The Impacts of Tourism Development on Stakeholders' Quality of Life (QOL): A comparison between community residents and employed residents in the hospitality and tourism industry

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ABSTRACT

The primary goal of this dissertation is to determine the relationship between the effects of tourism and stakeholders' quality of life. Specifically, the research investigates stakeholders' perception of the impact of tourism on their life domains, their satisfaction with life domains, and their overall life satisfaction. The relationships among these three components are examined. Depending on the types of stakeholders, their perceptions of and attitudes toward the impact of tourism and quality of life might be different. Therefore, the moderating effect of stakeholders' perceptions of the impact of tourism in life domains and satisfaction with life domains is investigated. Accordingly, the study proposes three research questions: (1) Does the perception of tourism impact in life domains affect satisfaction with different life domains? (2) Does satisfaction with life domains affect overall QOL? (3) Does the perspective of different stakeholders have a moderating effect on the relationship between the perception of tourism impacts in life domains and satisfaction with life domains?.

The sample population of stakeholders residing in Hawaii, Virginia, Orlando (FL), Las Vegas (NV), and New York City (NY) was surveyed. Four hundred seven usable questionnaires were subjected to data analysis. Structural equation modeling (SEM) and hierarchical multiple regression (HMR) were performed to test the hypotheses.

The results revealed that the stakeholders' perception of the impact of tourism in the material life domain did affect their material life domain satisfaction. This study also indicated that their satisfaction with the material and non-material life domains significantly influenced their overall quality of life. The hypothesized moderating effects of the perspective of different stakeholders on the relationship between the perception of the impact of tourism in material/non-material life domain and the material/non-material life satisfaction were supported.

DEDICATION

This dissertation is dedicated to my loving parents, Kwangho Woo and Okhee Kim, and husband Byung O Kang.

항상 저를 사랑으로 응원해 주신 부모님과 남편에게 이논문을 바칩니다.

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CHAPTER ONE: INTRODUCTION

1.1 INTRODUCTION

This chapter provides an explanation and support for the research purposes. The statement of problem is defined based on the background information. Research questions, theoretical background, and objectives of the study are all explained. The description of the conceptual model used in this study is presented, the key constructs are defined, and the contributions of the study are discussed.

1.2 BACKGROUND

The tourism industry is one of the world's greatest industries, having long experienced an almost constant and rapid annual increase in terms of revenues and employment (Pırnar & Günlü, 2012). With such growth, competition has become very severe, and only tourism destinations that apply creative and effective destination management and marketing strategies can survive in the tourism field. Therefore, the tourism industry has stimulated significant interest in highly effective marketing and management strategies for tourism destinations (Meng, 2006). Among the different marketing strategies, a significant number of studies have focused on the impacts of tourism development. The reason is that once a community becomes a tourism destination, the lives of residents in that community are affected, both positively and negatively, by different types of tourism impacts. Depending on the impacts, residents' support, which is essential for destination development, successful operation, competitiveness, and sustainability, is changed (Gursoy, Jurowski, & Uysal, 2002).

Therefore, the impacts of tourism development have historically been the most researched area of tourism. The early research in tourism impacts has focused on identifying the variously perceived impacts of tourism development. Tourism impacts have been identified in economic, social, cultural, political, and environmental areas, which both positively and negatively affect residents' perspective, opinion, and living conditions. In order to successfully measure these tourism impacts, a number of studies have developed measurement tools (Ap & Crompton, 1998; Choi & Sirakaya, 2005; Delamere, 2001; Lankford & Howard, 1994; Madrigal, 1993). For instance, Ap and Crompton (1998) developed a scale of 35 tourism impact items comprising 7 domains: social and cultural, economic, crowding and congestion, environmental, services, taxes, and community attitudes.

Residents' attitudes toward tourism impacts have also been studied (Gursoy et al., 2002). As previously mentioned, residents' perceptions and attitudes toward the impacts of tourism are likely to be an important planning and policy consideration for the successful development, marketing, and operation of existing and future tourism programs and projects (Haywood, 1975). As a result, a significant number of researchers have investigated links between tourism impacts and residents' attitudes toward these impacts. Previous studies on the topic have found that residents' attitudes are generally positive when they perceive more positive impacts than negative impacts but they are negative toward tourism development when they perceive more negative impacts. Previous studies have also found that the relationship between impacts and attitudes are not consistent as they differ across demographic, distance from the tourism area of the community, and levels of economic dependency on tourism.

Tourism impacts not only affect residents' attitudes toward tourism but also their overall quality of life (Uysal, Woo, & Singal, 2012). Once a community becomes a destination, local

residents' quality of life (QOL) is affected by the consequences of tourism development. The main purpose of tourism development is to increase residents' QOL, provide tourists with a quality experience, and benefit business sectors. Therefore, the QOL of residents in a community should be a major concern for community leaders (Uysal, Woo, & Singal, 2012). Although the main purpose of QOL research in tourism is to understand how impacts are internalized and influence an individual's overall QOL (Andereck & Jurowski, 2006; Perdue, Long, & Kang, 1999), few studies have specifically considered tourism impacts on residents' QOL. Therefore, this current study measures residents' QOL based on their perceptions of tourism impacts and satisfaction with life domains.

1.3 STATEMENT OF THE PROBLEM

Previous research has shown that tourism impacts can be perceived differently depending on residents. Residents in a destination community include different stakeholders. Thus, residents can be categorized based on the definition of stakeholders. Stakeholders can be defined as persons or groups who can affect or be affected by tourism activities within a particular market or community and who have interests in the planning, process(es), delivery, and/or outcomes of the tourism business (Freeman, 1984; Yoon, 2002). Common examples of tourism stakeholders include residents who live in destination areas, non-government organizations, government organizations, tourism-related associations and councils, convention and visitors bureaus, business leaders, and tourists (Freeman, 1984; Yoon, 2002). Depending on the type of stakeholders, their costs and benefits from tourism impacts differ; therefore, their perceptions about tourism impacts and QOL are also different. However, most previous research that attempts to measure residents' attitudes, perceptions, and QOL only considers one type of

stakeholder—most commonly, community residents. Limited research focuses on different types of stakeholders' perspective regarding tourism impacts on their quality of life. Therefore, the current research examines the perception of different types of stakeholders.

1.4 RESEARCH QUESTIONS

The specific research questions related to the purposes of this study are as follows:

1. Does the perception of tourism impact in life domains affect satisfaction with different life domains?

2. Does satisfaction with life domains affect overall QOL?

3. Does the perspective of different stakeholders have a moderating effect on the relationship between the perception of tourism impacts in life domains and satisfaction with life domains?

1.5 THEORETICAL BACKGROUND

The theoretical foundations of this study are the bottom-up spillover theory, stakeholder theory, and social exchange theory (Ap, 1992; Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Freeman, 1984; Sirgy, 2002) .

In order to measure quality of life, several different theories have been used, including telic theories, pleasure and pain, activity theories, associationistic theories, judgment theory, and top-down versus bottom-up theory. Bottom-up theory is not only the most popularly used theory among these (Diener, 1984; Diener et al., 1999; Sirgy, 2002; Sirgy & Lee, 2006), but also the most appropriate for this study. Therefore, bottom-up theory will serve as the conceptual framework for the current study.

The basic premise of the bottom-up spillover theory is that overall life satisfaction is affected by satisfaction with all life domains and sub-domains. Life satisfaction is considered to be on top of a satisfaction hierarchy. For instance, overall life satisfaction is influenced by satisfaction with family, social, leisure and recreation, health, work, financial, and travel. Satisfaction with a particular life domain will be influenced by lower levels of life concerns within that domain (Kruger, 2012). Satisfaction with a hospital stay, for example, affects satisfaction with health life and community life, which in turn contributes to overall quality of life (Sirgy, Hansen, & Littlefield, 1994).

The levels of importance and satisfaction of life domains differ depending on the types of stakeholders. For instance, residents are expected to regard their leisure and social well-being to be more important than their community and financial well-being, which makes the influence of their perceptions of the tourist destination’s impact on their social/leisure life stronger for their sense of leisure/social well-being than other perceptions of tourism impact.

Similarly, government officials are expected to regard their financial and community well-being to be more important than their social and environmental well-being, making the influence of their perceptions of the tourist destination's impact on their social/environmental life stronger for their sense of social/environmental well-being than other perceptions of tourism impact.

Business leaders are expected to regard their financial, family, and community well-being to be more important than their social and leisure well-being; thus, they make the influence of their perceptions of the tourist destination's impact on their financial/family/community life stronger on their sense of financial/family/community well-being than other perceptions of tourism impact.

In order to investigate different stakeholders' perceptions and perspectives regarding the relationship between perceptions of tourism impacts on life domains and satisfaction with life domains, this study will apply both stakeholder theory and social exchange theory concepts. Stakeholder theory suggests that an organization is characterized by its relationships with various groups and individuals, including employees, customers, suppliers, governments, and members of the communities (Freeman, 1984). Common examples of tourism stakeholders include chambers of commerce, tourism authorities, local agencies, tourism-related faculties and professionals, and local residents and tourists (Byrd, Bosley, & Dronberger, 2009; Yoon, 2002). Stakeholder theory posits that the various groups can and should have a direct influence on managerial decision making, and consideration should be given to each stakeholder group, regardless of the relative power or interest held by each (Sautter & Leisen, 1999). In addition, each stakeholder group must participate in determining the future direction of the firm in which a

stake is in question (Donaldson & Preston, 1995). Different types of stakeholders might have different opinions and perceptions depending on stakeholders' attitudes about costs and benefits.

Social exchange theory, on the other hand, can be defined as "a general sociological theory concerned with understanding the exchange of resources between individuals and groups in an interaction situation" (Ap (1992, p. 668). From a tourism development standpoint, social exchange theory assumes that stakeholders' attitudes toward and support for tourism in their community will be influenced by their evaluation of the actual and perceived outcomes that tourism has in their community (Andereck, Valentine, Knopf, & Vogt, 2005). Social exchange theory suggests that people evaluate an exchange based on the costs and benefits incurred as a result of that exchange. If the individual perceives benefits from an exchange, he/she is likely to evaluate it positively; however, if he/she perceives costs, he/she is likely to evaluate it negatively. Thus, depending on the nature of evaluations, the level of support from and perception of tourism impacts and sense of well-being might be positive or negative. If residents perceive tourism impacts positively, then their lives are also positively affected by tourism; however, if they perceive tourism impacts negatively, then their lives might also be negatively affected.

1.6 OBJECTIVES OF THE STUDY

The primary goal of this dissertation is to determine the relationship between tourism impacts and stakeholders' quality of life. Stakeholders' satisfaction with life in general derives from their satisfaction with life domains, and their satisfaction with particular life domains is also affected by their perception of tourism impacts. Therefore, the research attempts to investigate stakeholders' perception of tourism impacts in life domains, their satisfaction with life domains, and their overall life satisfaction. The interrelationships of these three components will be examined. Depending on the types of stakeholders, their perception and attitudes toward tourism impacts and quality of life might be different. Therefore, the moderating effect of different stakeholders' perception between tourism impacts in life domains and satisfaction with life domains is also investigated. The specific objectives of this research include three components:

1. To assess the direct effects of the perception of tourism impacts in life domains on satisfaction with life domains,
2. To investigate the direct effects of satisfaction with life domains on overall life satisfaction, and
3. To examine the moderating effects of the perspectives of different stakeholders between the perception of tourism impacts in life domains and satisfaction with life domains.

1.7 CONCEPTUAL MODEL

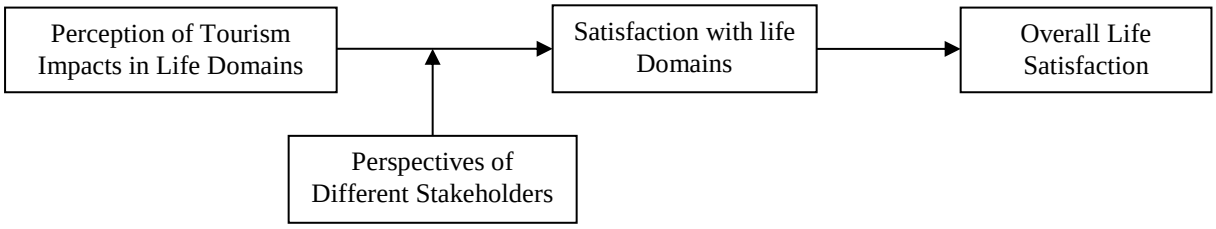

Figure 1. 1 Proposed conceptual model

Drawn from empirical studies and research as well as concepts and theories, a conceptual model is proposed, as shown in Figure 1.1. The conceptual model represents the proposed theoretical model, which demonstrates the relationship between the perception of tourism impact in life domains, satisfaction with life domains, and overall life satisfaction. The proposed model illustrates the logical relationship of the three major constructs by indicating the directions of the causes and effects of the interplay of tourism effects and quality of life. In particular, overall satisfaction is affected both differently and indirectly by the interplay of perception of tourism impact in life domains. In addition, different stakeholders' perspectives serve as a moderating factor in the relationship between the perception of tourism impact in life domains and satisfaction with life domains.

1.8 DEFINITIONS OF KEY CONSTRUCTS

Tourism impacts

Tourism takes places in the environments of human and natural features. The human environment comprises economic, social, and cultural factors while the natural environment consists of different types of resources, including plants and animals (Mason, 2008). Once a community becomes a tourist destination, the lives of residents in that community are affected by tourism activities, resulting in, for example, economic, sociocultural, and environmental impacts (Andereck et al., 2005; Uysal, Woo, et al., 2012). In the current study, tourism impacts have three dimensions: economic impact, sociocultural impact, and environmental impacts. Each impact dimension will have a list of appropriate items.

Stakeholders

Stakeholders can be defined in the context of the tourism field as persons or groups who can affect or be affected by the tourism business within a particular market or community and who have interests in the planning, process(es), delivery, and/or outcomes of the tourism business (Freeman, 1984; Yoon, 2002). Common examples of tourism stakeholders include chambers of commerce, tourism authorities, local tourism agencies, non-government organizations, tourism-related associations and councils, convention and visitors bureaus, tourism planning and development companies, tourism-related faculties and professionals, local and state parks, and visitor and information centers (Freeman, 1984; Yoon, 2002). In this study the definition of stakeholders includes community residents and employed residents, who also include business leaders and government officials.

Quality of life (QOL)

Overall life satisfaction is functionally related to satisfaction within a number of individual life domains (Lee & Sirgy, 1995). In other words, quality of life is an umbrella concept that refers to all aspects of a person's life, including physical health, psychological well-being, and social well-being (Dolnicar, Lazarevski, & Yanamandram, 2012). In order to measure quality of life, a number of QOL researchers have focused on the effect of many factors on QOL within specific domains (Sirgy, 2002; Sirgy, Kruger, Lee, & Grace, 2011).

Life is comprised of different types of life domains, such as health, work and productivity, material, family, love, education, social, community, leisure, tourism, emotion, and politics.

1.9 CONTRIBUTIONS OF THE STUDY

The potential contributions of this study can be discussed from both theoretical and practical standpoints. As little prior research has been conducted on stakeholders' QOL, the current study contributes to the theoretical enhancement of the current level of knowledge in the existing literature on tourism impacts and stakeholders' quality of life. Moreover, this study contributes to the theoretical advancement in the field of tourism by confirming the usefulness of the bottom-up spillover theory and stakeholder theory in explaining stakeholders' quality of life.

In terms of its practical contribution, the information gathered in this dissertation will provide tourism developers with a better understanding of stakeholders' QOL. Specifically, tourism professionals can monitor and measure stakeholders' quality of life and develop appropriate management and marketing plans for their communities as destinations. As a result, tourism destination communities will receive increased and enhanced social and economic

benefits from tourism activities. Tourists and visitors will also gain more meaningful and engaging experiences that would in turn contribute to their quality of life. Moreover, the findings will also suggest that tourism developers and marketers should know how stakeholders perceive tourism and how it affects their life satisfaction according to their connection with the hospitality and tourism industry.

1.10 CHAPTER SUMMARY

This initial chapter has provided an overview of the study and identified the statement of the problem in the quality of life area, the theoretical background of the problem, the research question, the theoretical framework of the study, and the theoretical model of the study. In the second chapter, a review of the relevant literature is presented.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

The aim of the literature review is to generate awareness, understanding, and interest for studies that have explored a given topic in the past. The main purpose of this research is to understand stakeholders' QOL based on their perceptions of tourism impacts, satisfaction with life domains, and their overall life satisfaction. Therefore, this chapter defines the current body of knowledge about the theoretical and conceptual research on tourism impacts, quality of life, and stakeholder studies. Specifically, this literature review consists of three parts. First, this chapter explains tourism impacts. Impact studies can be categorized into three parts: identifying the various perceived impacts of tourism; developing tourism impacts assessment; investigating residents' attitudes. Therefore, these three parts will be reviewed. In the second part, Quality of Life (QOL) will be investigated. Specifically, the concept of QOL, common life domains, measurement of QOL, and relationship between tourism and QOL will be examined. In the last part, the concept of stakeholders in tourism field will be reviewed.

2.2 TOURISM IMPACTS

Tourism takes places in the environments of human and natural features. The human environment comprises economic, social, and cultural factors while the natural environment consists of plants and animals (Mason, 2008). Once a community becomes a tourists destination, the lives of residents in that community are affected by tourism impacts such as economic, socioculture, and environment (Andereck et al., 2005; Uysal, Woo, et al., 2012). Therefore, a number of systematic approaches have been proposed to understand tourism impacts on the

destination; as a result, the impacts of tourism have been historically the most researched area of tourism (Ap, 1992; Mason, 2008; Mason & Cheyne, 2000).

Previous impact studies can be divided into three parts: identifying the various perceived impacts of tourism; developing tourism impacts assessment; investigating residents' attitudes toward tourism impacts (Kim, 2002; Perdue et al., 1999). Therefore, relevant literature review will be provided based on these three categories.

2.2.1 Types of tourism impacts

The early research in this area focused on identifying the various perceived impacts of tourism development (Allen, Long, Perdue, & Kieselbach, 1988; Belisle & Hoy, 1980; Liu, Sheldon, & Var, 1987; Liu & Var, 1986; Perdue, Long, & Allen, 1987; Ross, 1992; Sheldon & Var, 1984). The major impacts have been identified such as economic, social, cultural, political, and environment. Even though there are several different types of tourism impacts, perceived impacts fall into three domains: (1) economic (2) socio-cultural (3) physical and environmental (Andereck et al., 2005; Uysal, Woo, et al., 2012). All these three impacts have positive and negative perspectives; however, generally, residents recognize the positive economic impacts of tourism development, but were concerned with potentially negative social and environmental impacts (Perdue, Long, & Kang, 1995). These three impacts are reviewed from different perspectives in the following sections.

2.2.1.1 Economic impacts

To the destination community, the most prominent benefits of tourism development are economic benefits such as higher tax revenue, increase job opportunities, additional incomes, increased public spending, and foreign exchange earnings (Lankford, 1994; McCool & Martin, 1994; Uysal, Woo, et al., 2012). These benefits individually or collectively contribute to the economic well-being of the destination community. Therefore, economic impacts have been more researched than any other types of impacts (Mason, 2008). Belisle and Hoy (1980) mentioned that even though the perception of some serious negative impacts of tourism exists, residents consider the overall impact of tourism to be beneficial because of positive economic impacts such as employment and economic evolution.

A number of previous studies not only have examined the positive economic impacts of tourism development on host communities but also investigated negative economic impacts. Positive impacts may include contribution to foreign exchange earnings, government revenues, generation of employment, regional development, and economic quality of life (McCool & Martin, 1994), while negative consequences of tourism include inflation opportunity and over-dependence on tourism (Pearce, 1989). Liu and Var (1986) examined both positive and negative economic impacts and they found a strong perception among residents of increased employment, investment, and profitable local business. Moreover, they also found negative effects such as an increase in the cost of living. Similarly, Haralambopoulos and Pizam (1996) also found both positive and negative impacts. Specifically they examined that tourism not only increases tax revenue, personal income, and standard of living but it also increases price of goods and services.

2.2.1.2 Socio-cultural impacts

Tourism development affects socio-cultural characteristics of community residents such as habits, daily routines, beliefs, and values (Doğan, 1989). Like previous economic impact, socio-cultural impacts also have two perspectives: negative and positive. From the positive perspective of socio-cultural impacts, Brunt and Courtney (1999) found that tourism impacts community services including additional park, recreation, cultural facilities, and encouragement of cultural activities. Liu and Var (1986) also mentioned that tourism not only provides entertainment, historical, and cultural exhibits but also increases cultural exchange, event, and identity. Others have also found residents feel tourism encourages cultural activities, improved cultural heritages, development of natural parks and more recreation opportunities (McCool & Martin, 1994; Perdue, Long, & Allen, 1990).

From negative side of social cultural impacts, a number of studies have identified concern with crime, degradation of morality, gambling, drug addiction, vandalism, and crowding of public facilities and resources. Doğan (1989) found that there are several negative consequences such as a decline in traditions, materialism, increase in crime rates, social conflicts, and crowding. Similarly, Haralambopoulos and Pizam (1996) mentioned that even though there was a high degree of agreement among residents with regards to the positive economic impacts of tourism in the area, residents also recognized the existence of some negative social impacts such as individual crimes, brawls, vandalism, sexual harassment, and drug abuse.

2.2.1.3 Environmental impacts

Although much of the literature reveals positive views by residents on the economic and socio-cultural aspects of tourism, it also reveals some contradictory findings with respect to opinions regarding environmental impacts (Andereck, 1995; Andereck et al., 2005; Brunt & Courtney, 1999). Andereck (1995) identified the negative potential environmental consequences of tourism development, for instance, emission from vehicles and airplanes, water pollution such as waste water discharge, wildlife destruction as a result of hunting, plant destruction, and deforestation. Brunt and Courtney (1999) also examined residents' concern with traffic and pedestrian congestion. Similarly, Pizam (1978) also investigated that residents of Cape Cod are negatively affected by tourism such as noise, litter, air, and water quality.

However, some research has also examined the positive environmental impacts of tourism. For instance, Perdue et al. (1995) found a positive aspect of environmental impact. They mentioned that tourism development improves community appearance and results in greater recreation and park opportunities than before. Other studies have also found positive environmental impacts. For instance, Liu and Var (1986) found that roughly half of the respondents agreed tourism provides more parks and recreation areas and improve the quality of the roads and public facilities and has not contributed to ecological decline. Moreover, most of respondents disagreed that tourism is the case of traffic problems, overcrowded outdoors recreation or the disruption of peace and tranquility of parks. Ritchie (1988) also found that 91% of respondents agreed that tourism affected the quality of attractions and 93% believe that tourism affected the quality of national provincial parks.

2.2.2 Impact measurements

Among tourism impact studies, the development of a tourism impact measurements has also been one of the important topics (Chen, 2000). A few studies successfully developed tools to measure resident attitudes toward tourism and its impacts because of the absence of a widely used measure of resident attitudes toward sustainable tourism (Ap & Crompton, 1998; Choi & Sirakaya, 2005; Delamere, 2001; Lankford & Howard, 1994; Madrigal, 1993).

Ap and Crompton (1998) found 35 tourism impacts scales based on an initial pool of 147 impact items which drew from 38 personal interviews with key individuals representing residents, tourist businesses, and senior government officials in four communities and also previous literature review. The scale comprises seven domains: social and cultural, economic, crowding and congestion, environmental, services, taxes, and community attitudes. They mentioned that these 35 tourism impact scales help monitor sustainable tourism development. Similarly, Lankford and Howard (1994) developed a multiple item tourism impact attitude for resident attitude toward tourism development. They followed the procedures recommended by Likert (1974), and Churchill Jr (1979) (Parasuraman, Zeithaml, & Berry, 1988). They found a 27 item, two-dimensional scale measuring resident attitudes toward tourism development. McCool and Martin (1994)investigated mountain residents' attitudes toward tourism, and revealed four factors including impact, benefits, equity, and extent. Fredline, Jago, and Deery (2003) tested and validated an instrument that can be used to compare the social impact of a variety of event and ultimately to inform knowledge in the area of social impact assessment in tourism more generally. They found six factors: social and economic development benefits; concerns about justice and inconvenience; impact on public facilities; impacts on behavior and environment; long-term impact on the community; impact on prices of some goods and services. Choi and

Sirakaya (2005) developed and validated a scale assessing residents' attitudes toward sustainable tourism (SUS-TAS) that incorporated the complex dimensions of the construct. The final scale consisted of a 44-item list with seven subscales: perceived social costs; environmental sustainability; long-term planning; perceived economic benefits; community-centered economy; ensuring visitor satisfaction; maximizing community participation.

2.2.3 Residents' attitudes toward tourism impacts

Residents' attitudes toward tourism developments and impacts have been studied extensively in the literature (Gursoy et al., 2002) because perceptions and attitudes of residents toward the impacts of tourism are likely to be an important planning and policy consideration for the successful development, marketing, and operation of existing and future tourism programs and projects (Haywood, 1975). Moreover, for tourism in a destination is to thrive, these adverse impacts should be minimized and they must be viewed favorably by the host population (Ap, 1992).

