

AN EXPLORATORY INVESTIGATION OF PERCEIVED TOURISM IMPACTS ON
RESIDENT QUALITY OF LIFE AND SUPPORT FOR TOURISM IN COLOGNE,
GERMANY

By

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To my family

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The fundamental objective of tourism development lies in achieving a desirable quality of life for residents of host destinations by improving economic prosperity, while protecting cultural and natural resources. If residents perceive that tourism has a substantial role in the achievement of these goals, they will likely be supportive of development. Hence, the effects of perceived tourism impacts on both personal, and community quality of life, along with residents' support for tourism in the historic city of Cologne, Germany were examined.

A theoretical model was conceptualized and empirically tested by applying a two-stage structural equation modeling approach. A total of 633 residents of Cologne were sampled which constituted a response rate of 68%. Residents were asked to rate their level of agreement with tourism impacts based on the four dimensions of sustainability-economic, environmental, socio-cultural, and institutional. In addition, two measures of quality of life-community and personal, and support for tourism were assessed.

It was hypothesized that resident perceptions of tourism impacts would affect community and personal quality of life, as well as support for tourism. Furthermore, it

was postulated that quality of life would mediate the relationship between perceived impacts and support for tourism. Results identified that residents had overall positive perceptions of tourism; were generally satisfied with their quality of life, and were supportive of tourism in Cologne.

Based on the inclusion of both community and personal quality of life constructs, although positive perceptions of tourism impacts were found to predict support for tourism, their relationship with resident quality of life may not be as straightforward as previously assumed. Moreover, perceived tourism impacts had varying effects on community and personal quality of life, and neither mediated the relationship between perceived tourism impacts and support for tourism. More specifically, resident perceptions of the institutional structure of Cologne and the socio-cultural impacts of tourism had significant direct effects on community quality of life; conversely, resident perceptions of economic and environmental impacts had significant direct effects on personal quality of life. Moreover, community quality of life had the strongest effect on personal quality of life. Additionally, a negative relationship existed between perceived environmental impacts and personal quality of life while perceptions of socio-cultural tourism impacts and of institutional structure demonstrated weak indirect effects on personal quality of life mediated by community quality of life.

CHAPTER 1 INTRODUCTION

Over the last two decades, there has been a major paradigm shift from an economically driven development perspective to the concept of sustainable development, which offers a more holistic framework, integrating economic, environmental, and socio-cultural factors. By taking a more comprehensive perspective and recognizing the interactive linkages between society, economy, and the environment, a more balanced and harmonious quality of life can be achieved (Noll, 2002). The principles of sustainability have been found to be in congruence with the achievement and/or protection of a better quality of life in community development projects (Christensen, 1995). Community quality assessments range from purely economic measures, such as the Gross Domestic Product (GDP); economic measures combined with measurable objective indicators in both the natural and human realms, such as the Human Development Index or the Genuine Progress Indicator; to measures of subjective well being which assess respondents overall well being, happiness, or satisfaction with their lives (Vemuri & Costanza, 2005). Subjective evaluations of how residents feel about living in their community have been recognized as an appropriate measure of community quality and factors related to the community environment are directly relevant to personal quality of life (Marans & Mohai, 1991).

Sirgy (2002) categorized quality of life as a terminal value meaning it is “an end goal for the human species, and society organizes its many institutions to strive to attain a better quality of life for all” (p. xiii). The ultimate goal of most governments is (or should be) to maintain or increase the welfare and quality of life of their constituents (Costanza et al., 2007; Noll, 2002). In this vein, Rojas (2009) recently stated:

“enhancing quality of life is a globally accepted aspiration. It is expected from governments, as well as from local and international organizations, to embrace the enhancement of people’s quality of life as a top priority and a main justification for their actions” (p.12). One avenue many governments have taken to try to enhance the lives of their constituents has been through tourism development.

