47.141     9.564     0.00000
        sat2 |  1058    0.93966     40.059     9.160     0.00000
        sat3 |  1059    0.93758     41.481     9.247     0.00000
        env1 |  1058    0.93065     46.043     9.505     0.00000
        env2 |  1060    0.96211     25.200     8.010     0.00000
        env3 |  1060    0.98193     12.019     6.172     0.00000
        env4 |  1057    0.99360      4.247     3.590     0.00017
localwellb~1 |  1057    0.93976     39.960     9.153     0.00000
localwellb~2 |  1060    0.94830     34.386     8.781     0.00000
localwellb~3 |  1056    0.95930     26.974     8.178     0.00000

.
```

Appendix 3.5: Results of Multivariate Normality Test

```
. mvtest normal pv1 pv2 pv3 pv4 pv5 pv6 pv7 pv8 pv9 pv10 pv11 pv12 sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10 pa1 pa2 pa3 pa4 pa5 pa6 pa7
>  pa8 dl1 dl2 dl3 dl4 dl5 sat1 sat2 sat3 env1 env2 env3 env4 localwellbeing1 localwellbeing2 localwellbeing3

Test for multivariate normality

    Doornik-Hansen                chi2(90) = 8111.765   Prob>chi2 =  0.0000
```

APPENDIX 4: Reliability tests for the main survey

Appendix 4.1:Results of Reliability For Perceived Value

Test scale = mean(standardized items)

Item	Obs	Sign	item-test corr.	item-rest corr.	interitem corr.	alpha	Label
pv1	1054	+	0.5097	0.4024	0.3632	0.8625	perceived value item 1
pv2	1060	+	0.5923	0.4963	0.3520	0.8566	perceived value item 2
pv3	1060	+	0.5867	0.4898	0.3527	0.8570	perceived value item 3
pv4	1060	+	0.5708	0.4715	0.3549	0.8582	perceived value item 4
pv5	1057	+	0.6990	0.6214	0.3373	0.8484	perceived value item 5
pv6	1060	+	0.7057	0.6294	0.3363	0.8479	perceived value item 6
pv7	1060	+	0.6378	0.5491	0.3457	0.8532	perceived value item 7
pv8	1060	+	0.6993	0.6218	0.3372	0.8484	perceived value item 8
pv9	1060	+	0.6949	0.6166	0.3378	0.8487	perceived value item 9
pv10	1060	+	0.6458	0.5585	0.3446	0.8526	perceived value item 10
pv11	1059	+	0.6683	0.5851	0.3414	0.8508	perceived value item 11
pv12	1060	+	0.5861	0.4891	0.3528	0.8571	perceived value item 12
Test scale					0.3463	0.8641	mean(standardized items)

Appendix 4.2: Results of Reliability for Service Quality

```
. alpha sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10, item label asis std

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test corr.	item-rest corr.	interitem corr.	alpha	Label
sq1	1059	+	0.5927	0.4693	0.3022	0.7958	service quality item 1
sq2	1060	+	0.6077	0.4872	0.2997	0.7939	service quality item 2
sq3	1058	+	0.5956	0.4729	0.3017	0.7954	service quality item 3
sq4	1060	+	0.6503	0.5386	0.2924	0.7881	service quality item 4
sq5	1060	+	0.6246	0.5075	0.2968	0.7916	service quality item 5
sq6	1059	+	0.6034	0.4821	0.3004	0.7944	service quality item 6
sq7	1059	+	0.5758	0.4493	0.3051	0.7980	service quality item 7
sq8	1060	+	0.6215	0.5038	0.2974	0.7921	service quality item 8
sq9	1060	+	0.5931	0.4699	0.3021	0.7958	service quality item 9
sq10	1059	+	0.6151	0.4961	0.2984	0.7929	service quality item 10
Test scale					0.2996	0.8105	mean(standardized items)

Appendix 4.3: Results of Reliability for Satisfaction

```
. alpha sat1 sat2 sat3, item label asis std

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test corr.	item-rest corr.	interitem corr.	alpha	Label
sat1	1057	+	0.8450	0.6481	0.6266	0.7705	satisfaction item 1
sat2	1058	+	0.8782	0.7148	0.5411	0.7022	satisfaction item 2
sat3	1059	+	0.8445	0.6472	0.6280	0.7715	satisfaction item 3
Test scale					0.5986	0.8173	mean(standardized items)

Appendix 4.4: Results of Reliability for Place Attachment