A great number of researchers have investigated links between the impacts and attitudes toward tourism by comparing residents across demographics (Brougham & Butler, 1981; Haralambopoulos & Pizam, 1996; Liu & Var, 1986; Mason & Cheyne, 2000; McCool & Martin, 1994; Milman & Pizam, 1988; Pizam, 1978), distance from the tourism area of the community (Liu & Var, 1986; Sheldon & Var, 1984; Um & Crompton, 1987), economic dependency on tourism (Haralambopoulos & Pizam, 1996; King, Pizam, & Milman, 1993; Liu & Var, 1986; Pizam, 1978; Schluter & Var, 1988; Zhou & Ap, 2009), knowledge about the industry (D. Davis, Allen, & Cosenza, 1988), and types and form of tourism (Murphy, 1985; Ritchie, 1988).

Early research typically examined differences in perceived impacts among different types of local residents identified on the basis of sociodemographic characteristics (Brougham & Butler, 1981; Haralambopoulos & Pizam, 1996; Liu & Var, 1986; Mason & Cheyne, 2000; McCool & Martin, 1994; Milman & Pizam, 1988; Pizam, 1978). Brougham and Butler (1981), for instance, found that resident's attitudes differed in terms of age, language, length of residents, degree of tourist exposure, and personal contacts. Liu and Var (1986) tested whether any significant differences regarding tourism impacts exist among demographic subgroups such as sex, ethnicity, length of residency, income, education, occupation, and job type. The highest percentage of significant variation is found for economic effects followed by socio-cultural effect, and ecological effects. They found that among the eight demographic categories, length of residency and ethnicity are the most important and warrant further investigation. Haralambopoulos and Pizam (1996) mentioned that certain socio-demographic characteristics play an important role in understanding significant perceptual differences between groups of residents such as occupational status, years of living in the area, number of minors in the family, education, income and employment in tourism. McCool and Martin (1994) examined the relationship between perceived tourism impacts and residents' community attachment, finding that highly attached residents were more likely to be concerned about the costs and impacts of tourism development. The longer residents have been living in a community the more negative they are towards tourism development (Allen et al., 1988; Liu & Var, 1986; Sheldon & Var, 1984; Um & Crompton, 1987). Previous research shows that there was little consistent difference in perceived tourism impacts by sociodemographic characteristics.

Other studies examined the relationship between distance from the tourism area of the community and residents' attitudes. Belisle and Hoy (1980) found that distance has a significant

effect on the perception of tourism impact. Specifically, as residents move away from the tourist zone, the impact of tourism is perceived less positively. Perdue et al. (1999) mentioned that the perceived impact of tourism decreases as distance between the individuals' home and the tourism sector of the community increases.

Early research also examined differences in perceived tourism impacts among different types of local residents identified on the basis of economic dependency on tourism (Haralambopoulos & Pizam, 1996; King et al., 1993; Liu & Var, 1986; Perdue et al., 1999; Pizam, 1978; Schluter & Var, 1988; Zhou & Ap, 2009). For example, Haralambopoulos and Pizam (1996) examined local residents' perceptions of the social consequences of tourism. They found that residents had a mixed attitude toward tourism impacts. Most of residents perceived positive impacts of tourism; however, residents also perceived the existence of some negative social impacts. They also found a relationship between respondents' socioeconomics and impacts of tourism. Specifically, those residents who had a main business relation with tourism industry had more positive attitudes than those who were not involved in tourism industry. Schluter and Var (1988) found that while residents did not have a strong perception of the economic benefits of tourism they recognized a number of positive soicocultural benefits. They also found a strong relationship between the level of economic dependency on tourism and the extent to which perceptions of the economic effects of tourism were positive. King et al. (1993) also found that residents depending on tourism can clearly differentiate between its economic benefits and the social costs and that awareness of certain negative consequences does not lead to opposition towards further tourism development. Others indicated that tourism-employed residents were more favorably disposed toward tourists than those who were not tourism-employed (Pizam, 1978; Zhou & Ap, 2009).

As previously mentioned, tourism impacts and residents attitudes toward tourism impacts studies have been researched extensively since 1960s in the tourism field. However, tourism impacts not only affect residents' attitudes toward tourism but also their overall quality of life (Uysal, Woo, et al., 2012). The reason is that once a community becomes a destination, the quality of life of the local residents is also affected by the consequences of tourism development. Therefore, the quality of life of the residents in a community should be a major concern for community leaders (Uysal, Woo, et al., 2012). However, only few studies have specifically considered tourism impact on residents' QOL (Andereck & Nyaupane, 2011; Uysal, Woo, et al., 2012). Therefore, in the next section, relationship between tourism impact and quality of life will be reviewed. Before investigating the existing relationship, main concept of QOL, common life domains and indicators, and measurement of the quality of life will be examined in the next section.

2.3 QUALITY OF LIFE (QOL)

2.3.1 Definition of Quality of Life (QOL)

Many researchers have been debating the meaning of QOL since the 1960s, and defining QOL is difficult because it is clearly problematic to differentiate between such terms as "well-being", "welfare", and "happiness" (Puczkó & Smith, 2011). Wilson (1967, p. 294) reviewed well-being literature and mentioned that the happy person is a "young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, married person with high self-esteem, high job morale, modest aspirations, of either sex and of a wide range of intelligence".

Maslow (1968), who developed happiness and well-being based on the concept of human needs, characterized the good life as a fulfillment of needs, arranged in a hierarchy of five categories: physic ological needs, needs to safety, belongingness and love, and esteem and self-actualization. Maslow (1968) defines QOL as "necessary conditions for happiness". Terhune (1973) defined it as subjective satisfaction itself.

According to Andereck and Nyaupane (2011) there are more than 100 definitions of QOL and models. However, QOL can be defined either using uni-dimensional perspective or multi-dimensional perspective. Uni-dimensional perspective used a single-item survey question to define QOL. Andrews and Withey (1976), for instance, define QOL using a single question such as "how do you feel about your life as a whole". This approach has proved very useful for comparing population samples. However, uni-dimensional concept has been criticized on a number of grounds. The major reason is that it is impossible to obtain estimates of internal consistency and also using one single question has limited utility for smaller group comparisons since the question provides only a global measure of perceived well-being (Cummins, 1997). Therefore, the majority of QOL definitions stress the multi-dimensional nature of the concept,

typically manifested in the specification of a number of QOL domains (Schalock, 1996). From multidimensional perspective, overall life satisfaction is functionally related to satisfaction within a number of individual's life domains (Lee & Sirgy, 1995). In other words, QOL is an umbrella concept that refers to all aspects of a persons' life including physical health, psychological well-being, and social well-being (Dolnicar et al., 2012). For instance, Meeberg (1993, p. 37) defined QOL as "a feeling of overall life satisfaction, as determined by the mentally alert individual whose life is being evaluated". Based on Meeberg's definition Puczkó and Smith (2011, p. 168) mentioned that "quality of life is a feeling of overall life satisfaction as determined by the mentally alert individual whose life is being evaluated. In the formulation of the individual's opinion, which is fundamentally based on subjective factors, tourism can play a role". According to OECD, QOL can be defined as "the notion of human welfare (well-being) measured by social indicators rather than by quantitative measures of income and production (OECD, 2005, p, 1). This definition emphasizes the importance of subjective well-being.

Even though QOL has been defined differently by various scholars and there is no agreement on the final definition of QOL (Mugenda, Hira, & Fanslow, 1990; Rahman, Mittelhammer, & Wandschneider, 2005), overall QOL can be defined as having multidimensional perspective in that total perceived QOL is a composite of satisfaction with a number of domains (Rahman et al., 2005). However, there is little agreement on the key domains that need to be included to cover the construct of QOL, and identifying robust QOL domains and indicators remain problematic (Dolnicar et al., 2012). Therefore, in the next section measurement of overall QOL, life domains, and indicators will be reviewed.

2.3.2 Measurement

QOL researchers have developed several different measures of QOL. QOL can be measured in different levels of units (individual, family, community or country), different levels of space (global or specific domains), and different indicators (subjective or objective/ reflective or formative) (Sirgy, 2001).

According to Sirgy (2001), even though the focus of many of these measures is global QOL measures, many QOL measures are domain specific. For instances, many QOL researchers examine the effects of many factors on QOL which may include specific domains such as material, emotional, environmental, family, and community. This implies that overall QOL is derived by summing of the number of life domain satisfaction.

QOL can be assessed at different levels: individual level, the family level, the community level, and the country level. Depending on the perspectives, level of analysis can be different (Sirgy, 2001). For instance, psychotherapists who need to know why their clients are depressed want to know individual level QOL while, family therapists are not interested in individual's QOL but family QOL. Similarly, local planners and community developers are interested in their community or region's QOL. In the same way, government officers are interested in their countries level QOL so they try to measure and increase country level QOL.

Individual measurement of QOL can be divided into two dimensions (figure 1): (1) objective versus subjective indicators (2) reflective versus formative indicators. In other words, the description of the measures is categorized into four categories: subjective reflective, subjective reflective, objective formative, and objective formative indicators (Kim, 2002).

Measuring QOL overall or within a specific life domain can be done either objectively or subjectively (Sirgy, Meadow, & Samli, 1995). Objective QOL studies focus on social indicators

such as income, physical health, standard of living, and crime in order to determine the life satisfaction of individuals. The strength of objective indicators is that they can usually be defined and quantified without relying on individual perception (Kruger, 2012). Another strength of objective indicators is that by including measurement across various life domains, important aspects of society that are not sufficiently reflected in economic terms can be captured (Kim, 2002). However, the greatest limitation of objective indicators is that they may not accurately reflect people's experience of well-being (Andrews & Withey, 1976) and there is agreement among economists that per capita GDP or related measures of income are substantially insufficient measure of well-being. Therefore, the emphasis now has shifted to the identification of alternative measure (Rahman et al., 2005).

While subjective indicators seem to offer lower scientific credibility, a major advantage is that they capture experiences that are important to the individual as well as family, community, and country levels (Kruger, 2012). Subjective QOL measure attempts to measure the perceived satisfaction that individuals report experiencing in their lives (Andereck & Jurowski, 2006; Diener & Suh, 1997; Phillips, 2006) therefore, subjective indicators can more easily be compared across domains than objective measures.

Reflective indicators essentially measure the construct in the most proximate fashion. Reflective indicators reflect a view of the construct as being unidimensional; therefore, reflective indicators often measure construct directly, not factor directly. While, formative indicators represent the view that the construct is multidimensional and the best way to measure the construct is through some composite of the dimensions that make it up. Based on the formative-indicators view, the dimensions making up the construct can be thought of as determinants of that construct. For instance, country's QOL is determined by three important dimensions such as

longevity, knowledge, and a decent standard of living and each dimension is also captured by other indicators. For instance, knowledge is captured through adult literacy rate (Sirgy, 2001).

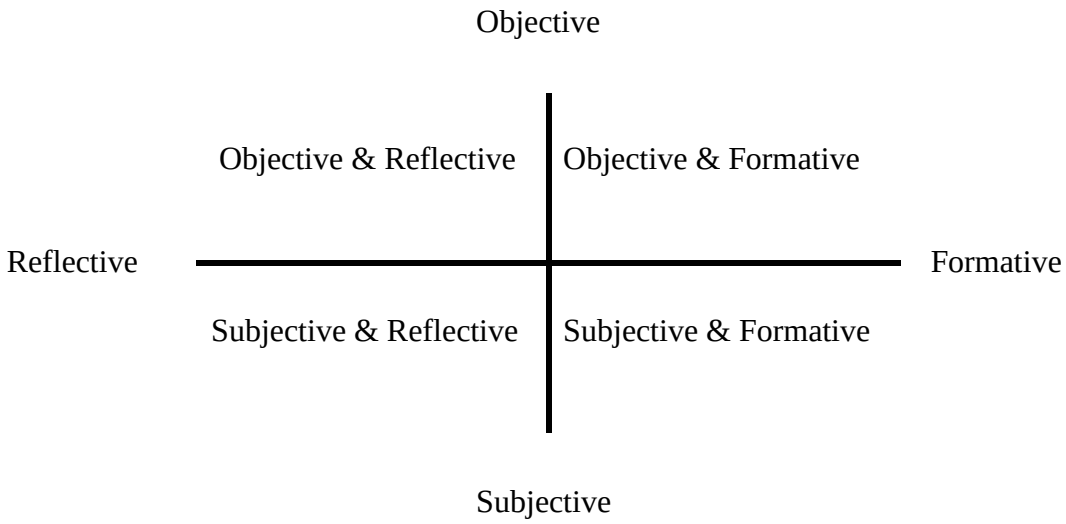

Figure 2. 1 Individual measure of QOL

In the present study, the measure for QOL of individuals will be representative of subjective/formative indicators measured by life satisfaction. Subjective well-being has been recognized as a key aspect of QOL (Cummins, 1997), and a number of frameworks have been developed to assess subjective well-being. The basic premise of this approach is that life satisfaction is functionally related to satisfaction with all of related life's domains and sub-domains (Sirgy et al., 1999). Various measures of subjective well-being are highly sensitive to domains of QOL that are considered in the construction of comparative indices. (Rahman et al., 2005). Therefore, in the next section life domains will be investigated.

2.3.3 Life domains

In order to define and measure quality of life, several different QOL domains have been developed and used (Table 2.1). Kim (2002) first examined how tourism impacts including economic, social, cultural, and environmental affect residents QOL in tourism destinations. This research used four different life domains in order to measure overall QOL. Specifically this study developed material well-being, community well-being, emotional well-being, and health & safety well-being based on previous research. The research indicated that four different life domains were affected by different tourism impacts and also had an effect on overall QOL.

Rahman et al. (2005) identified 8 interrelated domains of QOL based on review of current and historical literature on well-being indices: health, work and productivity, material wellbeing, feeling part of one's local community, personal safety, quality of environment, emotional well-being, and relationship with family and friends. In order to measure different domains they adopted corresponding indicators in each domain. Using these eight domains the authors presented a picture of conditions among the 43 countries of the world. They showed that the various measures of well-being are highly sensitive to domains of QOL and these eight domains are the most comprehensive of all those in the QOL literature and these would be the most appropriate for the development of a tourism and QOL model.

Table 2.1 List of life domains and indicators

Author(s)	Perspective(s)	Life domain(s)	Indicator(s)
Campbell, Converse, and Rodgers (1976)		Non-working activities Family life Standard of living Work Marriage Savings and investments Friendship City or country Housing Amount of education Neighborhood Life in the U.S. Usefulness of education Health Religion National government Organizations	Not available
Cummins (1997)	Based on literature review	Health	
		Intimacy	
		Emotional well-being	
		Material well-being	
		Productivity	
		Safety	Security/ personal control/ privacy/ independence/ autonomy/ competence/ knowledge of rights/ residential stability
		Community	Social class/ education/ job status/ community integration/ community involvement/ self-esteem/ self-concept/ empowerment
Cummins (1996)		Emotional well-being Health	Not available

		Social Material Work	
Kim (2002)	Resident	Material-wellbeing	Cost of living/ Income and employment
		Community	Well-being
		Emotional	Leisure activity / Spiritual activity
		Health and safety well-being	Health well-being/ Safety well-being
Gilbert and Abdullah (2004)	Tourist	Friends Family Home Interpersonal relationships Economic situation Job Leisure Neighborhood Self Services and facilities Health Nation	Not available
Rahman et al. (2005)	Based on review of current and historical literature	Relationship with family and friends	Divorce rates
		Emotional well-being	Female and male suicide rate
		Health	Population growth rate/ life expectancy at birth/ infant mortality rate/ the number of AIDS cases and tuberculosis cases/ government expenditure on health as a percentage of GDP; doctor/population ratio
		Material well-being	Per capital GDP/ daily per capita supply of calories/ the commercial use of energy/ telephone lines per thousand people

		Feeling part of one's local community	Political rights index; civil liberties index/ female adult literacy rate/ male adult literacy rate
		Work and productivity	Enrollment ratio in school/ female economic activity rates
		Personal safety	Total number of offences/ expenditure on military as a percent of GDP
		Quality of environment	Emission of carbon dioxide/ rate of deforestation/ the access to safe water
Puczkó and Smith (2011)	Both tourist and resident	Attitudes towards travelling (ATA)	Number of trips per capita/ per capita spending during trips/number of visitors at attractions
		Motivations of the visitor (MV)	Not available
		Qualities of the trip (QT)	Number of people travelling together/ frequency of visits/ length of the trip/ demographic of the visitors
		Characteristics of the destination (CD)	Number of bed spaces per capita
		Impacts of tourism (IT)	Number of guest nights per capita/ number of guest nights per capita/ number of employees in tourism/ average length of stay/ balance of tourism per capita
Andereck and Nyaupane (2011)	Resident perspective	Community well-being	Preserving peace and quiet / feeling safe/ clean air and water /city services like police and fire protection/ a stable political environment / good public transportation/ the beauty of my community / quality of roads, bridges, and utility services
		Urban issues	the prevention of crowding and congestion / controlled traffic / controlled urban sprawl and population growth / litter control / proper zoning/land use
		Way of life	The preservation of my way of life / a feeling of belonging in my community / resident participation in local government / having tourists who respect my way of life
		Community pride awareness	The image of my community to others / an understanding of different cultures/ awareness of

			natural and cultural heritage / community pride / opportunities to participate in local culture
		Natural/cultural preservation	Preservation of wildlife habitats/ preservation of natural areas/ preservation of cultural/historical sites
		Economic strength	Strong and diverse economy / stores and restaurants owned by local residents/ the value of my house and/or land / enough good jobs for residents/ plenty of retail shops and restaurants / fair prices for good and services
		Recreation amenities	Plenty of festivals, fairs, museums / having live sports to watch in my community / quality recreation opportunities
		Crime and substance abuse	The prevention of crime and vandalism / the prevention of drug and alcohol abuse
Sirgy et al. (2011)	Tourist perspective	Social	Meeting new people/ making new friends/ spending quality time with friends and sharing mutual interest/ spending time away from home and family/not having enough time with friends to get to know them better/ having to deal with noxious behavior of accompanying persons/ lacking enough personal time and space because of accompanying persons.
		Leisure/recreation	Engaging in a variety of recreational activities/ experiencing new forms of recreational activities/ mastering an ongoing recreational activities/ getting a chance to do a fair amount of leisurely reading/ feeling tired and exhausted from expending too much energy on the recreational activities/ having read too much thus enjoyed less scenery
		Family	Spending quality time with family/ Getting the whole family together/ Achieving balance between work and family life/ Spending fun time on the trip without family and feeling negative about that/ Failing to get in touch with family because of telephone/mobile

			communication problems/ Getting embroiled in family conflict
		Love	Spending quality time with significant other/ Strengthening personal relationship with significant other/ Visiting places considered as “romantic” spots with significant other/ Spending time alone without significant other— “Distance makes heart grow fonder”/ Failing to get in touch with significant other because of telephone/mobile communication problems/ Missing significant other/ Not being able to share the travel experience with significant other
		Arts/culture	Learning about other cultures/ Learning to tolerate and appreciate people from other cultures/ Learning to appreciate one’s own culture vis-à-vis other cultures/ Experiencing other cultures in the form of music, art, architecture, food, and beverage/ Failing to communicate with local people because of Language/ Feeling disgusted toward people doing things that are unacceptable in one’s culture/ Feeling that others met on the trip do not approve nor appreciate one’s culture
		Work	Feeling good to break away from the work routine/ Feeling good escaping the demands and constraints of the workplace/Coming back to work feeling refreshed and energized/ Getting a chance to do some strategic thinking and planning about work during trip/ Feeling forced to work during the trip, which took away from leisure time/ Not having any time during the trip to do some work/ Feeling stressed because the trip was interfering with work and deadlines/ Being forced to work during the trip and make money to finance the trip/ Feeling of not wanting to go back to work and missing the fun/ Feeling tired and exhausted coming

			back to work because the trip was tiring and exhausting.
		Health/safety	Feeling relaxed, rested, distressed/ Feeling mentally recharged after the trip/ Feeling that own health improved because the trip required physical activity/ Feeling tired and exhausted/ Getting sick/ Gaining weight/ Worrying about catching a disease/ Worrying about safety and crime during the trip
		Financial life	Judging that the trip was well worth the money spent/ Spending money specifically saved for travel/ Saving money by being thrifty and looking for bargains/ Learning how to budget/ Spending too much money/ Lacking sufficient financial resources to fully enjoy the trip/ Returning home with significant debt/ Running out of money before the end of the trip/ Spending money on frivolous, unnecessary things
		Spiritual life	Learning to appreciate nature/ Feeling close to God (given the trip is outdoors)/ Getting a chance to think about what is important in life/ Feeling good to share one's spiritual beliefs with others/ Feeling that the trip is all about consumption and spending money, thus lacking the spiritual element/ Assessing one's life and realizing that one's life is adrift and had no purpose
		Intellectual life	Feeling that the trip was very educational and intellectually fulfilling/ Not getting a chance to learn as much as one desired
		Self	Spending time alone to enjoy doing things one likes best without the social pressure/ Spending time alone to learn more about oneself/ Learning to enjoy being by oneself without the significant other/ Spending time alone to make future plans/ Missing one's significant other, friends, and

			family/ Feeling bored and alone/ Feeling frustrated about making future plans without input of loved ones
		Culinary	Spending time alone to make future plans/ Enjoying good tasting food/ Eating healthy/ Experiencing new and exotic cuisines/ Experiencing new and exotic beverages/ Not having the variety of food items to choose from/ Not having food and beverages one is accustomed to
		Travel life	Being able to break away from daily routine through travel/ Enjoying new places to visit/ Being outdoors and on the move/ Enjoying the travel and lodging accommodations/ Feeling uneasy getting outside one's comfort zone/ Feeling tired and exhausted traveling from one place to another
Dolnicar et al. (2012)	Based on literature review	Work and material well being Health Family and love Leisure and recreational experiences Social life Education/learning; Neighborhood/community Spiritual life Vacation Goals/hopes for the future Self-esteem/acceptance Safety Stress Transport Standard of living	Not available
Kruger (2012)	Tourist perspective	Social life Leisure and recreation Family life	Not available

		Love life Arts and culture Work life Health and safety Financial life Spiritual life Intellectual life Self Culinary life Travel life	

Based on Rahman et al's study, Puczkó and Smith (2011) introduced an integrative approach to QOL studies applying QOL theory and practice to the field of tourism. The model was developed to measure the quality of life of both residents and tourists. This model includes five identified QOL domains: attitudes towards traveling (ATA); motivation of the visitor (MV); qualities of the trip (QT); characteristics of the destination (CD); and impacts of tourism (IT).

Dolnicar et al. (2012) reviewed published measures of QOL research and found fifteen life domains (work and material well-being; health; family and love; leisure and recreational experiences; social life; education/learning; neighborhood/community; spiritual life; vacation; goals/hopes for the future; self-esteem/acceptance; safety; stress; transport; standard of living) They mentioned that there are only two undisputed domains: work/material well-being and health. These two items are included in all of the articles; however, all other domains are included only less than half times.

Kruger (2012) mentioned that satisfaction with tourist's tip experience related to effect in the thirteen life domains and will have an influence on satisfaction with life overall. They provided 13of the most concrete life domains including social life; leisure and recreation; family life; love life; arts and culture; work life; health and safety; financial life; spiritual life; intellectual life; self-life ; culinary life; and travel life. The perceptions by tourists of positive and negative experiences affecting a specified life domain plays an important role in the increase of positive and negative affects within the relevant life domain and in turns satisfaction in the various life domains plays is important in determining satisfaction with life overall.

Andereck and Nyaupane (2011) used thirty eight indicators and eight different life domains in order to measure residents' quality of life: community well-being; urban issues; way of life; community pride and awareness; natural/cultural preservation; economic strength;

recreation amenities; and crime and substance abuse. Sirgy et al. (2011) developed 13 life domains (table 1) to see how tourism experience affect tourists' overall quality of life.

Different domains have been used depending on different perspectives and contexts. Moreover, domains are not all equally important and the importance of each of the domains varies across people and context. There is little agreement regarding either QOL numbers or scopes (Cummins, 1997). Therefore, a number of authors have tried to find common life domains (Cummins, 1996, 1997; Cummins, Mccabe, Romeo, & Gullone, 1994). Cummins (1996) reviewed 27 definitions of life quality that attempted to identify QOL domains. The research found five major domains: emotional, health, social, material, and work. Cummins (1997) investigated the previous literature and tried to group 173 different domains under seven headings as used by the Comprehensive Quality of Life Scale (ComQol): these being material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Cummins et al. (1994) and Cummins (1996) have provided both empirical and theoretical arguments for the use of seven common domains: material well-being, health, productivity, intimacy, safety, community, and emotional well-being.

Based on the previous research, four life domains which are the most appropriated for the tourism industry were selected for this research: material, community, emotional, and health/safety life domain (Kim, 2002; Puczkó & Smith, 2011). These four life domains can be divided into two parts: material life and non-material life domain. Non-material life domain includes community, emotional and health/safety life domain. The characteristics of each life domain are explained in the following section.

2.3.3.1 Material life domain

Campbell et al. (1976) studied the importance of life domains and found that 73 % of the respondents scored material life domain as one of the most important domains. Flanagan (1978) also indicated that 83% of the respondents considered the material well-being domains as important life domain. Recently, Dolnicar et al. (2012) conducted a review of published measures of quality of life and found that material and work well-being is included in all the time.