It has been argued that the fundamental objective of tourism development lies in achieving a desirable or improved quality of life for residents of the host destination by improving economic opportunity/prosperity and protecting cultural and natural resources (Ap, 1992; Ap & Crompton, 1998; Bachleitner & Zins, 1999; McCool & Martin, 1994; McKool, Moisey & Nickerson, 2001; Murphy & Price, 2004; Perdue, Long & Allen, 1990). While economic growth and job creation have been the driving force behind much tourism development, negative economic, environmental, and socio-cultural impacts of tourism have also been evident. Based on this recognition, many governments and organizations have adopted a sustainable tourism paradigm. By integrating the economic, environmental, and socio-cultural needs of the present tourists and host communities while protecting the needs of future generations, sustainable tourism aims to maximize the positive and minimize the negative impacts of tourism (UNWTO, 2004). Therefore, the aim of sustainable tourism development is to improve the quality of community life, and ultimately improve or maintain the personal well being of the community residents.

The sustainable tourism literature has consistently highlighted the importance of local residents in tourism development based on two overarching themes; the first is that stakeholder involvement is one of the fundamental principles of sustainable tourism

(Byrd, 2007; Choi & Sirakaya, 2005; Hardy, Beeton & Pearson, 2002, Nicholas, 2007); and secondly, the receptiveness of local residents to visitors plays an important role in both visitor enjoyment and overall destination appeal (Ap, 1992, Gursoy & Rutherford, 2004). Therefore, resident support for tourism is extremely important for any community that seeks to utilize tourism as a part of their development strategy.

Based on the interdependent relationship between tourists and the destinations visited, there have been a plethora of studies that have examined resident perceptions of tourism impacts (Andereck, Valentine, Knopf & Vogt, 2005; Ap, 1990 & 1992; Ap & Crompton, 1993 & 1998; Bachleitner & Zins, 1999; Gu & Ryan, 2008; Haralambopoulos & Pizam, 1996; Johnson, Snepenger & Akis, 1994; Jurowski, Uysal, & Williams 1997; King, Pizam & Milman 1993; Liu, Sheldon & Var 1987; Liu & Var 1986; Milman & Pizam 1988); attitudes towards tourism (Andereck & Vogt, 2000; Andriotis & Vaughan, 2003; Allen, Hafer, Long & Perdue, 1993; Allen, Long, Perdue & Kieselbach; 1988; Burns, 1996; Carmichael, Peppard & Boudreau, 1996; Choi & Sirakaya, 2005; Gilbert & Clark 1997; Johnson, Snepenger, & Akis 1994; Jurowski & Uysal, 2004; Ko, 2002; Mason, 2000; McGehee & Andereck, 2004; Lankford 1994; Lankford & Howard 1994; Lindberg & Johnson 1997; Perdue, Long & Allen 1987; Long, Perdue & Allen 1990; McCool & Martin 1994; Snaith and Haley 1995; Wang & Pfister, 2008), and support for tourism development (Andereck & Vogt, 2000; Chen, 2001; Gursoy, Jurowski & Uysal, 2002; Gursoy & Rutherford, 2004; Dyer, Gursoy, Sharma & Carter, 2007; Jurowski, Uysal, & Williams, 1997; Ko and Stewart, 2002; Mason & Cheyne, 2000; Nunkoo & Ramkissoon, 2009; Pennington-Gray, 2005; Perdue et al., 1990; Perdue, Long & Kang, 1995; Shen & Cotrell, 2008; Yoon, Gursoy & Chen, 2001). While these studies play an important role

in the monitoring and evaluation of tourism development, they can also be utilized as a vehicle to increase resident awareness and involvement in community development, as well as tourism planning. Tourism impact and attitude studies list a litany of positive and negative effects that include but are not limited to: increased employment opportunities; increased cost of living; increase in traffic and pollution; and loss of community character (Easterling, 2004). Researchers have striven to identify impacts that cover all facets of sustainability in order to help communities successfully plan, manage, and monitor both positive and negative impacts of tourism, which inevitably affect resident's quality of life.