```
. alpha pa1 pa2 pa3 pa4 pa5 pa6 pa7 pa8, item label asis std

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test corr.	item-rest corr.	interitem corr.	alpha	Label
pa1	1058	+	0.7129	0.6044	0.3982	0.8225	place attachment item 1
pa2	1060	+	0.7407	0.6398	0.3909	0.8180	place attachment item 2
pa3	1060	+	0.7126	0.6038	0.3984	0.8226	place attachment item 3
pa4	1059	+	0.7379	0.6365	0.3916	0.8184	place attachment item 4
pa5	1060	+	0.6819	0.5650	0.4064	0.8274	place attachment item 5
pa6	1059	+	0.6974	0.5844	0.4023	0.8249	place attachment item 6
pa7	1056	+	0.6573	0.5343	0.4129	0.8311	place attachment item 7
pa8	1056	+	0.5918	0.4543	0.4301	0.8409	place attachment item 8
Test scale					0.4039	0.8442	mean(standardized items)

Appendix 4.5: Results of Reliability for Destination Loyalty

```
. alpha dl1 dl2 dl3 dl4 dl5 dl6, item label asis std

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test corr.	item-rest corr.	interitem corr.	alpha	Label
dl1	1058	+	0.6691	0.4974	0.3716	0.7473	destination loyalty item 1
dl2	1056	+	0.7280	0.5773	0.3471	0.7267	destination loyalty item 2
dl3	1056	+	0.5410	0.3339	0.4242	0.7865	destination loyalty item 3
dl4	1059	+	0.7066	0.5475	0.3560	0.7343	destination loyalty item 4
dl5	1057	+	0.7260	0.5746	0.3482	0.7276	destination loyalty item 5
dl6	1060	+	0.7450	0.6010	0.3402	0.7205	destination loyalty item 6
Test scale					0.3646	0.7749	mean(standardized items)

Appendix 5: Confirmatory Factor Analysis (CFA) Results for model constructs

Appendix 5.1 CFA Results For Perceived Value

Goodness of Fit Indices for Perceived Value

Chi-square (χ^2)	276.38 (df = 51, ρ <0.001)
RMSEA	0.07
SRMR	0.04
CFI	0.94
TLI	0.92
N	1050

Results of Statistical Significance Tests Of Indicators Loadings

Indicators loadings and Z- values for Perceived Value

Construct dimensions & indicators	**Std loadings**	**z-statistic**
Functional value		
Visiting Vic Falls was reasonably priced	0.56	20.23
Compared to travel expenses I got reasonable quality from visiting Vic Falls	0.67	27.20
Compared to other destinations Vic. Falls is a good a good value for money	0.64	25.86
I received good service while visiting Vic. Falls	0.55	19.96
Emotional Value		
Visiting Vic. Falls gave me pleasure	0.73	39.12

Visiting Vic. Falls made me feel better	0.76	42.43
After visiting Vic. Falls my image of Vic. Falls was improved	0.62	27.38
Overall value		
The choice to visit Vic. Falls was the right decision	0.74	41.65
I obtained good results from visiting Vic. Falls	0.71	37.70
Overall visiting Vic. Falls was valuable	0.65	31.03
Overall visiting Vic. Falls was worth it	0.66	31.30
The value of visiting Vic. Falls was more than what I expected	0.54	21.75

Composite reliability and Average Variance Extracted Assessment results

CR and AVE value for Perceived Value subscales

Subscale (Dimension)	**CR***	**AVE**
Emotional Value	0.8	0.6
Overall Value	0.8	0.5
Functional Value	0.7	0.5

Results of Discriminant Validity Assessment

Correlation Matrix for Perceived Value Dimensions

	Functional Value	Emotional Value	Overall Value
Functional Value	1.00		
Emotional Value	0.71	1.00	
Overall Value	0.65	0.83	1.00

Note: Values below the diagonal are correlation estimates among constructs and the diagonal elements are construct variances

Appendix 5.2: CFA Results For Service Quality

Goodness of Fit Indices for Service Quality

Chi-square (χ^2)	265.62 (df = 32, ρ <0.001)
RMSEA	0.08
SRMR	0.04
CFI	0.91
N	1055

Results of Statistical Significance Tests Of Indicators Loadings

Indicators loadings and Z- values for Service Quality

Construct dimensions & indicators	Std loadings	z-statistic
Accessibility		
Availability of parking spaces	0.57	18.89
Availability of site maps	0.60	19.86
Conditions of facilities		
Cleanliness of toilets	0.59	22.85
Cleanliness of recreation areas	0.71	32.48
State of trails around the site	0.66	27.69
State of the road on the site	0.59	22.86
Amenities		
Availability of raincoats/umbrellas	0.56	20.19
Availability of interpretation services	0.68	27.54
Availability of restaurants	0.66	26.57
Availability of places to sit and rest	0.60	21.92

Composite reliability and Average Variance Extracted Assessment results

CR and AVE value for Service Quality subscales

Subscale	CR	AVE
Amenities	0.7	0.5
Conditions of Facilities	0.7	0.5
Accessibility	0.5	0.5

Results of Discriminant Validity Assessment

Correlation Matrix for Service Quality Dimensions