Material life can be interchangeably used such as financial well-being, economic well-being, and consumer well-being (Cummins, 1996; Sirgy, 2002). Sirgy (1998) defined that the material life domain as psychological space that groups value-laden beliefs related to standard of living. Cummins (1996) mentioned that material life can be defined by ones economic situation, income, living situation, standard of living , housing, socio-economic status, financial situation, and personal possessions. Andrews and Withey (1976) defined material well-being in terms of people's feelings regarding how secure they are financially, their family income, and how well off they think they are. Sirgy (2002, p. 325) provided several ways to define the definition of material well-being:

> (*1) evaluation of one's financial situation; (2) evaluation of one's standard of living; (3) feeling of financial security; (4) objective indicators of economic well-being; (5) consumer's feeling about major goods and services; (6) satisfaction with acquisition of consumer goods/services and possession of major consumer durables; (7) satisfaction with specific categories of obtained goods and services that are purchased through retail institutions; (8) satisfaction with acquisition, possession, and maintenance of material goods; and (9) subjective well-being directed related to product benefits.*

2.3.3.2 Community life domain

Many of public policy makers have become increasingly interested in understanding and measuring the effects regional, community, and neighborhood development through both objective and subjective indicators of community QOL (Sirgy, 2002). The reason is that community well-being affects the quality of life (Andrews & Withey, 1976; Campbell et al., 1976). Major national surveys in the European Union countries have also shown that satisfaction with community is a significant predictor of life satisfaction (E. E. Davis & Fine-Davis, 1991).

Community well-being can be defined and measured from different perspectives. From the psychological perspective, QOL researchers have conceptualized residential well-being in terms of residents' gap between actual gap and desired housing and neighborhood conditions, residents' attitude toward their living space, feeling of gratification from living in a specific space, satisfaction with the community overall, residents' perceptions of the QOL of their community, and satisfaction with dwelling features (Sirgy, 2002). Puczkó and Smith (2011) mentioned that community quality of life is related to people in the community, public space, life and services.

There are several factors affecting community quality of life. Factors can be categorized into three groups (Sirgy, 2002); Institutional factors, social factors, and environmental factors. According to Widgery (1982), trust in government and the political system to be an institutional factor affecting residents' satisfaction with the community. A significant number of study found that satisfaction with business, governments, and nonprofit services affect residents' overall feelings about their community and overall well-being (Andrews & Withey, 1976; Campbell et al., 1976; Sirgy, 2001). Community quality of life is also affected by personal happiness or overall perception of QOL of community residents and perception of other's QOL. There are

many environmental factors affecting community quality of life. These factors can be positively or negatively affect community quality of life such as noise pollution, air pollution, structural defects, parks and green spaces, sports and recreation opportunities for children, and garden.

2.3.3.3 Emotional life domain

Emotional well-being is related to spiritual well-being and free time (Puczkó & Smith, 2011). Spiritual well-being is viewed as involvement or state of awareness of devotion to a higher being or life philosophy (Sirgy, 2002). It incorporates the satisfaction of spiritual needs and activities related to the satisfaction of these needs. A significant number of studies support the relationship between spiritual well-being and overall subjective well-being (Sirgy, 2002). Teichmann, Murdvee, and Saks (2006) examined spiritual well-being through questions related to meaningfulness of life. They found positive and significant correlations between spiritual well-being and subjective well-being. Moreover, they also found the positive relationship between spiritual well-being and physical health and social relationships. Ellison and Lee (2010) demonstrated that spiritual struggles (three types: divine or perception of an uneasy or troubled relationship with God, negative encounter with other religious people, and having religious doubt and God and divinity) were associated with psychological distress.

Leisure well-being can be defined in several ways: satisfaction with leisure life; satisfaction with important dimensions of leisure life, perceived recreation quality, satisfaction with leisure time; satisfaction with a specific leisure event.

2.3.3.4 Health/ Safety life

QOL researchers have addressed important issues in relation to health-related quality of life. There are many conceptualizations and corresponding measures of health well-being. Sirgy (2002) provided examples of popular conceptualization and measure of health well-being: successful adjustment to illness; good functional status; perceptions of low illness symptoms; satisfaction with personal health; positive mood and affect; satisfaction with personal health and related life domains.

Health well-being can be examined from both personal and community level (Puczkó & Smith, 2011). Much research has shown that feelings about personal health spill over to overall life satisfaction, because personal health is considered important in one's evaluation of life (Andrews & Withey, 1976). Okun, Stock, Haring, and Witter (1984) conducted a meta-analysis of 104 studies focusing on the American elderly and concluded that objective and subjective measure of health account for 8-14% of the variance in subjective well-being. Maddox and Douglass (1973) found that the healthier an elderly person feels, the more likely he or she is to be satisfied with life in general. Rahtz, Sirgy, and Meadow (1989) investigated the role of personal health on the relationship between community healthcare satisfaction and life satisfaction. They found a stronger relationship between community healthcare satisfaction and life satisfaction when personal health is perceived as poor as compared to good.

2.3.4 Relationship between tourism impacts and QOL

In the tourism literature, the importance of tourism to QOL is examined from two different perspectives: (1) QOL of residents at a tourism destination and (2) QOL of tourists (Uysal, Perdue, & Sirgy, 2012). Studies investigating the QOL of residents at a tourism destination are reviewed in the present study because this study focuses on the QOL of residents. There are only few previous studies that were conducted to see the relationship between tourism development and resident's QOL and their community satisfaction. Therefore, each of these works will be reviewed.

Residents' quality of life can be measured by using either subjective or objective indicators. Most previous research has used subjective indicators (Allen, Hafer, Long, & Perdue, 1993; Allen et al., 1988; Andereck & Nyaupane, 2011; Andereck & Vogt, 2000; Bachleitner & Zins, 1999; Carmichael, Peppard Jr, & Boudreau, 1996; Kim, 2002; Lankford, 1994; Nichols, Stitt, & Giacopassi, 2002; Perdue et al., 1999; Roehl, 1999). Research which used subjective indicators will be examined first and then studies which applied objective indicators will be investigated.

Allen et al. (1993) examined residents' attitudes toward recreation and tourism development in ten rural Colorado towns. They found that residents' attitudes towards tourism development in communities with both high economic and tourism development and low economic and tourism development were more positive than those residents of the low/high or high/low economic and tourism development communities. Moreover, they also found that in all four community groups residents were significantly more positive toward the effects of recreation on their quality of life than the effects of tourism development on quality of life.

Allen et al. (1988) explored changes in resident perception of seven dimensions (public services, economics, environment, medical services, citizen involvement, formal education, and recreation services) of community life across 20 communities classified on the basis of the percentage of retail sales derived from tourism. The results support the tourism development cycle theories. Specifically, lower to moderate levels of tourism development were beneficial to the study communities but as development continued resident perception of community life declined.

In the longitudinal study Carmichael et al. (1996) investigated changing local resident attitudes towards the casino, their Native American neighbors, and future development. The results indicated that residents perceive significantly reduced quality of life in their town. Specifically, crime and traffic were perceived as much worse in 1995 than in earlier years, the historic value of the towns was seen as more affected and the towns were deemed less desirable places to live.

Perdue et al. (1999) explored the impact of gaming tourism on resident quality of life (QOL) in host communities. They compared the concepts of tourism development cycle and social disruption theories for assessing the impact of gaming tourism on residents' QOL. They collected data from the five different communities: a nongaming community, three early stage gaming communities, and a late stage gaming community. In order to measure overall QOL this study used four different subjective indicators. The results showed support for social disruption theory that residents' QOL is expected to initially decline and then improve with community and resident adaption to the new situation.

Roehl (1999) examined the relationship between resident characteristics, perception of the impact gaming, and perceived QOL. The results showed that respondents' characteristics

were related to specific perceptions about gambling's impacts moreover, perceived social costs are negatively correlated with QOL whereas perceived job growth is positively correlated with QOL. In other words, if economic benefits to the community and personal benefits to residents are perceived to be high while social costs were perceived to be low, then QOL was perceived to be high. If respondents believed that casinos were associated with relatively more social costs and fewer benefits then QOL was perceived to be low.

Bachleitner and Zins (1999) examined differences in tourism demand toward cultural benefits between urban multifunctional and rural region for two years. They mentioned that a high degree of regional identification with the space, history, and cultural heritage of the destination improves the QOL of residents.

Andereck and Vogt (2000) mentioned that early studies on resident's reactions or feelings towards tourism development can be divided into studies which have a focus on tourism impacts and studies which have a tourism attitude focus. This study examines the relationship between resident attitudes toward tourism and support for specific tourism development options in seven diverse communities. Based on 37 attitude items they developed three dimensions which are community development, quality of life, and negative impacts, and found that these three variables positively affect tourism development in general. However, seven communities have differing attitudes about tourism with respect to community development, quality of life, and negative impacts.

Lankford (1994) compared attitudes toward tourism development and planning at the local and regional level among the key actors in the process. Comparisons between four groups (residents, government employees, decision makers, and local business owners) were made by using a standardized tourism impact attitudes scale (TIAS). The results indicated that key actors

in the community development process differ with regard to their support for tourism development and promotion. Specifically, resident groups differ significantly from the other three groups regarding the quality of life issues such as noise, crime, litter, and environmental impacts. The other three groups felt that tourism did not contribute as much to these impacts while residents felt tourism increased these negative impacts.

Nichols et al. (2002) examined the impact that casino has on quality of life as perceived by residents in eight US communities that recently adopted casino gambling. Respondents were asked five questions related to quality of life. Two of the questions are related to crime, one to economic conditions, and two to general community satisfaction. The results demonstrated that the casino impacts quality of life. However, it is not uniform either between or within communities. Depending on different characteristics such as demographic, proximity and relationships with the casino, and moral attitudes toward the casino residents' attitudes toward quality of life are different.

Kim (2002) conducted one of the first studies that attempted to establish the relationship between tourism impacts and quality of life. She tested a theoretical model that links community residents' perception of tourism impact (economic, social, cultural, and environmental) with residents' satisfaction with particular life domains (material well-being, community well-being, emotional well-being, and health and safety well-being) and overall life satisfaction. Results indicated that residents perceived tourism impacts and these impacts influence their sense of well-being in various life domains which in turn affect overall QOL.

Andereck and Nyaupane (2011) investigated the relationship between resident perception of the role of tourism and quality of life. In order to measure QOL, this study used 38 indicators and based on exploratory factor analysis they found 8 life domains: community well-being;

urban issues; way of life; community pride and awareness; natural/cultural preservation; economic strength; recreation amenities; and crime and substance abuse.

Objective indicators, as opposed to subjective indicators, have been used in limited research (Meng, Li, & Uysal, 2010; Perdue & Gustke, 1991). Perdue and Gustke (1991) investigated changes in several objective indicators (population; economic; education; health; welfare; crime) of QOL across the 100 counties of North Carolina and classified them into five groups on the basis of per capita tourism receipts. Their findings indicate that the economic benefits of tourism development, per capital income, per student education expenditures, and the quality of available health care facilities all increased with increasing levels of tourism development.

Meng et al. (2010) examined whether significant differences exist among the three groups of provinces with varying levels of tourism development by using 17 objective indicators of QOL such as income, annual per capital income, consumption composition, and Engel coefficient. The study conducted on China revealed that the residents of provinces with the highest level of tourism development lead a significantly "better life" than those who are in the regions on medium or low level of tourism development, as measured with a select number of objective indicators of QOL.

As seen from the selected studies described above, tourism development or impacts affect residents' QOL, and their level of QOL is different depending on internal and external factors (Andrews & Withey, 1976; Cummins, 1997). In general, an examination of studies on impacts and QOL indicate that positive impacts contribute positively to community QOL, while negative impacts reduce the QOL of residents. Therefore, for this study, the relationship between tourism impacts and QOL are proposed as the following propositions:

P 1: Perception of tourism impacts in different life domains (material, emotional, community, and health/safety) affects satisfaction with life domains (material, emotional, community, and health/safety).

P 2: Overall quality of life is a function of satisfaction with life domains (material, emotional, community, and health/safety).

Not all residents perceived tourism's impacts similarly. For example, those who directly benefit from tourism through employment are more likely to support it and are more satisfied with their QOL. Furthermore, some studies have shown that demographic characteristics are related to differences in perceptions about tourism impacts (Milman & Pizam, 1988; Perdue et al., 1990; Roehl, 1999). In comparison to the amount of research conducted on individual stakeholder groups, such as residents, limited research has been done to compare the perceptions of different stakeholder groups (Byrd et al., 2009). Moreover, tourism researchers have in the past focused on residents' QOL perceptions, there are only few empirical contributions highlighting perceptions of tourism stakeholders such as entrepreneur's and tourism worker's perspective (Byrd et al., 2009; Deery, 2008; Jurowski & Brown, 2001; Weiermair & Peters, 2012). QOL is not equally important to all people. Murray (1938) mentioned that individuals of one social class may share similar notions of which needs are important to them and those notions differ across social classes.

Therefore, this study will examine whether the perspectives of different stakeholders have a moderating effect on the relationship between the perception of tourism impacts in life domains and sense of well-being in life domains. In the next section, concepts of stakeholders will be reviewed.

2.4 STAKEHOLDERS

Stakeholders can be defined in the tourism field as persons or groups who can affect or be affected by the tourism business within a particular market or community and who have interests in the planning, process(es), delivery, and/or outcomes of the tourism business (Freeman, 1984; Yoon, 2002). The common examples of tourism stakeholders are as follows: chambers of commerce, tourism authorities, local tourism agencies, non-government organizations, tourism related associations and councils, convention and visitors bureaus, tourism planning and development companies, tourism related faculty and professionals, local and state parks, and visitor and information centers (Freeman, 1984; Yoon, 2002).

In order to understand different stakeholders' attitudes and perspectives, stakeholder theory and social exchange theory have been applied. Stakeholder theory suggests that an organization is characterized by its relationships with various groups and individuals, including employees, customers, suppliers, governments, and members of the communities (Freeman, 1984). In general, the concept is about what the organization itself should be and how it should be conceptualized. The stakeholder theory posits that the various groups can and should have a direct influence on managerial decision-making. Consideration should be given to stakeholder groups, regardless of the relative power or interest held by each and each stakeholder group must participate in determining the future direction of the firm in which a stake is in questions (Donaldson & Preston, 1995; Sautter & Leisen, 1999).

Ap (1992, p. 668) redefined social exchange theory which is grounded in sociology as "a general sociological theory concerned with understanding the exchange of resources between individuals and group in an interaction situation". From a tourism development standpoint, social exchange theory assumes that stakeholders' attitudes towards and supports for tourism in their

community will be influenced by their evaluation of the actual and perceived outcomes in tourism (Andereck et al., 2005). Social exchange theory suggests that people evaluate an exchange based on the costs and benefits incurred as a result of that exchange. If the individual perceives benefits from an exchange, they are likely to evaluate it positively; however, if they perceive costs, they are likely to evaluate it negatively.

Depending on types of stakeholders, their costs and benefits are different. Therefore, a clear understanding of the attitudes and interests of stakeholders is a necessary precursor to the planning and management of sustainable tourism (Belisle & Hoy, 1980). This indicates that stakeholders are essential for the development, successful operation, and long-term sustainability of tourism. If tourism stakeholders receive benefits from tourism impacts, they will prefer tourism development and will support destination planning and strategies. As a result, tourism destination residents will receive positive impacts of tourism such as economic, social cultural and environmental benefits from enhanced tourism destination well-being. Moreover, the support of destination attraction development and destination competitive strategized by tourism stakeholders can enhance the possibility of successful tourism in a region and could help to improve destination competitiveness. Tourists and visitors will also receive more benefits from travel experiences if the tourism destination and attractions are appropriately developed and promoted.

Even though the perceptions or attitudes of stakeholders are essential, limited research has been conducted comparing multiple stakeholder groups in a community (Byrd et al., 2009). Thomason, Crompton, and Kamp (1979) tried to measure residents and interest groups' (entrepreneurs and public sector personnel) perceptions of tourism. The results show that entrepreneurs perceived visitors significantly more favorably then did the other two respondent

groups and those who favored tourism development were more likely to be economically dependent upon the tourists.

Allen and Gibson (1987) compared the perceptions of community leaders and the general public regarding the importance of 22 proposed community work projects and satisfaction with various dimensions of community life. They found that health and safety, education, environmental, economic, public administration, community involvement, and leisure were considered important to one's perception of community life by both groups. However, residents were less satisfied than leaders on every dimension of community life.

Lankford (1994) examined the impacts of tourism development of business owners, paid government officials, elected, appointed officials, and residents of the Columbia River Gorge region of Oregon and Washington. He found that residents were more negative about the impacts, or rather more cautious about the benefits of tourism than were government employees, elected/appointed leaders or business owners. Business owners, elected/appointed leaders, and government employees seem to be in agreement with regard to support for tourism developed in the Columbia River Gorge.

Jurowski and Brown (2001) mentioned that depending on citizens' community involvement, their perception of tourism-related QOL is different. Therefore, an understanding of the perceptions of citizens who are involved in community organization is important. Using telephone interview results showed that residents who belonged to no community organizations evaluated the quality of most aspects of their lives lower than those one that were the most involved. They found a positive relationship between membership in community organizations and resident's satisfaction with their QOL.

Byrd et al. (2009) examined differences in perception of tourism's impacts on a rural community existed between four stakeholder groups: government officials, entrepreneurs, residents, and tourist. The results showed that there are significant differences between the entrepreneurs and government officials, residents and governmental officials, residents and entrepreneurs, and residents and tourists. Specifically, residents indicated a higher level of agreement than government officials on three negative impact items such as increased crime rate and property taxed.

Previous literature suggests that a number of differences exist between stakeholders such as residents, government officials, and tourism promoters within a community (Byrd et al., 2009; Jurowski & Brown, 2001; Lankford, 1994; Murphy, 1983, 1985; Thomason et al., 1979; Tyrrell, 1984; Weiermair & Peters, 2012). The differences in perception of tourism and tourism development can result in conflict between the stakeholder groups; therefore, in order to reduce conflict, it is necessary that the attitudes and perceptions of the stakeholders are identified and understood. Lankford (1994) mentioned that the impacts of tourism on community QOL have been researched by an interdisciplinary group of researchers and reported in a diverse number of journals. This body of literature suggests the need to identify the various opinions and attitudes held by key actors in the tourism planning and development process in order to mitigate problems.

Therefore, the third proposition of this study is to see whether the perspectives of different stakeholders have a moderating effect on the relationship between the perception of tourism impacts in life domains and sense of well-being in life domains.

P 3: The relationship between perception of tourism impacts in life domains (material, emotional, community, and health/safety) and satisfaction with life domains (material, emotional, community, and health/safety) is moderated by stakeholders' perspectives.

2.5 CHAPTER SUMMARY

The second chapter of this study defines the main constructs based on the conceptualization and previous empirical and theoretical research. Specifically, this chapter reviews the relevant tourism impact studies and general propositions. Three different types of tourism impacts, impact measurements, and resident's attitudes toward tourism impacts were reviewed. In the second literature review part, main concept of QOL, common life domains, measurement of QOL, and relationship between tourism impacts and QOL were examined. In the last part, discussions are provided whether stakeholders' perceptions or perspectives are different. Concepts of stakeholders, stakeholder theory, and social exchange theory are reviewed. The next chapter discusses research design and methodology in detail.

CHAPTER THREE: METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methodology used to test the theoretical model of stakeholders' QOL and the relationships among constructs (Figure 3.1). The conceptual model and specific hypotheses are discussed in the next section, followed by a description of the survey instrument and a discussion of the development of the measurement variables. Finally, data collection and methods for the statistical analyses are explained.

3.2 RESEARCH FRAMEWORK

The main purposes of this study are three-fold. The first is to assess the direct effects of the perception of tourism impacts in life domains on satisfaction with particular life domains. The second is to examine the direct effects of satisfaction with life domains on overall life satisfaction. The particular life domains are tested as having two domains: material life and non-material life domains. The third purpose is to investigate the moderating effects of the perspectives of different stakeholders between the perception of tourism impacts in life domains and satisfaction with life domains. The stakeholders are divided into two groups: employed residents in the hospitality and tourism industry and community residents. To address these research purposes, the framework of the research and hypotheses are proposed (Figure 3.1). The literature review presented in the previous chapter serves as a basis for the development and discussion of the theoretical model. The next section of this chapter presents the study hypotheses.

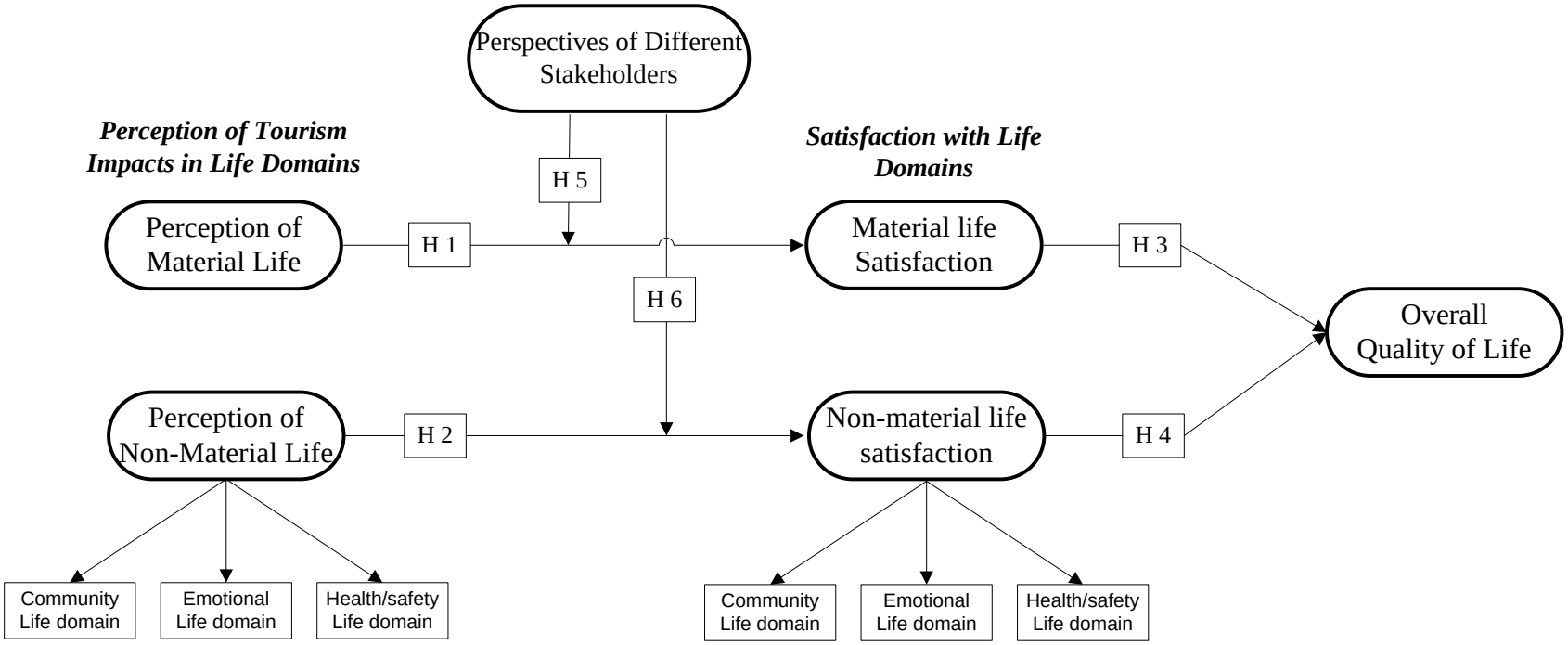

Figure 3. 1 Theoretical model and the hypotheses

3.3 RESEARCH HYPOTHESES

The following is a list of hypotheses presented in the theoretical model and empirically tested in this study (Figure 3.1).

Hypothesis 1: The perception of tourism impacts in the material life domain affects satisfaction with the material life domain.

Hypothesis 2: The perception of tourism impacts in the non-material life domain affects satisfaction with the non-material life domain.

Hypothesis 3: Satisfaction with the material life domain affects overall quality of life.

Hypothesis 4: Satisfaction with the non-material life domain affects overall quality of life.

Hypothesis 5: The relationship between the perception of tourism impacts in the material life domain and satisfaction with the material life domain is stronger for employed residents who work in the hospitality and tourism industry than community residents.

Hypothesis 6: The relationship between the perception of tourism impacts in the non-material life domain and satisfaction with the non-material life domain is stronger for community residents than employed residents who work in the hospitality and tourism industry.

3.4 RESEARCH DESIGN

3.4.1 Sample

Stakeholders who affect or are affected by tourism development are the unit of analysis in this study. The target population of this study is two different stakeholder groups in specific tourism destinations (i.e., New York; Hawaii; Nevada; Florida; Virginia):

Group 1: Related to the hospitality and tourism industry, whether employed, self-employed, or a business owner

Group2: Unrelated to the hospitality and tourism industry, whether employed, self-employed, a business owner, or retired

Stakeholders who are at least 18 years old and have lived in their community for at least a year were considered as potential participants. The minimum sample size should be at least 200 (or more) to ensure appropriate use of the structural equation model (SEM) and to minimize the chance of getting exaggerated goodness-of-fit indices due to small sample size (Anderson & Gerbing, 1988). The total target sample size for this study was 500 (100 samples in each destination). To compare perspectives of two different stakeholders, the study tried to get similar sample sizes for each group in order to populate the sample.

3.4.2 Study sites

Butler (1980) mentioned that the level of the development of a destination affects residents' and tourists' perceptions and experiences. The level of development is defined by the number of visitors and the level of infrastructure as indicators. Specifically, there are six stages: exploration of the tourism area, involvement, development, consolidation, stagnation, and post-stagnation stages.

A number of previous studies have found that depending on the level of tourism development residents' perceptions and attitudes regarding tourism impacts are different (Allen et al., 1993; Allen et al., 1988; Kim, Uysal, & Sirgy, 2012; Martin & Uysal, 1990; Uysal, Woo, et al., 2012). Uysal, Woo, et al. (2012) examined the level of tourism development and its effect on the quality of life of a destination community. Based on the previous literature review, they found that, depending upon the level of destination development, residents' attitudes toward economic, sociocultural, and environmental factors might change from positive to negative or negative to positive. They also found that different levels of tourism development affect residents' quality of life differently. Furthermore, Allen et al. (1988) found that the relationship between residents' perceptions of community life satisfaction and the level of tourism development in 20 rural Colorado communities varied with respect to the amount of tourism development. According to their conclusions, depending on the level of development, residents' attitudes showed a change from positive to negative.

As indicated, the level of tourism development affects community residents' perceptions, attitudes, and quality of life. Therefore, in order to control the level of tourism development, the current study selected five locations with a similar stage of tourism development based on the number of tourists:

- New York City, NY: metro area
- Orlando, Florida: theme park
- Hawaii: beach/leisure activities
- Las-Vegas, Nevada: entertainment/ gambling
- Virginia: historic/ cultural cites

According to the U.S. Census Bureau, 86 million visitors came to New York in 2010 (Appendix A)—the greatest number in the United States, followed by Florida (58 million), California (56 million), Nevada (25 million), and Hawaii (21million). Even within the same state, each city or county has a different level of tourism development and attracts a different number of tourists. For instance, as indicated in Table 3.1, 97% of New York tourists visited New York City and 96% of Nevada visitors came to Las Vegas. Thus, specific cities (i.e., New York City, Las Vegas, and Orlando) were selected as study sites. However, for Hawaii and Virginia, the entire states were considered as study sites because, compared to other study sites, Hawaii has a small number of residents and all of the Hawaiian islands are considered to be a popular tourism destination. Virginia is a historical tourism destination, and most tourism attractions are located in many different places. Therefore, the entire state of Virginia was considered as a study site.

3.4.3 Survey instrument

The survey instrument consists of seven parts (Appendix B). The first part measures demographic information; the second part examines perceptions of tourism impacts in life domains. The third part investigates life domain satisfaction, and the fourth part examines the relative importance of quality of life indicators. Overall life satisfaction is measured in section five, and the perceived value of tourism development and the general perception of tourism development are discussed in the last part. All of the sections consist of items that utilize a 5-point Likert type scale whose anchors include (a) not at all affected to very affected, (b) very unsatisfied to very satisfied, or (c) strongly disagree to strongly agree.

3.4.4 Measurement scales

As shown in the theoretical model (Figure 3.1), the model comprises five major constructs (perception of material life; perception of non-material life, material life satisfaction; non-material life satisfaction; overall quality of life). The non-material life domain consists of three different sub-dimensions: community life, emotional life, and health/community life. Each sub-dimension includes several measurement indicators.

The measurement scales and survey questionnaire were developed in several stages following the procedures recommended by Churchill Jr (1979) and DeVellis (1991). The scale development process begins with the creation of items to measure the constructs under examination. To generate the scale items, systematic literature reviews, discussions and/or focus groups with experts, and content analyses are useful (Churchill Jr, 1979). To generate a list of indicators in this study, the existing literature review was used (Andrews & Withey, 1976;

Cummins, 1996; Kim, 2002; Sirgy, 2001). After generating a list of indicators, four professional experts were asked to evaluate and add or delete valuable indicators in each life domain.

After the indicators were developed, they were pretested for content adequacy using the developed instrument. Ensuring content adequacy prior to the final questionnaire to be developed provided support for construct validity (Hinkin, Tracey, & Enz, 1997). Three different techniques were developed to test construct validity by Hinkin et al. (1997). The first method asks respondents to categorize or sort items based on their similarity to construct definitions. For this method, experts and students can be used. The second method uses both sorting and factor analytical techniques. Respondents are asked to rate the extent to which items correspond with construct definitions, and the responses are then factor analyzed. The last method can be conducted with a relatively small sample.

For this study, the second method was applied. Definitions of life domains were listed on the left-hand side of each page and indicators were listed on the right-hand side. The list of life domains was repeated in the same order on each page while the indicators were determined through the use of a random numbers. For this step, naïve respondents are required (Hinkin et al., 1997). Therefore, approximately 200 university students were asked to match items with a corresponding life domain. In total, 124 completed questionnaires were collected. The retained indicators were factor analyzed and then incorporated into a survey instrument.

In order to measure each perception of tourism impacts in the life domain and satisfaction with the life domain, the same exact list of indicators was used. For instance, in order to measure "perception of tourism impacts in material life" and "material life satisfaction," the same seven material life indicators were used. However, each construct was asked in a different way. For the perception of tourism impacts in material life, respondents were asked to "How does the impact

of tourism affect each of the material life indicators?"; for the material life satisfaction, respondents were asked "How satisfied are you with each of material life indicators?" The following discussion details the five constructs and the measurement items used to assess these constructs.

The material life domain is measured by specific material life indicators; meanwhile, the non-material life domain consists of three sub-dimensions, and each sub-dimension is measured by specific indicators. Therefore, specific measurement indicators of the material life construct and the sub-dimensions of non-material life are explained in the following subsections.

3.4.4.1 Material life domain

The material life domain can be measured by cost of living and income/employment (Kim, 2002). Kim (2002) developed a list of indicators of the material life domain based on the previous research. She found three items for cost of living and four items for income and employment subdomains. These indicators are appropriate for the current study; therefore, these seven indicators were used to measure the material life domain. Thus, in order to measure two constructs of "perception of material life domain" and "satisfaction with material life," seven indicators were used:

Material life indicators

- Real estate taxes
- Cost of living
- Cost of basic necessities such as food, housing, and clothing
- Income at your current job

- Economic security of your job
- Family income
- Pay and fridge benefits you get

The perception of the material life was measured on a 5-point Likert type scale with classifications of "not at all affected to very affected." For instance, "How does the impact of tourism affect the real estate taxes in your community?" For the material life satisfaction, a 5-point Likert scale was also used with the classification of "very unsatisfied to very satisfied." For example, "How satisfied are you with the real estate taxes in your community?"

3.4.4.2 Community life domain

In order to measure the non-material life domain, the community life domain was used as one of the sub-dimensions. Five items were applied to investigate the community life domain based on the studies of Andrews and Withey (1976), Cummins (1996), and Kim (2002):

Community life indicators

- Conditions of the community environment (air, water, land)
- People who live in your community
- Service and facilities you get in your community
- Community life
- Public transportation

Perception of community life was measured on a 5-point Likert type scale with classifications of "not at all affected to very affected." For instance, "How does the impact of tourism affect the conditions of your community environment (air, water, land)?" For the community life satisfaction, a 5-point Likert scale also used with classifications of "very unsatisfied to very satisfied." For example, "How satisfied are you with the public transportation?"

3.4.4.3 Emotional life domain

The emotional life domain is also one of the sub-dimensions of the non-material life domain. Cummins (1997) mentioned that the emotional life domain can be explained by leisure well-being and spiritual well-being; thus, the emotional life domain can be measured by these two components. Seven items related to leisure and spiritual well-being were adopted from Andrews and Withey (1976), Cummins (1996), Sirgy (2001), Sirgy (2002), and Kim (2002):

Emotional life indicators

- Spare time
- Leisure activities
- Leisure life
- Religious services
- The way culture is preserved in the community
- Leisure life in general
- Spiritual life in general

Perception of emotional life was measured on a 5-point Likert type scale with classifications of "not at all affected to very affected." For instance, "How does the impact of tourism affect your spare time?" For the emotional life satisfaction, a 5-point Likert scale was also used with classifications of "very unsatisfied to very satisfied." For example, "How satisfied are you with your spare time?"

3.4.4.4 Health/safety life domain

The health and safety life domain consists of health well-being and safety well-being. These two sub-domains were measured. Five items were proposed to measure health well-being and three safety life domain indicators were used. The domain of safety is intended to be inclusive of such constructs as security, personal control, privacy, and residence stability (Cummins, 1997). The health and safety indicators include

Health/ safety life indicators

- Health facilities
- Health service quality
- Water quality
- Air quality
- Environmental quality
- Environmental cleanliness
- Safety and security
- Accident rate or crime rate

3.4.4.5 Overall quality of life

Six items were adopted from previous research in order to measure overall quality of life (Diener, Emmons, Larsen, & Griffin, 1985; Diener, Horwitz, & Emmons, 1985; Sirgy, 2002).

- I am satisfied with my life as a whole
- The conditions of my life are excellent
- In most ways my life is close to ideal
- So far I have gotten the important things I want in life
- If I could live my life over, I would change almost nothing
- In general, I am a happy person

Overall quality of life was measured on a five-point Likert type scale with classifications of “strongly disagree to strongly agree”.

3.4.5 Data collection

This study used a commercial online market research company (www.surveymonkey.com) to distribute the questionnaire to potential respondents. The company has a true sample panel member of more than two million panel members in the United States as well as in Canada, France, the United Kingdom, and Australia. Overall, their panel is a diverse group of people and is reflective of the American population. However, it is comprised of people who have internet access and have joined a program to take the survey.

After the survey was created by the researcher, the survey company sent emails to targeted demographics. Potential panels participated in the online survey through the company's website. When the maximum number of qualified respondents had been reached, the survey was automatically closed.

3.5 STATISTICAL METHODS

To analyze the conceptual model, this study adopted two different techniques: structural equation modeling (SEM) and hierarchical multiple regressions (HMR). To test the conceptual model without the moderating effect (perspectives of different stakeholders), SEM was used. For the validity and reliability, a confirmatory factor analysis was conducted and then the structural model was tested. HRM was applied to test the moderating effect. Each dependent variable was regressed on an independent variable and a moderator.

3.5.1 Structural Equation Modeling (SEM)

Structural equation modeling (SEM) is a family of statistical models that examine the relationships among numbers of variables (Hair, Black, Babin, Anderson, & Tatham, 2010). SEM explains the structure of interrelationships expressed in a series of equations. Therefore, it is useful when examining the relationships among constructs simultaneously (the dependent and independent variables) (Hair et al., 2010). For this study, to test the conceptual model and a series of hypotheses (except the hypothesis related to the moderating effects), SEM was used utilizing the LISREL 8.51 structural equation analysis package with the maximum likelihood (ML) method of estimation. Two different components of SEM were investigated: the measurement model and structural equation model.

The measurement model describes the relationship of the observed variables to the underlying constructs, with the constructs allowed to intercorrelate freely (Anderson & Gerbing, 1988). According to Anderson and Gerbing (1988), measurement models should be examined and re-specified before the measurement models and structural models are examined simultaneously. A confirmatory factor analysis was used to test the measurement model. The use of a confirmatory factor analysis ensures the unidimensionality of the scales measuring each construct in the model. Therefore, before testing the overall measurement model, the measurement unidimensionality of each construct was examined, and then the overall measurement model fit was tested.

After assessing the measurement model, the structural model was examined. The structural model is the hypothetical model that describes relationships among latent constructs and observed variables that are not indicators of latent constructs (Hoyle, 1995). This statistical method provides parameter values for each of the research hypotheses and determines their

respective significance. Therefore, a structural model was used to test the path coefficient of each hypothesized relationship among the perception of tourism impacts in life domains, sense of well-being in life domains, and overall QOL.

3.5.2 Hierarchical Multiple Regression (HMR)

HMR is the most widely used statistical procedure to measure moderating effects (Kim, 2002). HMR can examine the moderating effects for moderator variables measured on both dichotomous and continuous scales (Cohen, Cohen, West, & Aiken, 1983). HRM provides researchers with important information about slope difference for groups. As a result, it has been widely applied to compare groups (Aguinis & Stone-Romero, 1997). Therefore, this study used the HMR technique to investigate the moderating effects of stakeholders' perspectives.

3.6 CHAPTER SUMMARY

This chapter has explained the master plan for conducting the research described in Chapters 1 and 2. It has included the conceptual model, research design, and statistical models. A series of hypotheses was also introduced based on the conceptual model. The research design involves testing the conceptual model and the study hypotheses. Considerations regarding sampling, instrument design, data collection, and statistical methods are discussed. Finally, statistical methods are examined. The results of the data gathering process and data analysis are presented in the next section.

CHAPTER FOUR: ANALYSIS AND RESULTS

4.1 INTRODUCTION

The results of the data analysis and hypothesis testing are presented in this chapter. The first section presents the pretest results of the scale items developed and used in this study. The second section provides a description of the survey methods employed in this study, as well as the demographic profile of the survey respondents. The third section of the chapter explains Confirmation Factor Analysis (CFA) in order to confirm the factor structure of the five constructs. The fourth section of the chapter presents the results of hypothesis testing.

4.2 PRE-TEST

As stated in Chapter Three, measurement items were developed by following the procedures recommended by Churchill Jr (1979) and DeVellis (1991). Original items were adopted from the previous research and then items were examined by four professors to assess content validity. Lastly, content adequacy was tested through a survey with 124 student samples.

According to Zikmund, Carr, Griffin, Babin, and Carr (2000), it is necessary to conduct a pre-test of scale items before the final survey instrument is prepared. The main purpose of this step is to test the validity of scale items that were modified from previous studies. Based on the scale development procedure described in the previous chapter, 27 scale items were developed for material, community, emotional, and health/safety life domains. In addition, 6 items were developed in order to measure overall quality of life. The pre-test was conducted using these 33 scale items.

4.2.1 Pre-test survey method

The initial survey questionnaire was developed by the researcher and then the questionnaire was distributed using a commercial survey company (www.surveymonky.com). The company emailed the survey invitation letters to the target population. Potential respondents could access and participate in the survey through the company's website.

4.2.2 Pre-test sample

As mentioned in the previous section, five tourism destinations were selected for this study (NYC, NY; Orlando, FL; Las-Vegas, NV; Virginia; Hawaii). For the pre-test, data was collected from residents who live in NYC. The questionnaire was distributed to the target population through the survey company's website. In order to collect data from the population targeted, the survey included a screening question at the beginning of the survey. A total of 389 visits were logged, and 100 completed questionnaires were generated.

Of those sampled, 28 percent of the respondents indicated that they were female and 72 percent that they were male (Table 4.1). Among 100 respondents, 40 respondents worked in the hospitality and tourism industry and 33 respondents worked in non-hospitality or tourism industry jobs. Twenty-seven respondents were unemployed, retired, or students. The average age of the respondents was 36. A majority of respondents (69%) were Caucasian. Fifty-nine percent of respondents had a college or graduate degree.

Table 4.1 Demographic profile of the pretest sample (N=100)

Category	Frequencies
Gender	
Male	72
Female	28
Age	
Under25	14
25-34	47
35-44	19
45-54	10
55-64	7
Over 65	3
Ethic group	
Caucasian	69
Hispanic	11
African-American	9
Asian	11
Other	1
Education	
Less than high school	1
High school	15
Vocational degree	2
Associate degree	4
Some college	19
College degree	28
Master's degree	28
Doctoral degree	27
Employment	
Related to the hospitality and tourism industry employed, self-employed, or business owner	40
Unrelated to the hospitality and tourism industry employed, self-employed, or business owner	33
Unemployed, retired, or student	27

4.2.4 Results from the pre-test

The responses were analyzed to test the reliability of the measurement items. The feedback received was also used to refine the initial instrument scale and develop the final version of the survey instrument. As previously indicated, one of the objectives of pre-test is to establish a uni-dimensional scale for the measurement of a construct. Uni-dimensionality refers to the existence of a single construct explaining a set of attributes. To identify scale dimensionality, an Exploratory Factor Analysis (EFA) with a principle component method was conducted for each construct. First of all, to determine the appropriateness of factor analysis, the Bartlett's test of Sphericity and the Kaise-Meyer-Olkin (KMO) measure of sampling adequacy were examined. Bartlett's test of Sphericity should be significant ($p<.005$) for the factor analysis to be considered appropriate. The KMO index range from 0 to 1, with .6 suggested as the minimum value for a good factor analysis (Tabachnick, Fidell, & Osterlind, 2001). In order to make sure that each factor identified by EFA has only one dimension and each attribute loads only on one factor, attributes that had factor loadings of lower than .40 and attributes loading on more than one factor with a loading score of equal to or greater .40 on each factor were eliminated from the analysis (Hair Jr, Black, Babin, Anderson, & Tatham, 2010).

Factor analysis of three constructs (perception of material life, material life satisfaction, and overall quality of life) and six sub-dimensions (perception of community life, perception of emotional life, perception of health/safety, community life satisfaction, emotional life satisfaction, and health/safety life satisfaction) were examined.

4.2.4.1 Perception of material life

As stated in the chapters two and three, the perception of material life was examined as having cost of living and income/employment. Seven items were proposed to measure the perception of material life from the literature. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.90) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis indicated that one factor represented 82% of the explained variance of the scale (Table 4.2). All factor loadings were greater than .87. The reliability for seven items was .96.

Table 4.2 Factor analysis of the perception of material life domain

	Factor loadings	Variance explained	Cronbach alpha
		82%	*.96*
The real estate taxes	.887		
The cost of living in general	.871		
The cost of basic necessities such as food, housing, and clothing	.906		
Income at your current job	.938		
The economic security of your job	.951		
Family income	.951		
The pay and fringe benefits you get	.895		

4.2.4.2 Perception of community life

The perception of community life was examined using five indicators. From a principal component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.87) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis showed that all of five indicators were loaded

on one factor (Table 4.3). They explained 87% of the total variance. The reliability coefficients were .96 which means they are all reliable.

Table 4.3 Exploratory factor analysis of the perception of community life domain

	Factor loadings	Variance explained	Cronbach alpha
		87%	*.96*
The conditions of your community environment	.904		
The people who live in your community	.943		
The service and facilities you get in your community	.965		
Community life	.954		
Public transportation	.895		

4.2.4.3 Perception of emotional life

The perception of emotional life was examined as having leisure and spiritual well-being indicators. Seven items were proposed to measure the perception of emotional life from the literature. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.92) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis indicated that one factor represented 85% of the explained variance of the scale (Table 4.4). All factor loadings were greater than .88. The reliability for seven items was .97.

Table 4.4 Exploratory factor analysis of the perception of emotional life domain

	Factor loadings	Variance explained	Cronbach alpha
		85%	*.97*
Spare time	.919		
Leisure activities	.880		
Leisure life	.957		
Religious services	.923		
The way culture is preserved in your community	.926		
The leisure life in general	.924		
The spiritual life in general	.907		

4.2.4.4 Perception of health/safety

The perception of health and safety construct was examined as having health and safety scales. Eight items were proposed to measure the perception of health/safety domain from the literature. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.90) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis with Varimax rotation indicated that all of eight items loaded on one factor (Table 4.5). The factor represented 86% of the explained variance. The Cronbach's alpha reliability estimates .98.

Table 4.5 Exploratory factor analysis of the perception of health/safety life domain

	Factor loadings	Variance explained	Cronbach alpha
		86%	*.98*
Health facilities	.911		
Health service quality	.919		
Water quality	.912		
Air quality	.956		
Environmental quality	.939		
Environmental cleanliness	.949		
Safety and security	.931		
Accident rate or crime rate	.916		

4.2.4.5 Material life satisfaction

The material life satisfaction was examined using the same indicators measured the perception of material life domain. Seven items were used. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.84) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The

principle component factor analysis indicated that one factor represented 65% of the explained variance of the scale (Table 4.6). All factor loadings were greater than .70. The reliability for four items was .91.

Table 4.6 Exploratory factor analysis of material life satisfaction

	Factor loadings	Variance explained	Cronbach alpha
		65%	*.91*
The real estate taxes	.700		
The cost of living in general	.777		
The cost of basic necessities such as food, housing, and clothing	.831		
Income at your current job	.888		
The economic security of your job	.766		
Family income	.811		
The pay and fringe benefits you get	.815		

4.2.4.6 Community life satisfaction

The pretest of the community life satisfaction included five indicators. A principle component factor analysis with varimax rotation was performed in order to determine the scale items. To determine the appropriateness of factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity were first examined. The result of the KMO test indicated an acceptable level (.816). The Bartlett's test of sphericity was also found to be significant at a level of .0001. The principle component factor analysis indicated that one factor was derived and it represented 70% of the explained variance of the scale (Table 4.7). All factor loadings were greater than .74. The reliability coefficient was .87 which exceeded the recommended reliability score of .70.

Table 4.7 Exploratory factor analysis of community life satisfaction

	Factor loadings	Variance explained	Cronbach alpha
		70%	*.87*
The conditions of your community environment	.811		
The people who live in your community	.860		
The service and facilities you get in your community	.853		
Community life	.899		
Public transportation	.744		

4.2.4.7 Emotional life satisfaction

The emotional life satisfaction was also examined using the same indicators measured the perception of emotional life domain. Seven items were factor analyzed. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.88) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis indicated that one factor represented 79% of the explained variance of the scale (Table 4.8). All factor loadings were greater than .70. The reliability for seven items was .91.

Table 4.8 Exploratory factor analysis of emotional life satisfaction

	Factor loadings	Variance explained	Cronbach alpha
		79%	*.91*
Spare time	.693		
Leisure activities	.805		
Leisure life	.825		
Religious services	.860		
The way culture is preserved in your community	.869		
The leisure life in general	.825		
The spiritual life in general	.812		

4.2.4.8 Health/safety life satisfaction

As stated in Chapters two and three, the health/safety construct was examined as using the same indicators measured the perception of health/safety life domain. From a principle component factor analysis, results of the Kaiser-Meyer-Olkin measure of sampling adequacy test (.81) and the Bartlett's test of sphericity ($p<.0001$) indicated that data were acceptable for factor analysis. The principle component factor analysis with Varimax rotation indicated that all of eight items loaded on one factor (Table 4.9). The factor represented 62 % of explained variance. The Cronbach's alpha reliability estimates .91.

Table 4.9 Exploratory factor analysis of health/safety life satisfaction

	Factor loadings	Variance explained	Cronbach alpha
		62%	*.91*
Health facilities	.729		
Health service quality	.768		
Water quality	.713		
Air quality	.873		
Environmental quality	.837		
Environmental cleanliness	.844		
Safety and security	.780		
Accident rate or crime rate	.712		

4.2.4.9 Overall quality of life

The pretest of the overall quality of life had 6 items. To determine the appropriateness of factor analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity were examined. The results of the KMO test indicated an acceptable level (.84). The Bartlett's test of sphericity was also found to be significant at a level of .0001. The principle component factor analysis indicated that one factor was derived and represented 76% of the

explained variance of the scale. All the factor loadings of the items were above .80 and the reliability coefficients were above .90.

Table 4.10 Exploratory factor analysis of overall quality of life

	Factor loadings	Variance explained	Cronbach alpha
		76%	*.94*
I am satisfied with my life as a whole.	.844		
The conditions of my life are excellent.	.895		
In most ways my life is close to ideal.	.881		
So far I have gotten the important things I want in life.	.910		
If I could live my life over, I would change almost nothing.	.869		
In general, I am a happy person	.828		

4.2.5 Summary of pre-test

The pretest data was collected from the residents who lived in NYC in order to examine the measurement items for the proposed constructs: the perception of tourism impacts in life domains, life domain satisfaction, and overall quality of life. The results of exploratory factor analyses and reliability coefficients showed that all of dimensions presented uni-dimension and a satisfactory score of .7 and higher. Therefore, all items to measure the main constructs were considered to be reliable and valid.

4.3 DATE COLLECTION AND SAMPLE

This section of the chapter discusses the final survey method, the sample, the response rate, and the demographic characteristics of the final sample.

4.3.1 Survey method and samples

Data was collected using a marketing research company (Surveymonkey.com). An online panel survey was conducted through the company's website. The company emailed invitation letters to their panel of people who sign up to take surveys through Surveymonkey. The survey invitations were sent to around 4,000 respondents in February of 2013. Within one week, 1,790 respondents participated in the survey. Among these respondents, some of the respondents were filtered based on a screening question (residency). Only people who live in the selected destinations (Virginia, Las Vegas, Orlando, or Hawaii) could participate in the survey. 814 respondents were filtered out at the beginning of the survey and 50 responses were not completed, so these were deleted (Table 4.11). Next, the unusable responses that tended to answer in a certain direction or consciously misrepresent the truth were deleted. Therefore, a total of 407 responses were used for data analysis

Table 4.11 Response rate

	Number	Percent (%)
Total target population	3574	100
Total participation	1787	50
Screen population	814	23
Total completed responses	486	14
Incomplete responses	50	1.4
Unusable responses	30	.8
Total usable responses	407	10.8

4.3.2 Profiles of the respondents

The general demographic information of total sample is explained in this section in order to provide descriptive profile of the survey respondents (Table 4.12). Of the 407 respondents, 227 (55.8 %) were female while 187 (44.2%) were male respondents. Among 407 respondents, Ninety-two respondents live in Virginia, 79 in Hawaii, 109 in Las Vegas, and 127 in Orlando. Among 407 samples, ninety-five work in the hospitality and tourism industry. One hundred sixty-one work outside of the hospitality and tourism industry; 151 are retired, unemployed, or students. In terms of the ethic group, the majority of the survey participants were Caucasian (71.3%), followed by Hispanic (5.7%), African-American (6.1%), Asian (10.6%), and others (6.4%). Survey respondents also were asked their age in an open-ended question. Most of people were 45 or more (63.3%); around 18% of the respondents were between the age of 35-44. The average age of the respondents was 49 years old.