	Amenities	**Accessibility**	**Conditions of Facilities**
Amenities	1.00		
Accessibility	0.72	1.00	
Conditions Of Facilities	0.59	0.81	1.00

Note: Values below the diagonal are correlation estimates among constructs and diagonal elements are construct variances

Appendix 5.3: CFA Results For Place Attachment

Goodness of Fit Indices for Place Attachment

Chi-square (χ^2)	115.47 (df = 18, ρ <0.001)
RMSEA	0.07
SRMR	0.04
CFI	0.97
TLI	0.96
N	1048

Results of Statistical Significance Tests Of Indicators Loadings

Indicators loadings and Z- Values for Place Attachment

Construct dimensions & indicators	Std loadings	z-statistic
Place dependence		
Visiting Vic. Falls is more important than visiting any other place	0.74	41.28
I get more satisfaction from visiting Vic. Falls than any other place	0.80	50.97
I would substitute any other area for the type of experience I get from visiting Vic. Falls	0.72	39.73
I enjoy visiting Vic. Falls than any other place	0.78	47.92
Place identity		
I am very attached to Vic Falls	0.81	46.31
I identify strongly with Vic. Falls	0.85	49.24
Vic Falls means a lot to me	0.45	16.03
Vic Falls is special to me	0.40	16.61

Composite reliability and Average Variance Extracted Assessment results

CR and AVE value for Place Attachment subscales

Subscale	CR	AVE
Place Dependence	0.8	0.7
Place Identity	0.7	0.5

Results of Discriminant Validity Assessment

Correlation Matrix for Place Attachment Dimensions

	Place Identity	Place Dependence
Place Identity	**1.00**	
Place Dependence	**0.60**	**1.00**

Note: Values below the diagonal are correlation estimates among constructs and diagonal elements are construct variances

Appendix 5.4 CFA Results For Satisfaction

Results of Statistical Significance Tests Of Indicators Loadings, CR AND AVE Estimates

Standardized indicator loadings, Z-statistics, CR and AVE values for Satisfaction

Construct/indicators	Std Loadings	Z-statistics	CR	AVE
Satisfaction			0.8	0.7
Overall satisfied with experience at Vic. Falls.	0.74	33.16		
As a whole really enjoyed my visit to Vic. Falls	0.85	48.80		
Overall happy with experience at Vic. Falls	0.73	37.95		

Appendix 5.5 CFA Results For Destination Loyalty

Goodness of Fit Indices for Destination Loyalty

Chi-square ($\chi 2$)	44.62 (df = 8, p <0.001)
RMSEA	0.07
SRMR	0.03
CFI	0.98
TLI	0.96
N	1046

Results of Statistical Significance Tests Of Indicators Loadings

Indicators loadings and Z- values for Destination loyalty

Construct dimensions & indicators	Std loadings	z-statistics
Revisit intentions		
I intend to revisit the Vic. Falls again	0.69	29.25
I intend to revisit the Vic. Falls with others who have never visited the site before	0.81	35.20
My next recreation trip will most likely be to Vic. Falls	0.34	10.92
Recommendation intends		
I intend to say positive things about Vic. Falls	0.66	28.91
I intend to recommend Vic Falls to others	0.71	32.76
I intend to share my positive experiences at Vic Falls with others	0.77	37.73

Composite reliability and Average Variance Extracted Assessment results

CR and AVE value for Destination Loyalty subscales

Subscale	CR	AVE
Recommendations	0.8	0.6
Revisit Intentions	0.8	0.5

Results of Discriminant Validity Assessment

Correlation matrix for Destination Loyalty Dimensions

	Revisit Intentions	Recommendations
Revisit Intentions	**1.00**	
Recommendations	**0.69**	**1.00**

Note: Values below the diagonal are correlation estimates among constructs and diagonal elements are construct variances

Appendix 6: Geographical distribution of respondents

Variable	Frequency	Percent (%)
Town (N = 1,060)		
Chadiza	1	0.09
Chavuma	1	0.09
Chingola	13	1.23
Chipata	10	0.94
Choma	51	4.81
Itezhi Tezhi	1	0.09
Kabwe	16	1.51
Kalomo	23	2.17
Kalulushi	3	0.28
Kaoma	1	0.09
Kapiri mposhi	1	0.09
Kasama	6	0.57
Kazungula	3	0.28
Kitwe	33	3.11
Livingstone	410	38.68
Luanshya	12	1.13
Lundazi	1	0.09
Lusaka	305	28.17
Maamba	2	0.19
Mansa	7	0.66
Masaiti	1	0.09
Mazabuka	19	1.79
Mbala	1	0.09
Mfuwe	3	0.23
Mkushi	3	0.23
Mongu	24	2.26
Monze	5	0.47
Mpika	2	0.19
Mpongwe	1	0.09
Mporokoso	1	0.09
Mpulungu	2	0.19
Mufulira	10	0.94
Mumbwa	3	0.23
Namwala	5	0.47
Ndola	43	4.06
Pemba	2	0.19
Petauka	1	0.09
Senanga	7	0.66
Serenje	3	0.28
Sesheke	2	0.19
Siavonga	7	0.66

Variable	Frequency	Percent (%)
Sinazongwe	4	0.38
Solwezi	1	0.09
Zimba	11	1.04

Appendix 7: Pretest reliability tests results

Appendix 7.1:Pretest Reliability Results For Perceived Value