Table 4.12 Demographic characteristics of the respondents

Variables	Frequency	Percentage (%)
Gender (n=407)		
Female	227	55.8
Male	180	44.2
Residency (n=407)		
Virginia	92	22.6
Hawaii	79	19.4
Las-Vegas, Nevada	109	26.8
Orlando, Florida	127	31.2
Occupation (n=407)		
Related to the hospitality and tourism industry employed, self-employed or business owner	***95***	***23.3***
Chamber of commerce	1	.2
Travel information center	2	.5
State or local public parks	2	.5
Hotel or Resort	25	6.1
Restaurant	13	3.2
Airline	1	.2
Government official or Councils	1	.2
Nonprofit organization or association	1	.2
Convention and visitors bureau	4	1.0
Outdoor recreation company, facility, or outfitters	5	1.2
Local travel attractions (e.g. museum, theater)	4	1.0
Travel agency or Tour operators	3	.7
Tourism planning or development company	2	.5
My own private business (related to hospitality and tourism)	6	1.5
Others	25	6.1
Unrelated to the hospitality and tourism industry employed, self-employed or business owner	***161***	***39.6***
Unemployed, retired, or student	***151***	***37.1***
Ethnicity (n=407)		
Caucasian	290	71.3
Hispanic	23	5.7
African-American	25	6.1
Asian	43	10.6
Other	26	6.4
Age (n=407)		
18-24	22	5.4
25-34	55	13.5
35-44	72	17.7
45-54	92	22.6
55-64	103	25.3
65 or more	63	15.5

4.3.3 Descriptive statistics, Skewness, and Kurtosis

Since Structural Equation Modeling (SEM) is utilized for testing the hypotheses in this study, violation of the univariate or multivariate normality could invalidate statistical hypotheses testing (Hair Jr et al., 2010). Therefore, frequency distributions for each variable in the study were examined to ensure that the data were "clean". The results indicated that there was no error. Because, the survey was conducted through the online- website so the data were not keyed into SPSS by hand. Next, measure of central tendency was run for each of the variables in the study. The mean scores and standard deviation as well as skewness and kurtosis of each of the variables in the study are shown in Appendix C.

To assess the normality of the distribution of the data, the skewness and kurtosis of each variable were examined. The skewness value provides an indication of the symmetry of the distribution. Kurtosis, on the other hand, provides information about the 'peakedness' of the distribution. If the distribution is perfectly normal, a skewness and kurtosis value is 0 (Pallant, 2010). The critical value for both of these measures of normality is drawn from a z distribution. The SPSS software package was used to generate the skewness and kurtosis values for each of variables in the model. For the calculated skewness and kurtosis values, zero assumes perfect normality in the data distribution. Z value of ±2.58 indicating the rejection of the normality assumption at the .01 probability level, and ±1.96 signifies a .05 error level (Hair Jr et al., 2010). By applying the above criteria to the skewness values for each of the values listed in Appendix C. It is clear that no variable fell outside the ±1.96 range for skewness. Therefore, it can be assumed that all of the variables for the study are reasonably free from skewness, suggesting that the data used in the study not violate normal distribution properties.

Next, kurtosis was examined in each variable. Kurtosis measure how observations "cluster around a central point" for a given standard distribution (Pallant, 2010). Distributions that are more peaked than normal are called "leptokurtic" whereas those that are flatter than normal are referred to as "platykurtic". Positive values for kurtosis show that a distribution has a higher than normal peak. None of the variables fell outside ±2.56 range for kurtosis. Therefore, the study can conclude that none of variables was leptokurtic or platykurtic.

In order to control the level of tourism development, the current study selected five locations with a similar stage of tourism development based on the number of tourists. However, each destination appeals to different target markets (metro area; theme park; beach/leisure activities; entertainment/gambling; and historic/cultural cites). Therefore, their perception and attitudes regarding the possible impacts of tourism could be different. A series of ANOVA was conducted to see if there is any difference in the perception of impacts of tourism in life domains, life domain satisfaction, and overall quality of life in relation to the locations selected in this study. The results showed that there were some variations regarding the perception of tourism impacts in non-material life domain, satisfaction with non-material life domain, and overall quality of life. However, there was no statistical difference about the perception of tourism impacts in material life domain and satisfaction with material life domain (Appendix D).

4.4 DATA ANALYSIS

The section of the chapter discusses the results of the statistical analysis of the data collected. First, for the material life domain and overall quality of life construct, single confirmatory factor analysis was conducted. Second, the results of the confirmatory analysis of the constructs that have sub-dimensions (non-material life domains) are presented after confirming each sub-dimension of the construct (community, emotional, and health/safety life domains). A summated scale was then constructed for the non-material life domain. For example, the non-material life domain has three sub-dimensions. After confirming the three sub-dimensions, the non-material life domain was examined as one construct by using each summated scale as a measurement item. Third, the results of the measurement model, including all constructs, are presented. Lastly, the results of the structural equation modeling are presented to test the hypotheses.

4.4.1 Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) is used to test the measurement model specifying the posited relations of the observed variables to the underlying constructs. The CFA approach examines whether or not the collected data are consistent with a highly constructed hypothesized model, or a priori specified model (Hair Jr et al., 2010). Therefore, CFA allows identification and clustering of the observed variables in a pre-specified, theory-driven hypothesized model to evaluate to what extent a particular collected data set confirms what is theoretically believed to be its underlying constructs.

For this study, Confirmatory factor analysis (CFA) was used to confirm the measurement scale of the perception of tourism impacts in the material/non-material life domain, satisfaction

with the material/non-material life domain, and overall quality of life. As proposed in the pretest section, the material life domain consisted of seven indicators; non-material life domain was composed of three sub-dimensions (community life, emotional life, and health/safety life); overall quality of life included six items.

As discussed in the previous section, the model estimation process for each model is provided along with statistical results. Modification indices, Absolute Fit Measures, Incremental Fit Measures, and Parsimonious Fit Measures were utilized to evaluate the proposed model.

The analyses were conducted using LISREL 8.51. These analyses employed the Maximum Likelihood (ML) method of parameter estimation because the collected usable sample was quite large (n=407), the scales of observed indicators were continuous variables, the normal distribution of the observed variables were met according to the results of skweness and kurtosis. Moreover, ML estimation has been widely used because this estimation method has been found to be unbiased, consistent and efficient.

4.4.1.1 CFA for the perception of tourism impacts in material life

Seven indicators were utilized to measure the perception of tourism impacts in material life domain. The results of the initial estimation of the CFA for the construct were not acceptable. The Chi-square value was 506.65 with 14degrees of freedom ($p<.000$). The RMSEA value was .20, which was higher than the threshold of .08. Other fit indices indicated that the specified model was not acceptable showing NFI =.77, GFI =.73, AGFI =.46, and CFI =.78. Therefore, refinement was needed for better goodness-of-fit indices for the measurement model. After reviewing the t-value, standard error, modification indices, squared multiple correlations and completely standardized loadings, three indicators " The real estate taxes", "The cost of living in

general", "The cost of basic necessities such as food, housing, and clothing" were deleted due to its low t-value, high standard error, and low explained variances.

After deleting three indicators and re-testing the data, the final results of the CFA for the perception of tourism impacts in material life domain showed in Table 4.13. The re-specified model resulted in a Chi-square value of 12.34 with 2 degrees of freedom (p=.002). All other indices showed that the data successfully fit the model with GFI =.98, CFI=.99, RMSEA =.10, AGFI =.93, NFI =.99, IFI=.99, and RMSR=.002.

The completely standardized factor loadings revealed comparatively high loadings, ranging from .85 to .91. In terms of estimating the squared multiple correlations (R^2), which are used to examine the extent to which the measurement model adequately represents the observed indicators, R^2 values ranged between .73 and .83. These coefficient scores also serve as indicator reliabilities. The composite reliability of this measurement construct resulted in .93, which highly exceeded the recommended threshold level of .70 (Hair et al., 1998). The extracted variance for the construct of the perception of tourism impacts in material life revealed a value of .78, which matched the recommended level of .50. Overall, the perception of tourism impacts in material life construct retained four observed indicators with satisfactory results of fit indices.

Table 4.13 CFA of the perception of tourism impacts in material life

Indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
CFA of the perception of material life		***.93****	***.78****
Income at your current job	.90	.82	.18
The economic security of your job	.91	.83	.17
Family income	.85	.73	.24
The pay and fringe benefits you get	.87	.76	.24

* Composite reliability
** Variance extracted estimate

4.4.1.2 CFA for the perception of tourism impacts in non-material life

The perception of tourism impacts in non-material life is composed of three sub-dimensions (1) community life (2) emotional life, and (3) health /safety life. As discussed in the pretest section, five indicators loaded onto community life, seven indicators loaded onto emotional life, and eight indicators loaded onto health/safety life. Before testing the overall confirmatory measurement for the perception of tourism impacts in non-material life domain, the measurement of each sub-dimension was examined individually.

A separate confirmatory factor analysis was performed for each sub-dimension with indicators. Based on the modifications indices, error variance, and standardized loadings the sub-dimension was re-specified to increased model fit by deleting the indicators. Assessing each sub-dimension of the perception of tourism impacts in non-material life domain resulted in change to the indicators in the sub-dimensions except the community life domain.

For the community life dimension all five indicators had one dimensionality and the overall fit of the model was acceptable; $\chi^2(5)=16.91$ (p=.006), CFI=.99, GFI= .98, NFI=.99, RMSEA=.007, and RMR=.019. Therefore, refinement was not needed. The completely standardized factor loadings showed relatively high loadings, ranging from .77 to .93 (Table 4.14) and the result of the composite reliability and variance-extracted estimation for the community life is also relatively high.

Seven observed indicators were used to assess the emotional dimension. Among these indicators three indicators that had a large residual and low contribution were deleted: “Religious services in your community”, “The way culture is preserved in your community”, “The spiritual life in the community”. As indicated in the literature review part, the emotional life domain can be measured by leisure life and spiritual life indicators. These deleted indicators were more

related to the spiritual life and the remained indicators were related to the leisure life. In this case, spiritual indicators did not explain the emotional life construct. After deleting theses three indicators, the model fit of the emotional life is increased; $\chi^2(2)=1.65$ (p=.44), CFI=1.00, GFI=1.00 , NFI= 1.00, RMSEA=.00001, RMR=.0081. Therefore, four indicators were remained to measure the emotional life (Table 4.14).

The health/safety domain was measured by five health indicators and three safety indicators. Original results of the confirmatory factor analysis were not acceptable; therefore, three indicators were deleted in order to increase model fit: "Health facilities in your area", "Health service quality in your area", and "Accident rate or crime rate in your community". After deleting these three indicators, the model fit was acceptable: $\chi^2(5)=96.51$ CFI= .96 NFI=.96 GFI=.91 RMSEA=.2 RMR=.035. The completely standardized factor loadings revealed comparatively high loadings, ranging from .83 to .96. In terms of estimating the squared multiple correlations (R^2), which are used to examine the extent to which the measurement model adequately represents the observed indicators, R^2 values ranged between .69 and .92.

After the uni-dimensionality of each sub-dimension was verified, the indicators of the sub-dimension were summated and used as individual observed variables to test the construct of the perception of tourism impacts in non-material life. In this sense, the perception of non-material life construct was considered to be measured by three observed indicators: community life, emotional life, and health/safety life.

The three summated variables were used as indicators to test the construct of the perception of tourism impacts in non-material life. The final results showed a Chi-Squre value of .00 with degree of freedom (p=1.00). All indices were perfect and the model was saturated. The completed standardized factor loadings revealed comparatively high loadings (Table 4.15).

The composite reliability of this measurement construct resulted in .86 which exceeded the recommended threshold level of .7 (Hair Jr et al., 2010). Overall, the perception of non-material life construct retained three observed indicators with satisfactory results of fit indices.

Table 4.14 CFA of the sub-dimensions of the perception of non-material life domain

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Community life		***.93****	***.74****
The conditions of your community environment (air, water, land)	.80	.64	.36
The people who live in your community	.87	.76	.24
The service and facilities you get in your community	.92	.85	.15
Community life	.93	.87	.13
Public transportation	.77	.59	.41
Emotional life		***.94****	***.80****
Spare time	.78	.61	.39
Leisure activity in your community	.95	.91	.09
Leisure life	.97	.93	.07
The leisure life in the community	.86	.73	.27
Health/safety		***.95****	***.81****
Water quality in your area	.85	.72	.28
Air quality in your area	.90	.82	.18
Environmental quality in your area	.96	.92	.08
Environmental cleanness in your community	.94	.88	.12
Safety and security in your community	.83	.69	.31

* Composite reliability
** Variance extracted estimate

Table 4.15 CFA of the perception of non-material life

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Perception of non-material life		***.86****	***.68****
Community life	.87	.76	.24
Emotional life	.73	.54	.46
Health/safety	.87	.76	.24

* Composite reliability
** Variance extracted estimate

4.4.1.3 CFA for the material life satisfaction

The same seven indicators were utilized to measure the material life satisfaction. The results of the initial estimation of the CFA for the construct were not acceptable. The Chi-square value was 548.39 with 14degrees of freedom ($p<.000$). The RMSEA value was .2, which was higher than the threshold of .08. Other fit indices indicated that the specified model was not acceptable showing NFI =.76, GFI =.75, AGFI =.50, and CFI =.76. Therefore, refinement was needed for better goodness-of-fit indices for the measurement model. After reviewing the t-value, standard error, modification indices, squared multiple correlations, and completely standardized loadings, three indicators were deleted due to its low t-value, high standard error, and low explained variances.

After deleting three indicators and re-testing the data, the final results of the CFA for the material life satisfaction showed in table 4.16. The re-specified model resulted in a Chi-square value of 10.70 with 2 degrees of freedom ($p=.004$). All other indices showed that the data successfully fit the model with GFI = .99, CFI=.99, RMSEA = .10, AGFI = .93, NFI = .99, IFI=.99, and RMSR= .01.

The completely standardized factor loadings revealed comparatively high loadings, ranging from .82 to .90 (Table 4.16). The squared multiple correlations (R2) ranged between .59 and .80. The composite reliability of this measurement construct resulted in .90, which exceeded the recommended threshold level of .70 (Hair et al., 1998). The extracted variance for the construct of the material life satisfaction revealed a value of .70, which exceeded the recommended level of .50. Overall, the material life satisfaction construct retained four observed indicators with satisfactory results of fit indices.

Table 4.16 CFA for the material life satisfaction

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
CFA for material life satisfaction		***.90****	***.70****
Income at your current job	.90	.80	.20
The economic security of your job	.77	.59	.41
Family income	.82	.67	.33
The pay and fringe benefits you get	.84	.71	.29

* Composite reliability
** Variance extracted estimate

4.4.1.4 CFA for the nonmaterial life satisfaction

Non-material life satisfaction is measured by three sub-dimensions (1) community life (2) emotional life, and (3) health /safety life. Before testing the overall confirmatory measurement for the non-material life satisfaction, the measurement of each sub-dimension was examined individually.

For the community life satisfaction all five indicators had one dimensionality and the overall fit of the model was acceptable; $\chi^2(5)=20.62$ (p=.0009), CFI=.99, GFI= .98, NFI=.98, RMSEA=.008, and RMR=.024. Therefore, the model was not modified. The completely standardized factor loadings showed acceptable level, ranging from .51 to .92 (Table 4.17) and the result of the composite reliability and variance-extracted estimation for the community life is also acceptable.

Among seven observed indicators of the emotional life three indicators that had a large residual and low contribution were deleted. After deleting these three indicators, the model fit of the emotional life is increased; $\chi^2(2)=5.41$ (p=..66), CFI=1.00, GFI=.99, NFI= 1.00, RMSEA=.0065, RMR=.0062. Therefore, four indicators were remained to measure the emotional life satisfaction (Table 4.17).

Original results of the confirmatory factor analysis of the health/safety domain were not acceptable; therefore, three indicators were deleted in order to increase model fit. After deleting these three indicators, the model fit was acceptable: $\chi^2(5)=20.19$ (p=.001), CFI= .99 NFI=.99 GFI=.98 RMSEA= .087 RMR=.017. The completely standardized factor loadings revealed comparatively high loadings, ranging from .68 to .96.

After the uni-dimensionality of each sub-dimension was verified, the indicators of the sub-dimension were summated and used as individual observed variables to test the construct of the non-material life satisfaction. In this sense, non-material life satisfaction was considered to be measured by three indicators: community life, emotional life, and health/safety life satisfaction. The final results show a Chi-Squre value of .00 with degree of freedom 0 (p=1.00). All indices were perfect and the model was saturated. The completed standardized factor loadings revealed comparatively high loadings (Table 4.18). The composite reliability of this measurement construct resulted in .83 which exceeded the recommended threshold level of .7 (Hair Jr et al., 2010). Overall, the non-material life satisfaction construct retained three observed indicators with satisfactory results of fit indices.

Table 4. 17 CFA for the non-material life satisfaction

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Community life		***.89****	***.63****
The conditions of your community environment (air, water, land)	.71	.51	.49
The people who live in your community	.86	.74	.26
The service and facilities you get in your community	.89	.79	.21
Community life	.92	.85	.15
Public transportation	.51	.26	.74
Emotional life		***.94****	***.79****
Spare time	.81	.66	.34
Leisure activity in your community	.92	.85	.15
Leisure life	.95	.90	.10
The leisure life in the community	.86	.74	.26
Health/safety		***.92****	***.69****
Water quality in your area	.72	.52	.48
Air quality in your area	.87	.75	.25
Environmental quality in your area	.96	.92	.08
Environmental cleanness in your community	.90	.80	.20
Safety and security in your community	.68	.46	.54

* Composite reliability
** Variance extracted estimate

Table 4. 18 CFA for the non-material life satisfaction

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Perception of non-material life		***.83****	***.62****
Community life	.90	.81	.19
Emotional life	.68	.47	.53
Health/safety	.77	.59	.41

* Composite reliability
** Variance extracted estimate

4.4.1.5 CFA for the overall quality of life

Six indicators were utilized to measure the overall quality of life. The results of the initial estimation of the CFA for the construct were acceptable. The Chi-square value was 94.95 with 9 degrees of freedom (p<.000). The RMSEA value was .1, which was higher than the threshold of .08; however, other fit indices indicated that the specified model was acceptable showing NFI =.95, GFI =.93, AGFI =.83, and CFI =.95. Therefore, refinement was not needed for better goodness-of-fit indices for the measurement model.

The completely standardized factor loadings revealed comparatively high loadings, ranging from .71 to .90. The squared multiple correlations (R2) ranged between .50 and .81. The composite reliability of this measurement construct resulted in .92, which exceeded the recommended threshold level of .70 (Hair et al., 1998). The extracted variance for the construct of overall quality of life revealed a value of .67, which exceeded the recommended level of .50. Overall, the overall quality of life construct retained six observed indicators with satisfactory results of fit indices.

Table 4. 19 CFA for the overall quality of life

Constructs and indicators	Standardized loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Overall quality of life		***.92****	***.67****
I am satisfied with my life as a whole.	.84	.70	.30
The conditions of my life are excellent.	.90	.81	.19
In most ways my life is close to ideal.	.89	.80	.20
So far I have gotten the important things I want in life.	.81	.65	.35
If I could live my life over, I would change almost nothing.	.71	.50	.50
In general, I am a happy person.	.73	.54	.46

* Composite reliability
** Variance extracted estimate

4.4.2 Testing the proposed model

Structural equation modeling (SEM) is a family of statistical models that seek to explain the relationships among multiple variables. In doing so, it examines the structure of interrelationships expressed in a series of equations, similar to a series of multiple regression equations. However the most obvious difference between SEM and other multivariate techniques is the use of separate relationships for each of a set of dependent variables. In other word, SEM estimates a series of separate, but interdependent, multiple regression equations simultaneously by specifying the structural model used by the statistical program (Hair Jr et al., 2010).

The commonly-used approaches to estimate the parameters of structural equation models are maximum likelihood (ML) and normal theory generalizes least squires. Both estimation techniques assume that the measured variables are continuous and have multivariate normal distribution. Among them, ML is the most popular and default method of estimation in most SEM program. The reasons are the ML produces estimates that are unbiased, consistent and efficient moreover it is scale free and scale invariance. However, ML also has disadvantages. It assumes multivariate normality and the chi-square value will be inflated when data are nonnormal therefore causing an increase in Type 1 errors. All indicators that already checked the normality showed that they have faire normal distribution (Appendix C). Therefore, the properties of the items of five constructs in the proposed model and the hypotheses were tested using the LISREL 8.51 structural equation analysis package (Joreskog & Sorbom, 2001) with maximum likelihood (ML) method of estimation in combination with the two stage process (Measurement model and Structural Equation model) recommended by Anderson and Gerbing (1988) and Sethi and King (1994).

4.4.2.1 Overall measurement model

After making sure that each construct was unidimensional in the previous section, the overall measurement model fit was tested. The overall measurement model consisted of five major constructs and 20 observed indicators. Specifically, the perception of tourism impacts in material life domain and the material life satisfaction were measured by four indicators; the perception of tourism impacts in non-material life domain and non-material life domain satisfaction were examined by three indicators; the overall quality of life was examined by six indicators (Table 4.20).

Maximum likelihood confirmatory factor analysis requires complete data for every subject in order to preserve the integrity of the data set. The missing data of the individual cases need to be replaced with the mean scores of that variable. In this study, there was no missing data. The confirmatory factor analysis requires the minimum number of sample size 200. The reason is that a small sample size may result in inflated and spurious results. Moreover, for more complex models, larger sample sizes are needed. The total of 407 completed data was used in this study and this sample size was considered large enough to satisfy the sample size requirement of confirmatory factor analysis.

Table 4. 20 Constructs and indicators of the overall measurement model

Constructs & Indicators
Perception of material life
PM1: Income at your current job
PM2: The economic security of your job
PM3: Family income
PM4: The pay and fringe benefits you get
Perception of non-material life
PNM1: Perception of community life domain
PNM2: Perception of Emotional life domain
PNM3: Perception of Health/Safety life domain
Material life satisfaction
SM1: Income at your current job
SM2: The economic security of your job
SM3: Family income
SM4: The pay and fringe benefits you get
Non-material life satisfaction
SNM1: Community life satisfaction
SNM2: Emotional life satisfaction
SNM3: Health/Safety life satisfaction
Overall quality of life
QOL1: I am satisfied with my life as a whole.
QOL2: The conditions of my life are excellent.
QOL3: In most ways my life is close to ideal.
QOL4: So far I have gotten the important things I want in life.
QOL5: If I could live my life over, I would change almost nothing.
QOL6: In general, I am a happy person.

The primary purpose of the confirmatory factor analysis is to test whether the measurement model has acceptable fit or not. Before evaluating the model as a whole, it is necessary to evaluate the individual parameter estimates. First, the viability of the individual parameters' estimated values need to be determined. Parameter estimates should exhibit the correct sign and size and be consistent with the underlying theory. A second criterion relates to the statistical significance of parameter estimates. The test statistic used is the t-statistic, which represents the parameter estimate divided by its standard error. The t-statistic tests whether the estimate is statistically significant from zero. A t-test statistic that is larger than ±1.96 indicates that the parameter estimate is significant at .05 probability level. Table 4.21 presents the unstandardized parameter estimates for the proposed measurement model produced by LISREL. There are three lines of information for each observed indicator. The first line represents the estimate, the parentheses value of the second line denotes the standard error, and the third line represents the t-value. An examination of the unstandardized parameter estimation in Table 4.21 reveals all estimates to be both reasonable and statistically significant.

Table 4. 21 Parameter estimates for the overall measurement model (n=407)

LAMDA-X	P_Mat	P_NonMa	Mat_Sat	NonMat_Sat	QOL
PM1	1.00				
PM2	.99				
	(.044)				
	27.85				
PM3	.89				
	(.04)				
	24.80				
PM4	.93				
	(.04)				
	25.76				
PNM1		1.00			
PNM2		.88			
		(.055)			
		16.52			
PNM3		1.03			
		(.05)			
		19.13			
SM1			1.00		
SM2			.89		
			(0.05)		
			18.83		
SM3			1.00		
			(0.05)		
			21.41		
SM4			.98		
			(.04)		
			21.78		
SNM1				1.00	
SNM2				.088	
				(.06)	
				14.73	
SNM3				.91	
				(.06)	
				16.07	
QOL1					1.00
QOL2					1.14
					(.05)
					23.53
QOL3					1.20
					(.05)
					23.24
QOL4					1.02
					(.05)

	19.74
QOL5	1.00
	(.06)
	16.13
QOL6	.08
	(.05)
	17.2

Note: PM1-Perception of income at your current job, PM2-Perception of the economic security of your job, PM3-Perception of family income, PM4-Perception of they pay and fringe benefits you get, PNM1-Perception of community life, PNM2-Perception of emotional life, PNM3-Pereption of health/safety life, SM1-Satisfaction with income at your current job, SM2-Satissfaction with the economic security of your job, SM3-Satisfaction with family income, SM4-Satisfaction with the pay and fringe benefits you get SNM1-Community life satisfaction SNM2-Emotional life satisfaction, SNM3-Health/safety life satisfaction QOL1-I am satisfied with my life as whole, QOL2-The conditions of my life are excellent, QOL3-In most ways my life is close to ideal, QOL4-So far I have gotten the important things I want in life, QOL5-If I could live my life over, I would change almost nothing, QOL6-In general, I am a happy person.

The next step in assessing model fit is to examine the extent to which the measurement model is adequately represented by the observed variables. The squared multiple correlation (R2) values generated by the LISREL 8.51 were used to determine whether the measurement model is adequately represented by the observed variables. The squared multiple correlation also represents the indicator reliability. Examination of the Li2 values reported in Table 4.22 reveals that the measures are strong. After measuring the adequacy of the individual items, the composite reliability score and variance extracted estimate for each latent factor was measured. As shown in Table 4.22, all of the composite reliabilities were above .80, ranging between .83 and .93. All the variance extracted estimates were also above .50, which indicated satisfactory results of fit indices.

Table 4. 22 CFA results for the overall measurement model (n=407)

Constructs & indicators	Standardized Loading (Li)	Reliability (Li^2)	Error/ Variance extracted
Perception of material life		**.93***	**.78****
PM1	.90	.81	.19
PM2	.91	.82	.18
PM3	.86	.74	.26
PM4	.87	.76	.24
Perception of non-material life		***.87**	**.68****
PNM1	.87	.76	.24
PNM2	.74	.55	.45
PNM3	.86	.74	.26
Material life satisfaction		**.90***	**.69****
SM1	.89	.78	.22
SM2	.77	.59	.41
SM3	.83	.69	.31
SM4	.84	.71	.29
Non-material life satisfaction		**.83***	**.62****
SNM1	.87	.76	.24
SNM2	.71	.50	.50
SNM3	.77	.60	.40
Overall quality of life		**.92***	**.66****
QOL1	.84	.70	.30
QOL2	.90	.81	.19
QOL3	.89	.80	.20
QOL4	.81	.65	.35
QOL5	.70	.49	.51
QOL6	.73	.53	.47

Note: * Composite reliability ** Variance extracted estimate

PM1-Perception of income at your current job, PM2-Perception of the economic security of your job, PM3-Perception of family income, PM4-Perception of they pay and fringe benefits you get, PNM1-Perception of community life, PNM2-Perception of emotional life, PNM3-Pereption of health/safety life, SM1-Satisfaction with income at your current job, SM2-Satissfaction with the economic security of your job, SM3-Satisfaction with family income, SM4-Satisfaction with the pay and fringe benefits you get SNM1-Community life satisfaction SNM2-Emotional life satisfaction, SNM3-Health/safety life satisfaction QOL1-I am satisfied with my life as whole, QOL2-The conditions of my life are excellent, QOL3-In most ways my life is close to ideal, QOL4-So far I have gotten the important things I want in life, QOL5-If I could live my life over, I would change almost nothing, QOL6-In general, I am a happy person.

Next, the overall measurement fit was assessed. The most common index of fit is the $\chi 2$ goodness-of-fit test, which is derived directly from the value of the fitting function. Therefore, the $\chi 2$ goodness-of-fit test (and associated p values) was first examined. However, according to the nature of $\chi 2$, Chi-square tends to be large in large samples (Jöreskog, 1993). In a $\chi 2$ test, only the central $\chi 2$ distribution is used to test the hypothesis that the discrepancy between the sample covariance matrix and the implied covariance matrix is statistically equal to zero.

However, even if the discrepancy between the estimated model and data is very small, if the sample size is large enough, almost any model will be rejected because the discrepancy is not statistically equal to zero due to the excess power of the large sample size. In other words, the researcher is not likely to know everything about the data. In addition, the $\chi 2$ test offers only a dichotomous decision strategy implied by a statistical decision rule and cannot be used to quantify the degree of fit along a continuum with some pre-specified boundary. In this case, the sample size was 407 and the $\chi 2$ value for the saturated model was 327.04 (df=160, p=.00) (Table 4.23). The critical N (CN) indicates that if the sample size was 227, the $\chi 2$ goodness-of-fit test would result in a lower $\chi 2$ value, and it would be insignificant, indicating an acceptable fit.

4.4.2.2 Fit indices

According to the problems associated with the χ^2, various different types of fit indices were selected to measure the fit of the tested model based on the recommendations of several researchers from a number of difference disciplines. These selected fit indices are absolute fit indices, incremental fit indices, and parsimonious fit indices.

Absolute fit indices

Absolute fit indices are a direct measure of how well the model specified by the researchers reproduces the observed data. As such, they provide the most basic assessment of how well a researcher's theory fits the sample data. They do not explicitly compare the GOF of a specified model to any other model. Rather, each model is evaluated independent of other possible models (Hair Jr et al., 2010). Four absolute fit indices are reported in this study: Chi-square (χ^2) of the estimate model, the Goodness of fit (GFI), the Root mean square residual (RMR), and the Root mean square error of approximation (RMSEA).

The GFI is a measure of the relative amount of variance and covariance in sample data that is jointly explained by sample data. The possible range of GFI 0 to 1, with higher values indicating better fit. GFI values of greater than .90 typically are considered good. GFI value for the overall measurement model was .92 which indicates that proposed model fits the sample data fairly well.

The RMR is a measure of the average of the fitted residual and can only be interpreted in relation to the sizes of the observed variance and covariance in the sample data. Lower RMR value represents better fit and higher values represent worse fits. RMR value in this model

was .047 which met the requirement of well-fitting model that RMR should be close to .05 to less.

The RMSEA is the most widely used measures that attempts to correct for the tendency of the χ^2 GOF test statistics to reject models with a large sample of a large number of observed variables is the root mean square error or approximation. A RMSEM value ranging from .05 to .08 is acceptable. The RMSEA value in this study was .057 showing that the proposed model was acceptable (Table 4.23)

Incremental fit indices

Incremental fit indices differ from absolute fit indices in that they assess how well the estimated model fits relative to some alternative baseline model. The most common baseline model is referred to as a null model, one that assumes all observed variables are uncorrelated. It implies that no model specification could possibly improve the model, because it contains no multi-item factors or relationship between them (Hair Jr et al., 2010). The incremental fit indices include Normed fit index (NFI), the Non-Normed Fit Index (NNFI), the parsimony Normed Fit Index (PNFI), and the Comparative Fit Index (CFI), and the Incremental Fit Index (IFI).

The CFI is an incremental fit index that is an improved version of the normed fit index (NFI). The CFI is normed so that values range between 0 and 1 with higher values indicating better fit. CFI values above .90 are usually associated with a model that fits well. As shown in the Table 4.23 the CFI (.96) indicated that the proposed model represented an adequate fit to the data.

The NFI is one of the original incremental fit indices. It is a ratio of the difference in the χ^2 value for the fitted model and a null model divided by the χ^2 value for the null model. It ranges between 0 and 1 with a value >.90 indicating an acceptable fit to the data. As shown in table 4.21 the NFI was .94. It is acceptable.

The NNFI takes the complexity of the model into account in the comparison of the hypothesized model with the independence model. Since the NNFI is not normed, its value can extend beyond the range of zero to 1.00. As indicated in the Table 4.23 the NNFI (.96) indicated that the proposed measurement model represented an adequate fit to the data.

Parsimonious fit indices

Parsimony fit indices are conceptually similar to the notion of an adjusted R^2 in the sense that they related model fit to model complexity (Hair Jr et al., 2010). More complex models are expected to fit the data better, so fit measures must be relative to model complexity before comparisons between models can be made. It includes Adjusted Goodness of Fit Index (AGFI), Parsimony Normed Fit Index (PNFI), and the Parsimony Goodness of Fit Index (PGFI).

An adjusted goodness-of-fit index (AGFI) tries to take into account differing degree of model complexity. It does so by adjusting GFI by a ratio of the degree of freedom used in a model to the total degree of freedom available. The AGFI penalizes more complex models and favors those with a minimum number of free paths.

The PNFI adjusts the normed fit index (NFI) by multiplying it times the PR. Relatively high values represent relatively better fit. Therefore, it can be used in the same way as the NFI. The value of the PNFI are meant to be used in comparing one model to another with the highest PNFI value being most supported with respect to the criteria captured by this index.

Parsimony goodness of fit (PGFI) addresses the issues of parsimony in SEM. It takes into account the complexity of the proposed model in the assessment of overall model fit. The threshold level (value) of parsimony-based indices is lower than the threshold level of normed indices of fit. The PGFI value of the hypothesized measurement model represented in Table 4.23 seems to be consistent with the previous fit statistics.

Table 4. 23 Fit indices for the overall measurement model (n=407)

Fit indices	**Value**
Absolute Fit Measures	
Chi-Squares (χ^2) of estimate model	327.04 (df=160, p=.00)
Goodness-of-fit index (GFI)	.92
Root mean square residual (RMR)	.047
Root mean square error of approximation (RMSEA)	.057
Incremental Fit Measures	
Comparative fit index (CFI)	.96
Normed fit index (NFI)	.94
Non-normed fit index (NNFI)	.96
Parsimonious Fit Measures	
Adjusted goodness of Fit Index (AGFI)	.89
Parsimony normed fit index (PNFI)	.79
Parsimony goodness of fit (PGFI)	.70

4.4.2.3 Testing the proposed model and hypotheses

The primary objective of this study is to examine the perception of tourism impacts on stakeholders' quality of life in the community. More specifically, the main purpose is to investigate: (1) the perception of tourism impacts in life domain on the life domain satisfaction, (2) the effects of satisfaction with life domain on overall quality of life, (3) the moderating effects of the perspectives of different stakeholders between the perception of tourism impacts in life domains and satisfaction with life domains.

Figure 4.1 presents the hypothesized the perception of tourism impacts in life domain on the quality of life model that is assessed. The model proposed that the perception of tourism impacts in life domain affect the life domain satisfaction and the life domain satisfaction influences on overall quality of life. The details of each construct and observed indicator were discussed in the previous section; moreover, the validity and reliability of measurement scales were confirmed earlier.

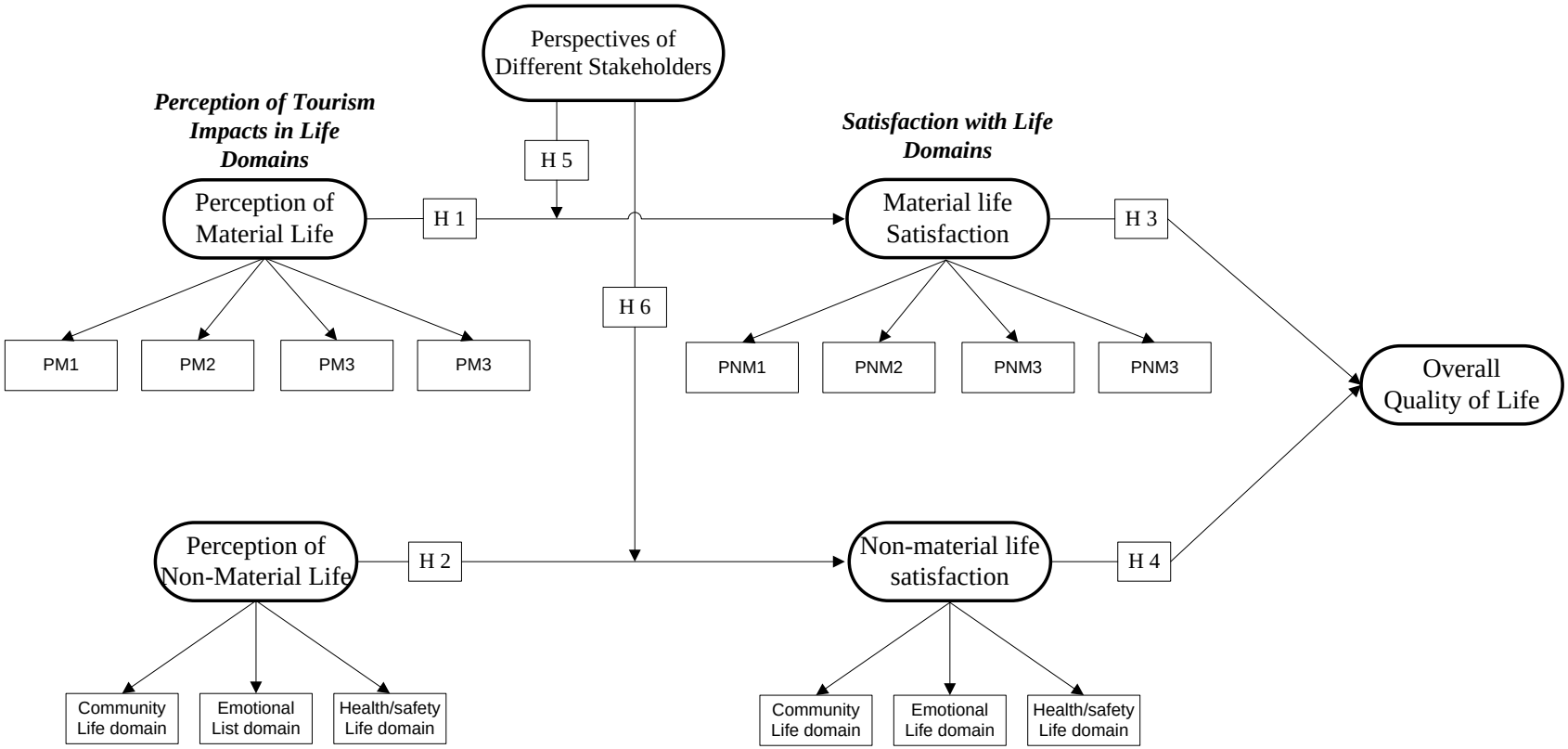

Figure 4. 1 Theoretical structural model

The review of the theoretical structural model demonstrated that the Chi-square value was 553.54 with 166 degree of freedom ($p<.000$) which indicated that the model was not good enough. Because of the sensitivity of this measure is not overly affected by sample size of 407, the use of the χ^2 test can provide evidence that a significant difference exists. However, it should be also noted that the chi-squire test becomes more sensitive as the number of indicators.

Therefore, it is more beneficial to check a number of other measures (Table 24). The GFI value of .90 is acceptable and the RMSEA .068 is also acceptable. The review of goodness-of-fit statistics indicated that the theoretical model was a well-fitting model to the data.

Table 4. 24 Fit indices for the proposed theoretical model (n=407)

Fix Index	**Value**
Chi-square with 166 degrees of freedom	553.54 (p=.00)
Goodness-of-fit Index (GFI)	.90
Adjusted Goodness-of-fit Index (AGFI)	.85
Parsimony Goodness-of-fit Index (PGFI)	.70
Normed Fit Index (NFI)	.92
Non- Normed Fit Index (NNFI)	.92
Parsimony Normed Fit Index (PNFI)	.80
Comparative Fit Index (CFI)	.95
Increment Fit Index (IFI)	.93
Relative Fit Index (RFI)	.89
Critical N	155.99
Root Mean Square Residual (RMR)	.17
Root Mean Square Error of Approximation (RMSEA)	.068

4.4.2.4 Analysis of hypotheses

The results of the structural equation analysis were analyzed by LISREL to test the proposed hypotheses in this study. The relationships between the constructs were examined based on t-values associated with path coefficients between the constructs. If the estimated t-value is greater than a certain critical value ($P<.05$, t-value=1.96), the null hypothesis that the associated estimated parameter is equal to 0 was rejected. Therefore, the hypothesized relationship was supported. In this section, a total of four hypotheses were tested by using structural equation modeling.

Hypothesis 1: The perception of tourism impacts in the material life domain affects satisfaction with the material life domain.

The results of SEM analysis indicated that the path from the construct of the perception of tourism impacts in the material life domain and construct of satisfaction with the material life domain was significant and negative ($t=-2.75$, $P<.01$). Therefore, hypothesis 1 was supported. This result indicates that if residents perceived high impacts from tourism in their material lives, they were less satisfied with the material life domain.

Hypothesis 2: The perception of tourism impacts in the non-material life domain affects satisfaction with the non-material life domain.

Hypothesis 2 investigated the relationship between the perception of tourism's impact on the non-material life domain and satisfaction with the non-material life domain. The postulated

statement was not supported by SEM analysis (t=1.25, p<.05). There was no significant relationship between the perception of tourism's impact in the non-material life domain and satisfaction with the non-material life domain. Therefore, hypothesis 2 was not supported.

Hypothesis 3: Satisfaction with the material life domain affects overall quality of life.

Hypothesis 3 postulated that satisfaction with the material life domain influences stakeholders' overall quality of life. The hypothesis was supported by LISREL analysis. Satisfaction with the material life domain significantly influenced on the overall quality of life (t=5.13, P<.001). Therefore, hypothesis 3 was supported. The results indicate that as stakeholders' satisfaction with the material life domain in terms of their family income and economic security increased, their overall quality of life was likely to increase.

Hypothesis 4: Satisfaction with the non-material life domain affects overall quality of life.

Hypothesis 4 investigated the relationship between non-material life satisfaction and overall quality of life. The structural coefficient and t-values associated with these two constructs were positively significant (t-value=4.59, p<.001), indicating support for this hypothesis. This finding suggests that the more satisfaction with the non-material life domain residents experienced in terms of community life, emotional life, and health/safety, the more satisfied they were with their lives overall . Table 4.25 presents a summary of the hypothesis testing results.

Table 4. 25 Summary of the hypothesis testing

Hypothesis	Hypothesized path	Standardized coefficients	t-value	Results
H1	Perception of tourism impacts in material life domain → Material life satisfaction	-.15	-2.75**	Supported
H2	Perception of tourism impacts in non-material life domain → Non-material life satisfaction	-.07	-1.25	Not supported
H3	Material life satisfaction → QOL	.26	5.13**	Supported
H4	Nonmaterial life satisfaction → QOL	.41	4.59**	Supported

Note: **p<.001 (2.58)

4.4.2.5 Testing of the moderating effects

This stage of data analysis deals with the moderating effects of the types of stakeholders on the relationship between the perception of tourism impacts in the life domains and satisfaction with the life domains. The basic premise is that responses to variations in the domain of life satisfaction depend on the type of stakeholder queried. This study used hierarchical multiple regression (HML) to examine these moderating effects.

The following procedures were articulated by Cohen and Cohen (1975). Each dependent variable was regressed on an independent variable and a moderator, with the types of stakeholders recoded as a dummy variable. Residents who work in the hospitality and tourism industry were coded as "0" and community residents were coded as "1" in the model. The specific procedures are explained below.

1) Center the independent variable (perception of tourism's impact on life domain) by creating a new variable in which the mean of this variable is subtracted from each person's score on the variable.

2) Multiply the centered independent variable by the dummy variable (types of stakeholders) to create cross-product terms.

3) Regress the dependent variable (satisfaction with life domains) on the independent variable of interest, using simultaneous regression. Use the centered version of relevant variables, but exclude the interaction terms.

4) Add, in a sequential fashion, the interaction term.

5) The moderating effect was tested by observing the statistical significance of ΔR^2. If ΔR^2 is significant, this indicates that the dummy variable affects the dependent variable.

Hypothesis 5: The relationship between the perception of tourism impacts in the material life domain and satisfaction with the material life domain is stronger for employed residents who work in the hospitality and tourism industry than community residents.

In order to test the manner in which stakeholder type moderated between the perception of tourism's impact on material life and satisfaction with material life, the above procedures were employed. First, the moderating variable was re-coded as a dummy variable. The two groups' information is explained below.

Group 1: Employed residents who work in the hospitality and tourism industry (n=95)

Group 2: Employed residents who work in non-hospitality and tourism industries (n=161)

Unemployed or retired (n=151)

Group 1 (n=95) was considered a reference group, so was re-coded as "0," while group 2 (n=311) was re-coded as "1." As noted earlier, in terms of the procedure for testing the moderating effect, the independent variable (centered perception of tourism's impact on the material life domain) and dummy variable (stakeholder type) were added in the first model to examine whether the two variables have main effects. The results showed that the perception of tourism's impact in the material life domain significantly affects satisfaction with the material life domain (adjusted R^2=.020, F [2,404]=5.08, P<.005). Next, the interaction effect (centered perception of tourism's impact on the material life domain*stakeholder type) was added.

As indicated in Table 4.26, ΔR^2 (.01) is statistically significant (P<.05). This means that the interaction effect increases the predictive power of the regression model (adjusted R^2=.020, F [1,403]=4.35, P<.005). Therefore, H5 was supported.

Table 4. 26 Model summary of moderating effect on satisfaction with material life

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.157	.025	.020	.90824	.025	5.086	2	404	.007
2	.187	.035	.028	.90449	.010	4.356	1	403	.038

The easiest way to understand an interaction is to graph it. Different regression coefficients mean that the slopes of regression lines will be different for the two groups. The graph indicated that when employed residents' (Group 1) perceptions regarding tourism's impact on the material life domain increases, their satisfaction with the material life domain also increases; however, when community residents' (Group 2) perceptions of impact increase, their satisfaction with the material life domain decreases (Figure 4.2).

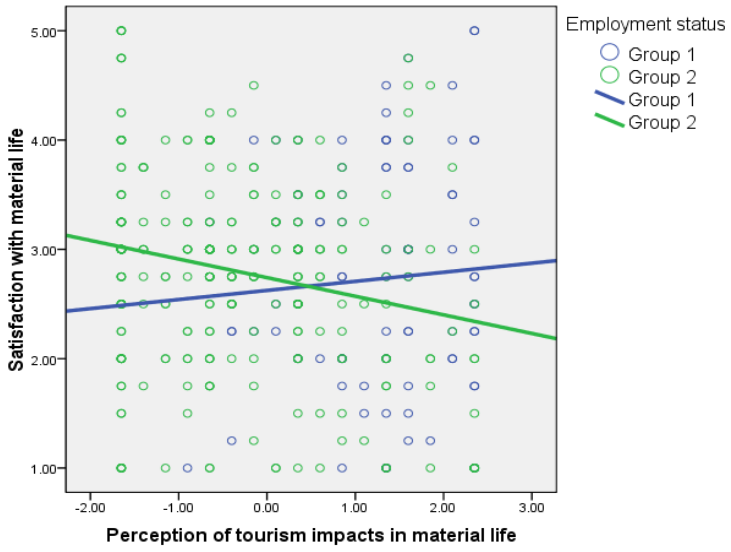

Figure 4. 2 Scatter plots for two groups' perception of material life satisfaction

Using the overall regression (Table 4.27), coefficients for each group were calculated. A regression equation also showed that for group 1, the perception of tourism's impact on the material life domain is positively related to satisfaction with the material life domain. That is, when employed residents' perceptions of tourism's impact on the material life domain increases, their satisfaction with the material life domain also increases. However, for group 2, when their perception of tourism's impact on the material life domain increases, their material life satisfaction decreases.

Regression equations:

Group1: Y= 2.625+.083(Xi)

Group2: Y=2.741-.170(Xi)

Table 4. 27 Coefficients of moderating effects on satisfaction with material life

Model	Variables	Unstandardized coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.889	.107		27.007	.000
	Perception of material life	-1.33	.043	-.181	-3.104	.002
	Dummy variable	-1.34	.127	-.062	-1.062	.289
2	(Constant)	2.625	.166		15.837	.000
	Perception of material life	.083	.112	.113	.741	.459
	Dummy variable	.117	.174	.054	.671	.503
	Perception of material life*Dummy variable	-.253	.121	-.271	-2.087	.038

Hypothesis 6: The relationship between the perception of tourism's impact on the non-material life domain and satisfaction with the non-material life domain is stronger for community residents than employed residents who work in the hospitality and tourism industry.

In order to test way that stakeholder type moderated between the perception of tourism's impact on non-material life and satisfaction with non-material life, HMR was also employed. The two groups' information is explained below.

Group 1: Employed residents who work in the hospitality and tourism industry (n=95)

Group 2: Employed residents who work in non-hospitality and tourism industry (n=161)

Unemployed or retired (n=151)

As noted earlier, in terms of the procedure for testing the moderating effect, an independent variable (centered perception of tourism's impact on the non-material life domain) and dummy variable were added in the first model to examine whether the two variables have

main effects. The results showed that the perception of tourism's impact on the non-material life domain did not affect satisfaction with the non-material life domain (adjusted R^2=.008, F [1,404] =2.549, P>.005). Next, the interaction effect (centered perception of tourism's impact on the non-material life domain*stakeholder type) was added in the second step. As shown in Table 4.28, the addition of the interaction term did lead to a statistically significant increase (ΔR^2=.007, P>.05).

Table 4. 28 Model summary of moderating effect on satisfaction with the non-material life

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.112	.012	.008	.70957	.012	2.549	2	404	.079
2	.140	.020	.012	.70787	.007	2.938	1	403	.087

The easiest way to understand an interaction is to graph it. Different regression coefficients mean that the slopes of regression lines will be different for the two groups. The graph indicated that when employed residents' (Group 1) perceptions regarding tourism's impact on the non-material life domain increases, their satisfaction with the non-material life domain also increases; however, when community residents' (Group 2) perceptions of impact increase, their satisfaction with the non-material life domain decreases (Figure 4.3).