```
. alpha pv1 pv2 pv3 pv4 pv5 pv6 pv7 pv8 pv9 pv10 pv11 pv12, std item asis

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
pv1	55	+	0.4769	0.3618	0.3247	0.8410
pv2	55	+	0.6161	0.5212	0.3060	0.8291
pv3	53	+	0.4122	0.2472	0.3418	0.8510
pv4	54	+	0.3047	0.1762	0.3457	0.8532
pv5	55	+	0.7692	0.7027	0.2864	0.8153
pv6	54	+	0.7161	0.6397	0.2942	0.8210
pv7	54	+	0.6134	0.5191	0.3074	0.8300
pv8	55	+	0.7293	0.6553	0.2931	0.8202
pv9	53	+	0.5080	0.3960	0.3183	0.8370
pv10	55	+	0.7877	0.7268	0.2833	0.8130
pv11	54	+	0.6899	0.6048	0.2942	0.8209
pv12	55	+	0.6859	0.6022	0.2963	0.8224
Test scale					0.3076	0.8421

Appendix 7.2: Pretest Reliability Results For Service Quality

```
. alpha sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10, std item asis

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
sq1	54	+	0.4629	0.3278	0.4433	0.8775
sq2	54	+	0.6846	0.5881	0.4023	0.8583
sq3	52	+	0.6376	0.5318	0.4103	0.8623
sq4	50	+	0.7841	0.7143	0.3831	0.8482
sq5	54	+	0.6884	0.5919	0.4013	0.8578
sq6	52	+	0.6893	0.5969	0.3998	0.8570
sq7	52	+	0.6436	0.5365	0.4099	0.8621
sq8	53	+	0.8031	0.7349	0.3786	0.8458
sq9	53	+	0.6816	0.5883	0.4022	0.8582
sq10	53	+	0.7192	0.6322	0.3959	0.8550
Test scale					0.4026	0.8708

Appendix 7.3: Pretest Reliability Results for Satisfaction

```
. alpha sat1 sat2 sat3, std item asis

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
sat1	55	+	0.8599	0.6784	0.6000	0.7500
sat2	55	+	0.8499	0.6588	0.6256	0.7697
sat3	55	+	0.8646	0.6878	0.5879	0.7405
Test scale					0.6045	0.8210

Appendix 7.4: Pretest Reliability Results For Place Attachment

```
. alpha pa1 pa2 pa3 pa4 pa5 pa6 pa7 pa8, std item asis

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
pa1	55	+	0.6659	0.5450	0.4208	0.8357
pa2	55	+	0.7044	0.5934	0.4108	0.8300
pa3	55	+	0.7587	0.6637	0.3957	0.8209
pa4	54	+	0.7529	0.6537	0.3993	0.8231
pa5	55	+	0.5871	0.4460	0.4393	0.8458
pa6	54	+	0.7022	0.5910	0.4100	0.8295
pa7	53	+	0.7583	0.6619	0.3962	0.8212
pa8	55	+	0.6549	0.5303	0.4248	0.8379
Test scale					0.4121	0.8487

Appendix 7.5: Pretest Reliability Results For Destination Loyalty

```
. alpha dl1 dl2 dl3 dl4 dl5 dl6, std item asis

Test scale = mean(standardized items)
```

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
dl1	55	+	0.7506	0.6165	0.3969	0.7669
dl2	55	+	0.7769	0.6535	0.3856	0.7583
dl3	55	+	0.3503	0.1240	0.5684	0.8682
dl4	55	+	0.7758	0.6519	0.3861	0.7587
dl5	55	+	0.7798	0.6577	0.3843	0.7574
dl6	55	+	0.8528	0.7645	0.3531	0.7318
Test scale					0.4124	0.8081