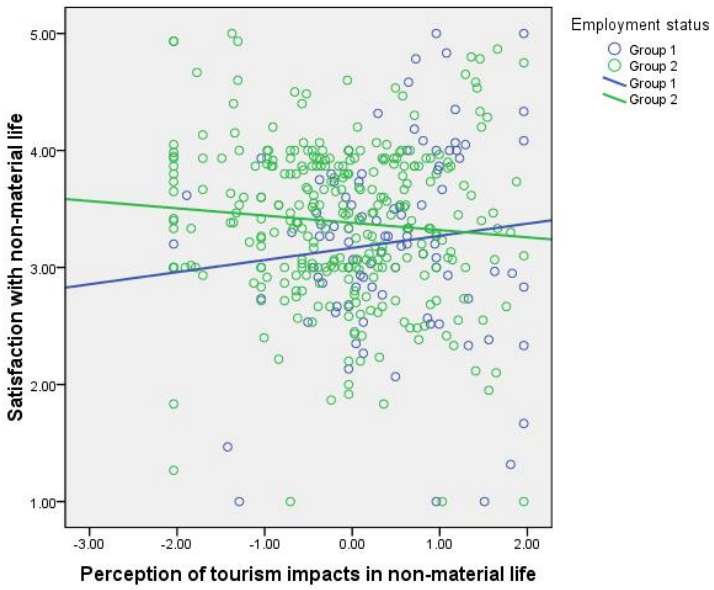

Figure 4. 3 Scatter plots for two groups' perceptions of non-material life satisfaction

Using the overall regression (Table 4.28), coefficients for each group were generated. The regression model also showed that for group 1, the perception of tourism's impact on the non-material life domain construct is positively related to satisfaction with the construct of non-material life domain. That is, when employed residents' perceptions of tourism's impact on the non-material life domain increase, satisfaction with their non-material life domain also increases. However, for group 2, when their perception of tourism's impact on the construct of non-material life domain increases, their non-material life satisfaction decreases. Although this was partially supported for H6 (p=.087), the direction of the hypothesis was negative.

Regression equations:

Group1: Y=3.168+.104(Xi)

Group2: Y=3.382-.062(Xi)

Table 4. 29 Coefficients of moderating effects on satisfaction with the non-material life

Model	Variables	Unstandardized coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.228	.075		43.160	.000
	Perception of non-material life	-.031	.038	-.041	-.803	.422
	Dummy variable	.158	.086	.094	1.834	.067
2	(Constant)	3.168	.083		38.367	.000
	Perception of non-material life	.104	.087	.139	1.191	.234
	Dummy variable	.214	.092	.127	2.330	.020
	Perception of non-material life*Dummy variable	-.166	.097	-.194	-1.714	.087

4.5 CHAPTER SUMMARY

Chapter four presented the data analysis from the pre-test of the scales and the final study. The first section explained the results of the pre-test. Specifically, the method of sampling and descriptive information for the pre-test sample was discussed. In the next section, a description of the survey method and demographic profile of the final study population was presented. In the third section, the confirmatory factor analysis results and measurement modeling testing were examined. This was followed by tests of the proposed structural equation models and tests of the hypotheses. Finally, the moderating effects were tested. Table 4.30 and Figure 4.3 present a summary of the hypothesis testing results.

Table 4. 30 Summary of the hypothesis testing

Hypothesis	Results
H1: The perception of tourism impacts in the material life domain affects satisfaction with the material life domain.	Supported
H2: The perception of tourism impacts in the non-material life domain affects satisfaction with the non-material life domain.	Not supported
H3: Satisfaction with the material life domain affects overall quality of life.	Supported
H4: Satisfaction with the non-material life domain affects overall quality of life.	Supported
H5: The relationship between the perception of tourism impacts in the material life domain and satisfaction with the material life domain is stronger for employed residents who work in the hospitality and tourism industry than community residents.	Supported
H6: The relationship between the perception of tourism's impact on the non-material life domain and satisfaction with the non-material life domain is stronger for community residents than employed residents who work in the hospitality and tourism industry.	Partially supported

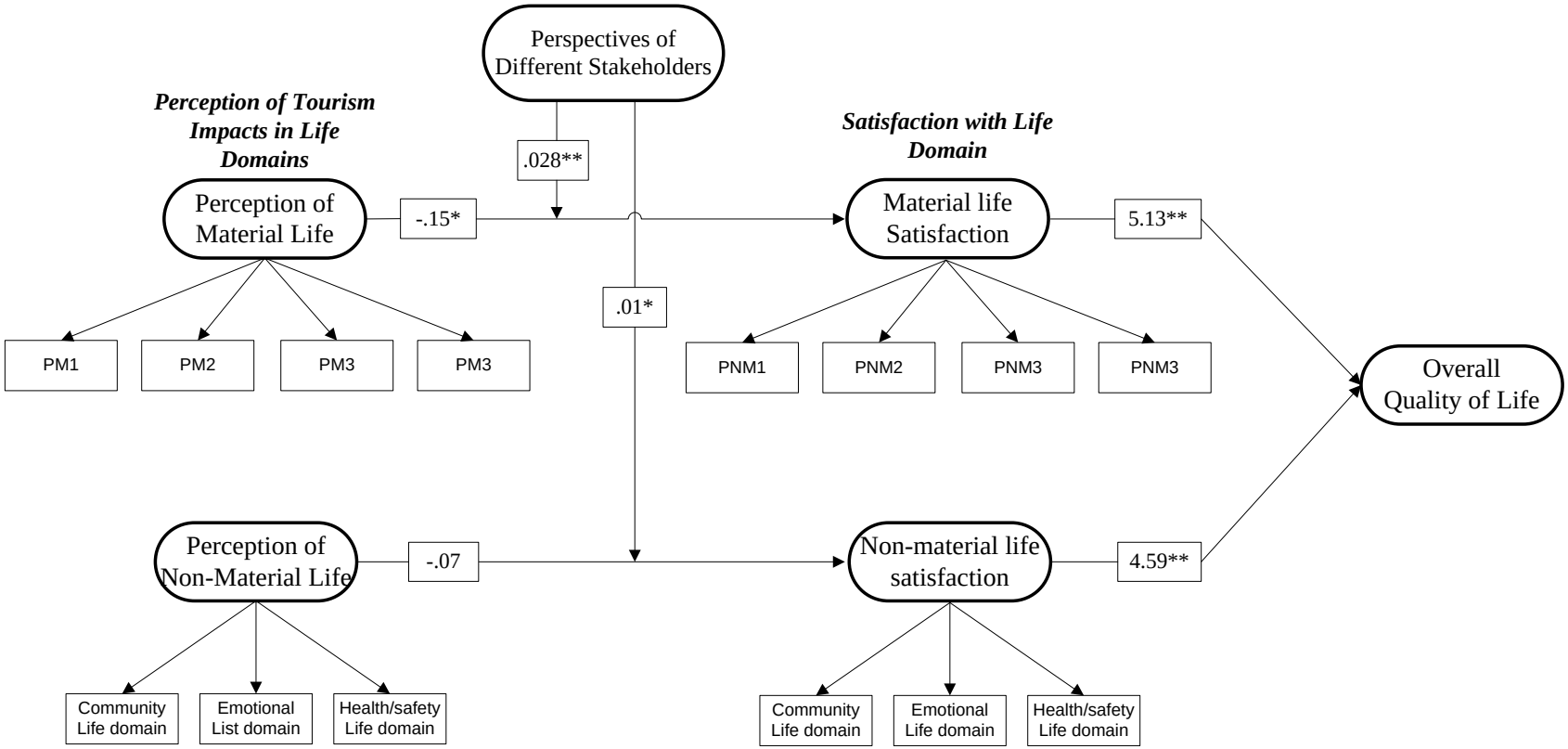

Figure 4. 4 The results of the empirical model and the hypothesis tests

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1 INTRODUCTION

This chapter summarizes the findings and their implications. In the first section, a summary of the hypotheses testing is presented. The managerial and theoretical implications of the findings, followed by the limitation of the study are then discussed. Finally, the chapter concludes with suggestions for future research.

5.2 SUMMARY OF THE FINDINGS

The study developed a model (Figure 3.1) that proposed the relationships among three constructs: perception of the impact of tourism in life domains, life domain satisfaction, and overall quality of life. The proposed model in Figure 3.1 was empirically tested. Specifically, this model analyzed (1) the effect of perception of the impact of tourism in life domain on life domain satisfaction; (2) the effects of satisfaction with life domain on overall quality of life; (3) the moderating effect of types of stakeholders on the relationship between perception of the impact of tourism in life domains and satisfaction with life domains.

Before conducting the actual study, a series of procedures was applied to develop the measurement scales for the proposed constructs in order to ensure that those measurements were valid and reliable. Measurement scales of constructs were refined from a sample survey of professors and students. A pretest was then done to make sure that the proposed constructs and items measuring these constructs were valid and reliable.

The study focused on tourism stakeholders who live in Virginia, Orlando (FL), Hawaii, Las Vegas (NV), or New York City (NY). Only five tourism destinations were considered in this

study to control the levels of tourism development. Pre-test data was collected from New York City while, for the actual data, survey was conducted in the other four destinations. The study examines the effect of the impact of tourism on stakeholders' quality of life. Respondents were asked to complete an online survey based on their perception of the impact of tourism and their satisfaction with different life domains. A final usable sample of 407 respondents was used in the data analysis. Of the 407 respondents, 55% were female and 45% were male. Ninety-two respondents live in Virginia, 79 in Hawaii, 109 in Las Vegas, and 127 in Orlando. Ninety-five work in the hospitality and tourism industry. One hundred sixty-one work outside of the hospitality and tourism industry; 151 are retired, unemployed, or students.

A measurement model for the five constructs was developed and tested. The five constructs were perception of the impact of tourism in material life domain, perception of the impact of tourism in non-material life domain, satisfaction with material life domain, satisfaction with non-material life domain, and overall quality of life. Each construct was measured by several indicators or sub-dimensions.

The perception of the impact of tourism in material life domain was found to affect the satisfaction with material life domain; this relationship was moderated by types of stakeholders. However, the perception of the impact of tourism in non-material life domain did not directly affect satisfaction with non-material life domain. In addition, the moderating effect on this relationship was not supported. Satisfaction with material and non-material life domain positively affected overall quality of life. These findings are discussed in detail in the following section.

5.3 DISCUSSION OF THE FINDINGS

This section describes the development and testing of the constructs of the perception of the impact of tourism and life domains. Two life domains and overall quality of life were discussed in Chapter II in order to provide a better understanding of the impacts of tourism on quality of life. The dimension of the perception of the impact of tourism in life domains and satisfaction with life domains were measured by material and non-material life domains. Non-material life domain consisted of three sub-dimensions: community life, emotional life, and health/safety life. In Chapter III, a multiple indicators measurement scale was developed for each sub-dimension of constructs.

In chapter IV, a pretest was first conducted on a measurement scale for each sub-dimension. The preliminary factor analyses of the data were conducted for the preparation of the proposed hypotheses testing. The preliminary data analysis revealed satisfactory reliability results for all the constructs with Cronbach's alpha scores higher than .87. The measurement items also explained acceptable variance of the constructs.

Next, confirmatory factor analysis was conducted. CFA resulted in elimination of some indicators from the proposed model to preserve the uni-dimensionality of each scale and generate satisfactory goodness-of-fit indices. Based on the CFA results, uni-dimensionality was confirmed and the composite reliabilities and average variance extracted for each construct were calculated. It showed that all of the constructs had satisfactory composite reliability (over .83) and average variance extracted (over .62).

After testing the uni-dimensionality and confirming the posited relationships of the constructs, the overall measurement model was tested to observe whether the theoretical measurement model fit the data well. Therefore, the overall measurement model for five

constructs was tested in order to check the uni-dimensionality of the scale to measure each construct. The fit indices were acceptable; therefore, overall measurement model was statistically significant.

5.3.1 Research questions and hypotheses

Table 5.1 summarizes the hypotheses tested. The findings supported four of the six proposed hypotheses. The rest of this section revisits the research questions and the hypotheses that were empirically tested.

Table 5.1 Hypothesized relationship and results

Hypothesis	Results
H1: The perception of tourism impacts in the material life domain affects satisfaction with the material life domain.	Supported
H2: The perception of tourism impacts in the non-material life domain affects satisfaction with the non-material life domain.	Not supported
H3: Satisfaction with the material life domain affects overall quality of life.	Supported
H4: Satisfaction with the non-material life domain affects overall quality of life.	Supported
H5: The relationship between the perception of tourism impacts in the material life domain and satisfaction with the material life domain is stronger for employed residents who work in the hospitality and tourism industry than community residents.	Supported
H6: The relationship between the perception of tourism impacts in the non-material life domain and satisfaction with the non-material life domain is stronger for community residents than employed residents who work in the hospitality and tourism industry.	Partially supported

5.3.3.1 Research question 1

Does the perception of tourism impact in life domains affect satisfaction with different life domains?

Research question 1 was addressed by H1 (The perception of tourism impacts in the material life domain affects satisfaction with the material life domain) and H2 (The perception of tourism impacts in the non-material life domain affects satisfaction with the non-material life domain).

The relationship between the perception of the impact of tourism in material life domain and the material life satisfaction was examined by hypothesis 1. The results indicated a statistical negative relationship between these two constructs. Based on these results, the perception of the impact of tourism in material life does not increase stakeholders' satisfaction with material life and lead to decreasing satisfaction with material life. This relationship might be negative because the perception of the impact of tourism in material life domain was measured by four indicators: "income at current job," "the economic security of job," "family income," and "the pay and fringe benefits you get." All of these indicators were related to their employment. Among 407 total respondents, 77% either worked outside of the hospitality and tourism industry or were unemployed. These respondents may have thought that their material life domain was not affected by tourism, and this does not lead to increased material life satisfaction.

The construct of the perception of tourism impacts in material life and satisfaction with material life domain was measured by four observed indicators. In order to check whether item by item analysis has different results, a series of simple regression runs were done. For instance, the dependent variable was satisfaction with "income at current job" and the independent variable was the perception of tourism impacts in "income at current job". Four different simple

regressions were conducted and the results showed that all of the relationships were negative. The results were consistent with previous results of the relationship between the perception of tourism impacts in material life domain and satisfaction with material life domain.

This negative relationship can be explained by the concept of locus of control. Locus of control (LOC) is a personality trait that asserts that people can be internal or external LOC. Persons who hold high expectancies about their capacity to control situations have an internal locus of control, while persons who hold low expectancies about their capacity over situation have an external locus of control (Morrison, 1997). DeNeve and Cooper (1998) conducted a meta-analysis of 137 personality traits and subjective well-being and found that locus of control would be a strong correlates of subjective well-being. Similarly, Spector et al. (2001) found that locus of control correlated with subjective well-being across all the nations they studied. A number of previous studies mentioned that internal locus of control is associated with higher subjective well-being; while, external locus of control is associated with lower subjective well-being (Diener, 1984; Diener, Oishi, & Lucas, 2003; Klonowicz, 2001; Kozma, 1978; Spector et al., 2001).

Given this, it may be stated that stakeholders who are happy with their material and overall life tend to have an internal locus of control, which makes them biased in the way that they may attribute their subjective well-being to themselves, not things that may happen in their community such as tourism activities in their community.

The relationship between the perception of the impact of tourism in non-material life domain and non-material life domain satisfaction was examined by hypothesis 2. The study showed a negative relationship between the perception of non-material life domain and non-material life satisfaction but this relationship was not statistically significant. The previous research has

shown that the perception of the impact of tourism in non-material life domain (community, emotional, and health/safety) affects non-material life satisfaction, because these life domains are considered important in community residents' evaluation of life. Perception of non-material life domain itself truly affects non-material life satisfaction; however, the components of the non-material life domain which came from different life domains such as community, emotional, and health/safety did not influence non-material life satisfaction. In order to make sure whether individual life domains affect overall non-material life satisfaction, additional multiple regression analysis was conducted. However, none of life domains significantly affected residents' non-material life satisfaction. As indicated in Table 5.2, the mean scores of life domain indicators are around 3 (somewhat affected). That means that most residents may perceive that tourism does not strongly affect their life domain perception; moreover, these impacts do not significantly affect their life domain satisfaction. Data were collected from the residents who live in developed tourism destinations (Hawaii, Orlando, Las Vegas, Virginia); however, most residents in these destinations live away from tourism attractions. Therefore, they may perceive the impact of tourism in life domain; but, the impacts are small and residents may feel that the items of the impact of tourism do not affect their satisfaction with non-material life.

Table 5. 2 Mean scores of sub-dimensions

Indicators	**Mean**	**Std. Deviation**
Perception of community life domain	3.1	1.05
Perception of emotional life domain	2.8	1.09
Perception of health/safety life domain	3.0	1.09
Community life satisfaction	3.2	.79
Emotional life satisfaction	3.5	.86
Health/safety life satisfaction	3.2	.82

5.3.3.2 Research question 2

Does satisfaction with life domains affect overall QOL?

The second research question addressed the influence of satisfaction with life domain on overall quality of life. These relationships were examined through hypotheses 3 and 4 (H3: Satisfaction with the material life domain affects overall quality of life; H4: Satisfaction with the non-material life domain affects overall quality of life). These hypotheses were supported. Findings of this study indicated that resident's satisfaction of material and non-material life domain positively influences their overall quality of life.

The relationship between material life satisfaction and overall quality of life was examined by hypothesis 3. The result indicated that residents' satisfaction with material life such as "income at current job", "the economic security of job", "family income", and "the pay and fringe benefits" positively affect their overall quality of life. The result was consistent with the previous studies (Andrews & Withey, 1976; Campbell et al., 1976; Cummins, 1996; Flanagan, 1978; Kim et al., 2012; Sirgy, 1998, 2001). For instance, Kim et al. (2012) found that sense of material well-being positively affect overall life satisfaction.

The relationship between non-material life domain (community, emotional, and health/safety) satisfaction and overall quality of life was also significant. The finding validated the previous studies related to tourism impacts and quality of life (Andrews & Withey, 1976; Campbell et al., 1976; Cummins, 1996; E. E. Davis & Fine-Davis, 1991; Ellison & Lee, 2010; Puczkó & Smith, 2011; Sirgy, 2001). For instance, major national surveys in the European Union countries have shown that satisfaction with community is a significant predictor of life satisfaction (E. E. Davis & Fine-Davis, 1991). Teichmann et al. (2006) examined that the emotional well-being positively influences on subjective well-being. In addition, Rahtz et al.

(1989) found a stronger relationship between community healthcare satisfaction and life satisfaction.

5.3.3.3 Research question 3

Does the perspective of different stakeholders have a moderating effect on the relationship between the perception of tourism impacts in life domains and satisfaction with life domains?

The third research question posits that the levels of satisfaction of life domains are depend on the type of stakeholders. These relationships were examined through hypotheses 5 and 6. (H5: The relationship between the perception of tourism impacts in the material life domain and satisfaction with the material life domain is positively much stronger for employed residents who work in the hospitality and tourism industry than community residents in general, and H6: The relationship between the perception of tourism impacts in the non-material life domain and satisfaction with the non-material life domain is positively much stronger for community residents than employed residents who work in the hospitality and tourism industry.)

The results showed that the hypothesis 5 was supported. That is, the type of stakeholders moderated the relationship between the perception of the impact of tourism in the material life domain and the material life satisfaction. The results indicated that the coefficients of these relationships significantly changed for the two groups (residents employed in the hospitality and tourism industry, and community residents). Specifically, for the residents who work in the hospitality and tourism, the relationship between the perception of material life and material life satisfaction was positive; however, for community residents it was negative. This finding validated previous studies and revealed support for social exchange theory (Allen & Gibson,

1987; Ap, 1992; Lankford, 1994). Social exchange theory suggests that people evaluate an exchange based on its costs and benefits. If the individual perceives benefits from an exchange, he/she is likely to evaluate it positively; if he/she perceives costs he/she is likely to evaluate it negatively. In other words, depending on the nature of evaluations, the perception of the impact of tourism and sense of well-being may be positive or negative. The results showed that employed residents perceived the impact of tourism in material life positively, and their material life satisfaction was also positively affected by their perception of the impact of tourism in material life. It is plausible that their income and job security is greatly affected by tourism. If the tourism industry is growing, employed residents' material life is improving. However, community residents perceived the impact of tourism, and then their material life was also negatively affected by tourism because their material life was not directly affected by it.

Hypothesis 6 was partially supported. The type of stakeholders moderated the relationship between the perception of the impact of tourism in non-material life domain and non-material life satisfaction. As indicated in the previous section (hypothesis 2), the main relationship between the perception of the impact of tourism in non-material life domain and non-material satisfaction was not supported; however, the moderating variable was significant. That means that the moderating variable is essential on the main relationship between the perception of tourism impacts in the variable of non-material life domain and the variable of non-material life satisfaction. Specifically, for the residents who work in the hospitality and tourism, the relationship was positive; however, for community residents the relationship was negative. The results showed that employed residents perceived the impact of tourism in the non-material life domain positively, and their non-material life satisfaction was also positively affected by their perception of the impact of tourism in their non-material life. However,

community residents perceived the impact of tourism negatively, and their non-material life satisfaction was also negatively affected by tourism.

Regardless of material and non-material life domains, employed residents are more positive about the impacts of tourism and more satisfied with their material and non-material life; while, community residents are more negative about the impacts of tourism and less satisfied with their material and non-material life domain in their community.

5.3.2 Summary of the discussion

The findings of this study indicate that a negative relationship between the perception of the impact of tourism in material life domain and material life domain satisfaction. This means that if stakeholders think that they have high impacts of tourism in their material life domain, then they are not satisfied with their material life domains. Another finding was that residents' satisfaction with life domains positively affects their overall quality of life; if they are satisfied with their material and non-material life domains they are likely to be satisfied with their life in general. Findings also indicate that statistical significance of the moderating effect in the model, thus suggesting that there were some meaningful moderating effects of the type of stakeholders on the relationship between the perception of the impact of tourism in material/non-material life domain and material/non-material life domain satisfaction.

5.4 IMPLICATIONS

5.4.1 Managerial implications

Once a community becomes a tourism destination, the lives of stakeholders in that community are affected in numerous ways. Tourism not only affects their attitude toward tourism but also their quality of life. Stakeholders are essential for the development, operation, and long-term sustainability of tourism. If stakeholders benefit from tourism, they will prefer tourism development and will support destination planning and strategies. Moreover, stakeholders' support for the development of destination attractions and competitive strategies can increase the likelihood of successful tourism in a region and could improve destination competitiveness. Therefore, it is necessary to have not only a short-term perceptive of the impact of tourism but also a long-term perspective of stakeholders' quality of life.

This study provides an integrated approach to understanding the relationship between the perception of the impact of tourism in the life domain and overall quality of life. The results indicate that stakeholders' quality of life is influenced by the perception of the impact of tourism in material life domain, and by satisfaction with material life and non-material life domains.

The significant relationship between life domain satisfaction (material and non-material) and overall quality of life has marketing and managerial implications. When stakeholders are satisfied with their material, community, emotional, and health/safety life domains, their overall quality of life improves. The makers of tourism development strategies need to consider the strength of these relationships and preserve the stakeholders' quality of life, derived from life domain satisfaction and the perception of the impact of tourism. In order to increase residents' satisfaction with community life, policy makers and decision makers need to improve the community environment and provide excellent services, facilities, and public transportation.

Moreover, developers and service providers can contribute to stakeholders' emotional well-being and satisfaction with life, by providing a variety of leisure activities and amenities that different stakeholders may enjoy. In addition, developers can increase stakeholders' health/safety life satisfaction by offering health facilities, environmental quality, safety, and security in the business and community environments.

This finding suggests that tourism developers and marketers should understand that stakeholders perceive the impacts of tourism differently. The relationship between the perception of the impact of tourism in material life domain and satisfaction with material life was positively supported by stakeholder group 1 (employees in the hospitality and tourism industry) but not for stakeholder group 2. In other words, members of stakeholder group 1 perceived the impact of tourism in a positive way because they benefit directly from it through their employment. Therefore, they are more favorable to the impact of tourism and more satisfied with their material life domain. In contrast, members of stakeholder group 2 believed that they do not receive any positive material benefits from tourism, so when their perception of the impact of tourism in material life domain increased, their satisfaction with material life decreased. For instance, they might think that tourism development increases their cost of living and this may lead to a decrease in satisfaction with material life.

Members of stakeholder group 2 may not receive the direct benefits from their employment but they could benefit indirectly from tourism development. Tourism development can provide employment opportunities, generate foreign exchange earnings, and increase income for the destination community in the form of tax revenue. These benefits can improve their community's quality of life; thus, leading to better individual quality of life. Therefore, tourism developers and managers need to help the residents to understand how tourism development may

improve their quality of life by creating access to better amenities, open and green space, better fire protection or greater safety and security.

5.4.2 Theoretical implications

Tourism development should improve community residents' quality of life, provide tourists with a memorable experience, and generate business revenue. However, few researchers have considered the impacts of tourism on different types of stakeholders' quality of life. Not all stakeholders perceive the impacts of tourism in the same way. For example, those who directly benefit from tourism through employment are more likely to support tourism activities and development and tend to be more satisfied with their quality of life than are people who do not receive benefits from tourism. However, most of the previous research has focused on the residents of a tourism destination. Little research has compared different stakeholders' quality of life.

This study contributes to scholarly literature of tourism by proposing a theoretical model to examine quality of life of different types of stakeholders by testing the relationship among the perception of the impact of tourism in life domains, satisfaction with life domains, and overall quality of lie. The study empirically validates the theory that stakeholders' quality of life depends on their economic dependence on the hospitality and tourism industry.

This study contributes to the theoretical advancements in the field of tourism by providing the usefulness of bottom-up spillover theory, social exchange theory, and stakeholder theory in explaining stakeholders' quality of life. In order to examine stakeholders' perception and attitudes, social exchange theory and stakeholder theory have been applied in the tourism industry; however, the bottom-up theory has not. The premise of this theory is that overall life

satisfaction is affected by satisfaction with all of life domains and sub-domains. This theory can be applied to measure both the demand side of stakeholders and the supply side of stakeholders.

The model developed and tested in this research provided a theoretical basis for studying tourism support in a variety of settings. The model can be used to compare communities at different stages of tourism development to determine stakeholders' quality of life. Moreover the model can be applied to different types of tourism destinations and cultural environments. New elements can be added to the model to explain stakeholders' quality of life. In addition, the proposed quality of life model constitutes a theoretical foundation for the examination of the relationship between the perception of the impact of tourism in life domains, satisfaction with life domains, and overall quality of life.

5.5 LIMITATIONS

The survey data was collected only from residents who live in Hawaii, Orlando, Las Vegas, or Virginia. In order to control the level of tourism development, these four destinations were selected based on the number of tourists. The purpose of this study was to propose and empirically test a theoretical model. However, if this study collected data from different destinations, the strength of the relationship between the perception of the impact of tourism in life domains and satisfaction with life domains may show some variation. For instance, if data were collected from the beginning stage of tourism destination, the results might be different.

Stakeholders can be persons or groups who can affect or be affected by tourism business within a particular market or community and who have interests in the planning, process (es), delivery, and/or outcomes of the tourism business. The most common examples of tourism stakeholders are chambers of commerce, tourism authorities, local tourism agencies, non-government organizations, tourism associations and councils, convention and visitors bureaus, tourism planning and development companies, tourism faculty and professionals, local and state parks, and visitor and information centers. These stakeholders are found in the government, business, and non-profit sectors; they are also residents and tourists. Each stakeholder group has its own perception of and attitude toward tourism development and their satisfaction with life domain. However, for this study stakeholders were placed in two groups: people who work in the hospitality and tourism industry and people who work outside of it. If this study had divided stakeholder groups in another way and collected data from different types of stakeholder groups, the results might be different. Further research should examine the issue from a wider selection of stakeholders.

This study investigated the effect of the perception of the impact of tourism on satisfaction with life domains and overall quality of life. To examine the theoretical model, two major life domains (material and non-material life) were considered as important life domains and were tested as direct effects. However, there might be other domains such as family life, social life, travel, and work. Moreover, there should be dynamic interactions between the perception of the impact of tourism and particular life domains. For example, the satisfaction with material well-being might influence the satisfaction with community, emotional, and health/safety well-being. This can be the why the relationship between the perception of non-material life domain and non-material life satisfaction was not supported. Consequently, these limitations should be considered as essential suggestions for future research.

5.6 SUGGESTIONS FOR FUTURE STUDY

Future research is needed to investigate how perceptions of the impact of tourism may affect stakeholders' quality of life at destinations in different stages of tourism development. According to the Tourism Area Life Cycle (TALC) model, residents' perception and attitudes regarding tourism development depend on the level of tourism development (Uysal, Woo, et al., 2012).

The TALC model examines the development of a destination in terms of series of life stages defined by the number of visitors and the level of infrastructure as indicators of development (Uysal et al, 2011). Specifically, this model consists of six stages: beginning with the exploration stage and followed by the involvement, development, consolidation, stagnation, and post-stagnation stages.

At the exploration stage, tourism development may not change much the physical and social characteristics of the destination and the level of development would be of relatively little significance to the economic and social well-being for the community residents. At the involvement stage, more of the local residents get involved to provide facilitates for the tourists, thus resulting in additional income for the providers. At the development stage, local involvement and control of development begins to decline rapidly while external companies provide up-to-date facilities. This stage may be the most important stage of development in improving the quality of life for the community residents and the economic well-being of employees and providers of the tourism industry. On the other hand, some of community residents may start developing a negative attitudes regarding tourism development; moreover, the residents may also suffer from a change in quality of life through problems of over-used facilities, crowding, air pollution, and crime rate. At the consolidation stage, tourism has become

a major part of the local economy. However, most of community residents may feel deterioration of the quality of life and negative impacts of tourism activities. Community residents who are not involved in the tourists industry may have stronger negative attitudes and perceptions regarding tourism activities in general. At the stagnation stage of development, the destination would have a well-established image, but it may no longer be in fashion or high demand. High negative impacts are likely to affect the quality of services and experiences provided to the tourists and diminish the value of tourism on the part of providers and other stakeholders involved in the production and management of tourism activities. At the decline stage, tourist facilities and accommodation may be converted to non-tourist-related structures and as a result, the quality of life in the destination community is likely to suffer in this stage of tourism development.

Depending on the stages, stakeholders' quality of life and perception regarding the impacts of tourism are changed. For this research, four developed tourism destinations were selected; therefore, their quality of life might differ from stakeholders who live in Louisiana, Texas, or Colorado. For example, stakeholders who live in Louisiana might perceive the impact of tourism more positively than those who live in Las Vegas. Further examination will help identify how overall quality of life depends on the level of tourism development.

For this research, two stakeholder groups were examined (people who work in the hospitality and tourism industry, and people who do not). The perception of and satisfaction with life domains were found to depend on the type of stakeholders. For instance, residents are expected to consider their leisure and social well-being to be more important than their community and financial well-being; while, government officials are expected to regard their

financial and community well-being to be more important than their social and environmental well-being. Therefore, future research is needed to investigate different groups of stakeholders.

Based on the previous literature review, two main life domains (material and non-material) were selected to investigate the stakeholders' perception of the impact of tourism and overall quality of life. Non-material life domain consisted of three sub-dimensions: community, emotional, health/safety. That is, this study examined four life domains: material, community, emotion, and health/safety. Future researchers should apply different types of life domains and examine the interaction among them. Moreover, the current study investigated general impact of tourism; therefore, future researchers need to examine how different types of tourism affect life domain satisfaction.

5.7 CONCLUSIONS

This study proposed and tested a theoretical model that investigates the influence of the perception of the impact of tourism in life domain on satisfaction with life domain and overall quality of life. The findings revealed that the perception of material life has a significant influence on satisfaction with material life. Finding of this study also showed positive relationships between satisfaction with material/non-material life domain and overall quality of life. In addition, the study found that the relationship between the perception of the impact of tourism in material life domain and satisfaction with material life domain was moderated by the type of stakeholders.

Among the important implications of this study are the establishment of a theoretical foundation for examination of stakeholders' quality of life through the impact of tourism and life

domain satisfaction; the importance of examining the relationship between satisfaction of material/non-material life domain and overall quality of life; and recognition of the roles of perspective of different stakeholders.

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Appendix A. Top states and cities visited by oversea travelers: 2000-2010

State and other area	Overseas visitors (1,000)				City	Overseas visitors (1,000)			
	2000	2005	2009	2010		2000	2005	2009	2010
New York	5,922	6092	8006	8647	***NYC, NY***	5714	5810	7792	8462
Florida	6026	4379	5274	5826	LA, CA	3533	2580	2518	3348
California	6364	4791	4632	5615	Miami, FL	2935	2081	2661	3111
Nevada	2364	1821	1900	2504	***Orlando, FL***	3013	2016	2399	2715
Hawaiian Islands	2727	2255	1853	2135	San Francisco, CA	2831	2124	2233	2636
Guam	1325	1127	1140	1318	***Las-Vegas, NV***	2260	1778	1853	2425
Massachusetts	1429	867	1259	1292	Washington, DC	1481	1106	1544	1740
Illinois	1377	1149	1164	1186	***Oahu/ Honolulu, HI***	2234	1821	1497	1634
Texas	1169	954	903	1028	Boston, MA	1325	802	1140	1186
New Jersey	909	997	926	975	Chicago, IL	1351	1084	1117	1134
Pennsylvania	649	629	879	923	San Diego, CA	701	499	618	765
Georgia	805	650	689	817	Atlanta, GA	701	564	570	712
Arizona	883	564	665	765	Philadelphia, PA	390	434	594	633
Washington	468	369	380	501	Flagstaff, AZ	*	*	428	501
Utah	*	*	*	475	Seattle, WA	416	347	356	475
Virginia	364	*	380	369	Houston, TX	442	*	428	448

*: Figure too small to meet statistical standards for reliability of a derived figure. Source: U.S. Census Bureau, Statistical Abstract or the United States

Appendix B. FINAL QUESTIONNIARE

Dear Community Resident:

Thank you for participation in this study.

The purpose of this research is to assess the quality of life in your community. Specifically, **this survey is designed to assess your perception of how your community's quality of life is affected by tourism**. Your participation in this survey allows you to voice your opinions to help community planners improve the quality of life in your community. Your help will be greatly appreciated.

It will take approximately 15 to 20 minutes of your time to complete this survey. Your participation in this study is entirely voluntary. Please answer all questions, as omitted responses may render your survey unusable for this study. Please know that your responses will be treated confidentially and anonymously. Please read all instructions and questions carefully. There are no right or wrong answers, so please try to answer as openly and accurately as possible.
If you have any questions about the study, feel free to contact the lead researcher, Eunju Woo, at eunjuw3@vt.edu.

Again, thank you for your time and participation!

Sincerely,

Eunju Woo, Ph.D Candidate
Hospitality and Tourism Management
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Part I: Demographic Information

1. Where is your residency?
(1) Virginia
(2) Hawaii
(3) Las-Vegas
(4) Orlando, Florida
(5) Other

2. In what Zip code is your home located? _____

3. How long have you lived in the present community? _____ year(s)

4. Which of the following best describes your present employment?
(1) **Related to the Hospitality and Tourism industry**, employed or self-employed or business owner
→ Keep answering the rest of the questions
(2) **Unrelated to the Hospitality and Tourism industry**, employed or self-employed or business owner → Go to question #6
(3) Unemployed or Retired or Students
→ Go to question #8

5. What kind of company or organization do you work for?

(1) Chamber of commerce (2) Private business (related to hospitality and tourism) (3) Travel information center (4) State and local public park (5) Hotel, Resort, Restaurant (6) Government official & Council (7) Non-profit organization & association	(8) Convention and visitors bureau (9) Outdoor recreation company, facility, and outfitters (10) Local travel attractions (e.g. Museum, Theater) (11) Travel agency (12) Tourism planning and development company (13) Other (please specify)_____

6. How long have you been working for the current company or organization? _____ year(s)

7. Based on your best estimate, how much of the income of the company or organization you work for (or business you own) comes from the tourist trade? (Circle one)
(1) None (2) A little (3) Some (4) A lot (5) Almost all (6) No opinion

8. What is your age? _____

9. What is your gender: Male _____ Female _____

10. What is your ethnic group:

_____ Caucasian _____ Hispanic
_____ African-American _____ Asian
_____ Other

11. Which of the following best describes your household? (check only one)

_____ Single adult living alone or with other single adults
_____ Single adult living with children or dependents
_____ Married couple living without children or dependents at home
_____ Married couple living with children or dependents at home
_____ Live-in together but unmarried
_____ Other; Please specify _____

12. What was the last year of school you completed? (Circle one)

(1) Less than high school
(2) High school degree
(3) Vocational degree
(4) Associate degree
(5) Some college
(6) College degree
(7) Master's degree
(8) Doctoral degree

Part II: Perception of Tourism Impacts in Life Domains

The following items are about quality of life indicators in general. We are interested in **how TOURISM IMPACTS affect these life indicators** in your community.

1=Not at all affected 2=Not affected 3=Somewhat affected 4=Affected 5=Very affected

1. How do tourism impacts affect these ***material life indicators*** in your community?

Indicators					
1. The real estate taxes	1	2	3	4	5
2. The cost of living in your community	1	2	3	4	5
3. The cost of basic necessities such as food, housing, and clothing	1	2	3	4	5
4. Income at your current job	1	2	3	4	5
5. The economic security of your job	1	2	3	4	5
6. Family income	1	2	3	4	5
7. The pay and fringe benefits you get	1	2	3	4	5

2. How do tourism impacts affect these ***community life indicators*** in your community?

Indicators					
1. The conditions of your community environment (air, water, land)	1	2	3	4	5
2. The people who live in your community	1	2	3	4	5
3. The service and facilities you get in your community	1	2	3	4	5
4. Community life	1	2	3	4	5
5. Public transportation					

3. How do tourism impacts affect these ***emotional life indicators*** in your community?

Indicators					
1. Spare time	1	2	3	4	5
2. Leisure activity in your community	1	2	3	4	5
3. Leisure life	1	2	3	4	5
4. Religious services in your community	1	2	3	4	5
5. The way culture is preserved in your community	1	2	3	4	5
6. The leisure life in the community	1	2	3	4	5
7. The spiritual life in the community	1	2	3	4	5

4. How do tourism impacts affect these ***health/safety life indicators*** in your community?

Indicators					
1. Health facilities in your area	1	2	3	4	5
2. Health service quality in your area	1	2	3	4	5
3. Water quality in your area	1	2	3	4	5
4. Air quality in your area	1	2	3	4	5
5. Environmental quality in your area	1	2	3	4	5
6. Environmental cleanness in your community	1	2	3	4	5
7. Safety and security in your community	1	2	3	4	5
8. Accident rate or crime rate in your community	1	2	3	4	5

Part III: Life Satisfaction of Quality-of-Life Indicators

Again, the following items are important quality of life indicators in general. This time, we are interested in **how SATISFIED you are with each of these life indicators**.

1=Very unsatisfied 2=Unsatisfied 3=Neutral 4=Satisfied 5=Very satisfied

1. How satisfied are you with each of these ***material life indicators*** ?

Indicators					
1. The real estate taxes	1	2	3	4	5
2. The cost of living in your community	1	2	3	4	5
3. The cost of basic necessities such as food, housing, and clothing	1	2	3	4	5
4. Income at your current job	1	2	3	4	5
5. The economic security of your job	1	2	3	4	5
6. Family income	1	2	3	4	5
7. The pay and fringe benefits you get	1	2	3	4	5

2. How satisfied are you with each of these ***community life indicators*** ?

Indicators					
1. The conditions of your community environment (air, water, land)	1	2	3	4	5
2. The people who live in your community	1	2	3	4	5
3. The service and facilities you get in your community	1	2	3	4	5
4. Community life	1	2	3	4	5
5. Public transportation					

3. How satisfied are you with each of these ***emotional life indicators*** ?

Indicators					
1. Spare time	1	2	3	4	5
2. Leisure activity in your community	1	2	3	4	5
3. Leisure life	1	2	3	4	5
4. Religious services in your community	1	2	3	4	5
5. The way culture is preserved in your community	1	2	3	4	5
6. The leisure life in the community	1	2	3	4	5
7. The spiritual life in the community	1	2	3	4	5

4. How satisfied are you with each of these ***health/safety life indicators*** ?

Indicators					
1. Health facilities in your area	1	2	3	4	5
2. Health service quality in your area	1	2	3	4	5
3. Water quality in your area	1	2	3	4	5
4. Air quality in your area	1	2	3	4	5
5. Environmental quality in your area	1	2	3	4	5
6. Environmental cleanness in your community	1	2	3	4	5
7. Safety and security in your community	1	2	3	4	5
8. Accident rate or crime rate in your community	1	2	3	4	5

Part IV. Relative Importance of Quality-of-Life Indicators

Again, the following items are important quality of life indicators in general. This time, we are interested in how IMPORTANT these indicators are to your overall life satisfaction

1=Not at all important 2=Unimportant 3=Somewhat important 4=Important 5=Very important

1. How important are these ***material life indicators*** to your overall life satisfaction?

Indicators					
1. The real estate taxes	1	2	3	4	5
2. The cost of living in your community	1	2	3	4	5
3. The cost of basic necessities such as food, housing, and clothing	1	2	3	4	5
4. Income at your current job	1	2	3	4	5
5. The economic security of your job	1	2	3	4	5
6. Family income	1	2	3	4	5
7. The pay and fringe benefits you get	1	2	3	4	5

2. How important are these ***community life indicators*** your overall life satisfaction?

Indicators					
1. The conditions of your community environment (air, water, land)	1	2	3	4	5
2. The people who live in your community	1	2	3	4	5
3. The service and facilities you get in your community	1	2	3	4	5
4. Community life	1	2	3	4	5
5. Public transportation					

3. How important are these ***emotional life indicators*** your overall life satisfaction?

Indicators					
1. Spare time	1	2	3	4	5
2. Leisure activity in your community	1	2	3	4	5
3. Leisure life	1	2	3	4	5
4. Religious services in your community	1	2	3	4	5
5. The way culture is preserved in your community	1	2	3	4	5
6. The leisure life in the community	1	2	3	4	5
7. The spiritual life in the community	1	2	3	4	5

4. How important are these ***health/safety life indicators*** your overall life satisfaction?

Indicators					
1. Health facilities in your area	1	2	3	4	5
2. Health service quality in your area	1	2	3	4	5
3. Water quality in your area	1	2	3	4	5
4. Air quality in your area	1	2	3	4	5
5. Environmental quality in your area	1	2	3	4	5
6. Environmental cleanness in your community	1	2	3	4	5
7. Safety and security in your community	1	2	3	4	5
8. Accident rate or crime rate in your community	1	2	3	4	5

Part V: Overall Life Satisfaction

1. The following statements are about your life domain satisfaction. Please check the appropriate circle to indicate how much you agree or disagree with each statement.

1= Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agreed

Indicators					
1. I am satisfied with my **material life.**	1	2	3	4	5
2. I am satisfied with my **financial situation**.	1	2	3	4	5
3. I am satisfied with my **standard of living**.	1	2	3	4	5
4. I am satisfied with my **community life**.	1	2	3	4	5
5. I am satisfied with my **community amenities, services, and conditions.**	1	2	3	4	5
6. I am satisfied with **the neighborhood in my community**.	1	2	3	4	5
7. I am satisfied with my **leisure life**.	1	2	3	4	5
8. I am satisfied with my **leisure time**.	1	2	3	4	5
9. I am satisfied with **spare-time activities**.	1	2	3	4	5
10. I am satisfied with my **spiritual life**.	1	2	3	4	5
11. I am **content with life**.	1	2	3	4	5
12. I appreciate **the life I lead**.	1	2	3	4	5
13. I am satisfied with **my health in general.**	1	2	3	4	5
14. I never felt **better in my life**.	1	2	3	4	5
15. I still feel **young and full of spirit**.	1	2	3	4	5
16. I am satisfied with my sense of **safety in life**.	1	2	3	4	5
17. I am satisfied with my sense of **security in life**.	1	2	3	4	5
18. I am satisfied with **the level of safety provided in my community**	1	2	3	4	5

2. The following statements are about your overall life satisfaction. Please check the appropriate circle to indicate how much you agree or disagree with each statement.

1= Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agreed

Indicators					
1. I am satisfied with my life as a whole.	1	2	3	4	5
2. The conditions of my life are excellent.	1	2	3	4	5
3. In most ways my life is close to ideal.	1	2	3	4	5
4. So far I have gotten the important things I want in life.	1	2	3	4	5
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5
6. In general, I am a happy person.	1	2	3	4	5

Part VI: Perceived Value of Tourism (Development)

The following items are about the perceived value of tourism (development) in your community. Please check the appropriate circle to indicate how much you agree or disagree with each statement.

1= Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree

Indicators					
1. Overall, tourism development is of importance to economic-well-being in your community.	1	2	3	4	5
2. Tourism development is a good cause.	1	2	3	4	5
3. Tourism as an economic development tool is worthy of strategic importance in tourism planning & development.	1	2	3	4	5
4. Tourism is a good investment.	1	2	3	4	5
5. Tourism helps increase cohesion in your community.	1	2	3	4	5
6. Tourism development generates a sense of pride in your community.	1	2	3	4	5

Part VII: General Information

1. How do you rate the level of tourism development in your community?

Low development Moderate High development No opinion

1 2 3 4 5 6 7 ( )

2. How do you perceive the overall impact of tourism development in your community?
(1) Very negative (2) Negative (3) Moderate (4) Positive (5) Very positive (6) No opinion

3. Would you oppose or support tourism development in your community?
(1) Strongly oppose (2) Oppose (3) Neutral (4) Support (5) Strongly support (6) No opinion

4. How much more tourism development would you like to see in your community?

No development at all Moderate development High development No opinion

1 2 3 4 5 6 7 ( )

5. Please indicate the extent to which you agree/disagree with the following two statements regarding further tourism development in your community.

1= Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree

Indicators	
1. Further tourism development would positively affect my community's quality of life	1 2 3 4 5
2. Further tourism development would negatively affect my community's quality of life	1 2 3 4 5

6. Please indicate the extent to which you are involved in the affairs of your community?
(1) Not at all involved (2) Seldom involved (3) Somewhat involved (4) Occasionally involved (5) Highly involved

Thank you for your participation!

Appendix C. Individual items of the constructs with mean scores and standard deviation

1. Perception of material life domain

Variables	Mean	SD	Skew.	Kurt.
The real estate taxes	2.88	1.16	.057	-.777
The cost of living in general	3.32	1.13	-.389	-.554
The cost of basic necessities such as food, housing, and clothing	3.26	1.13	-.199	-.664
Income at your current job	2.58	1.41	.416	-1.126
The economic security of your job	2.64	1.38	.310	-1.168
Family income	2.78	1.31	.169	-1.103
The pay and fringe benefits you get	2.58	1.34	.357	-1.087

2. Perception of community life domain

Variables	Mean	SD	Skew.	Kurt.
The conditions of your community environment (air, water, land)	3.21	1.14	-2.20	-.69
The people who live in your community	3.19	1.15	-.201	-.729
The service and facilities you get in your community	3.11	1.18	-.149	-.800
Community life	3.14	1.17	-.137	-.744
Public transportation	3.14	1.28	-.097	-1.016

3. Perception of emotional life domain

Variables	Mean	SD	Skew.	Kurt.
Spare time	2.65	1.17	.291	-.817
Leisure activities	3.01	1.22	-.052	-.893
Leisure life	2.94	1.22	.027	-.923
Religious services	2.15	1.06	.848	.234
The way culture is preserved in your community	2.88	1.23	.115	-.979
The leisure life in general	2.93	1.13	.015	-.700
The spiritual life in general	2.36	1.13	.668	-.243

4. Perception of Health/Safety life domain

Variables	Mean	SD	Skew.	Kurt.
Health facilities	2.82	1.13	.155	-.668
Health service quality	2.75	1.14	.246	-.734
Water quality	2.86	1.18	.115	-.849
Air quality	3.03	1.21	-.086	-.891
Environmental quality	3.07	1.18	-.085	-.813
Environmental cleanliness	3.21	1.18	-.258	-.677
Safety and security	3.25	1.20	-.286	-.734
Accident rate or crime rate	3.32	1.15	-.263	-.627

5. Satisfaction of material life domain

Variables	Mean	SD	Skew.	Kurt.
The real estate taxes	2.77	.91	-.148	-.001
The cost of living in general	2.50	1.08	.367	-.707
The cost of basic necessities such as food, housing, and clothing	2.51	1.12	.353	-.771
Income at your current job	2.70	1.01	.019	-.417
The economic security of your job	2.87	1.04	-.23	-.46
Family income	2.79	1.07	-.028	-.719
The pay and fringe benefits you get	2.77	1.04	-.07	-.588

6. Satisfaction of community life domain

Variables	Mean	SD	Skew.	Kurt.
The conditions of your community environment (air, water, land)	3.26	.940	-.386	-.180
The people who live in your community	3.36	.960	-.514	.178
The service and facilities you get in your community	3.28	.966	-.366	-.013
Community life	3.33	.931	-.436	.158
Public transportation	2.98	1.05	-.181	-.444

7. Satisfaction of emotional life domain

Variables	Mean	SD	Skew.	Kurt.
Spare time	3.49	.969	-.562	.094
Leisure activities	3.55	.934	-.698	.233
Leisure life	3.52	.940	-.672	.257
Religious services	3.48	.890	-.317	.682
The way culture is preserved in your community	3.32	.928	-.347	.240
The leisure life in general	3.54	.880	-.656	.509
The spiritual life in general	3.49	.884	-.296	.547

8. Satisfaction of Health/Safety life domain

Variables	Mean	SD	Skew.	Kurt.
Health facilities	3.38	.985	-.543	.006
Health service quality	3.35	1.01	-.509	-.141
Water quality	3.30	.966	-.423	-.259
Air quality	3.33	.955	-.439	-.113
Environmental quality	3.31	.909	-.486	.014
Environmental cleanliness	3.21	.951	-.294	-.392
Safety and security	3.18	.992	-.397	-.355
Accident rate or crime rate	2.80	1.09	-.013	-.788

9. Overall quality of life

Variables	Mean	SD	Skew.	Kurt.
I am satisfied with my life as a whole.	3.62	1.02	-.717	.241
The conditions of my life are excellent.	3.24	1.08	-.286	-.522
In most ways my life is close to ideal.	3.05	1.15	-.207	-.784
So far I have gotten the important things I want in life.	3.43	1.08	-.520	-.309
If I could live my life over, I would change almost nothing.	2.87	1.21	.025	-1.01
In general, I am a happy person.	3.76	.956	-.803	.566

Appendix D. The results of ANOVA analyses

		Sum of Squares	df	Mean Square	F	Sig.
Perception of tourism impacts in material life domain	Between Groups	9.394	3	3.131	2.027	.110
	Within Groups	622.675	403	1.545		
	Total	632.069	406			
Perception of tourism impacts in non-material life domain	Between Groups	9.837	3	3.279	3.638	.013
	Within Groups	363.270	403	.901		
	Total	373.108	406			
Satisfaction with material life domain	Between Groups	3.347	3	1.116	1.329	.264
	Within Groups	338.306	403	.839		
	Total	341.653	406			
Satisfaction with non-material life domain	Between Groups	6.869	3	2.290	4.634	.003
	Within Groups	199.107	403	.494		
	Total	205.976	406			
Overall quality of life	Between Groups	8.928	3	2.976	3.585	.014
	Within Groups	334.569	403	.830		
	Total	343.498	406			