While the impact of tourism on life conditions such as population migration, income, employment, poverty, education, health-care, and recreation as objective measures of quality of life have been undertaken (Crotts & Holland, 1993; Perdue, Long & Gustke, 1991); the majority of tourism impact studies have utilized subjective evaluations of residents from the affected communities. Moreover, based on existing research the link between tourism impacts and resident quality of life has been implicitly suggested rather than specifically investigated (Ap, 1992; Allen, Hafer, Long & Perdue, 1993; Andereck, Valentine, Knopf & Vogt, 2005; Andereck & Vogt, 2000; Ap & Crompton, 1993; Bachleitner & Zins, 1999; Burns, 1996; Carmichael, 2006; Choi & Sirakaya, 2005; Diedrich & Garcia-Buades, 2008; Gilbert & Clark, 1997; Gu & Ryan, 2008; Gursoy, Jurowski & Uysal, 2002; Johnson, Snepenger & Akis, 1994; Jurowski & Gursoy, 2004; Lankford & Howard, 1994; Long, Perdue & Allen, 1990; McCool and Martin, 1994; Milman & Pizam, 1988; Socher, 1992; Vargas-Sanchez, Plaza-Mejia & Porrás-Bueno, 2008; Wang & Pfister, 2008).

However, there are a few notable exceptions which should be highlighted: Allen et al., (1988), Crofts and Holland (1993), Perdue, Long and Gustke (1991) and Ko and Stewart (2002) examined the impact of tourism development on resident quality of life or resident perceptions of community life based on community characteristics commonly found in quality of life literature. Moreover, based on an extensive literature review, there are presently only two known studies that have employed a multidimensional conceptualization of quality of life within the tourism literature (Kim, 2002; Emptaz-Collomb, 2009).

Furthermore, although tourism impact and attitudinal studies have been examined in various communities, there has been a major North American focus geographically, with growing interest in other regions globally (Emptaz-Collomb, 2009; Gilbert & Clark, 1997; Konstantinos & Vaughan, 2003; Mason & Cheyne, 2000; Moswete, 2009; Sheldon & Abenoja, 2001; Shen & Cottrell, 2008; Sirakaya, Teye & Sonmez, 2002; Soutar & McLeod, 1993; Yen & Kerstetter 2009). Moreover, studies have primarily focused on rural communities in the early stages of tourism development (Andereck & Vogt, 2000; Emptaz-Collomb, 2009; Jurowski et al., 1997; McGehee & Andereck, 2004; Moswete, 2009; Perdue et al., 1990; Shen & Cottrell, 2008; Wang & Pfister, 2008). Generally, there has been a paucity of research with respect to tourism impact within an urban context and/or destinations in more mature stages of development (Chen, 2001; Diedrich & García-Buades, 2008; Gilbert & Clark, 1997; Pennington-Gray, 2005; Sheldon & Abenoja, 2001; Snaith & Haley, 1999). Similarly, much of the sustainable tourism literature has focused on natural or rural areas in developed nations or general development in less developed nations, while urban or developed environments often

associated with mass tourism have been limited (Butler, 1990; Chen, 2001; Swarbrooke, 1999). However, Weaver (2006) stated quite aptly that “it can be argued that every place in the world is now a tourist destination for which the issue of sustainability is relevant” (p. 14). While unsustainable development practices are more obvious in pristine, natural areas, similar negative consequences exist in developed/urban settings (Hinch, 1996; 1998). For example, Swarbrooke (1999) laments the increasing pressure exerted on many historic towns and cities in Europe based on the rapid growth in tourist numbers due to a greater interest in cultural and historic forms of tourism. Although there is extensive literature on sustainable cities from a variety of disciplines, tourism’s role and responsibility has been minimally addressed (Hinch, 1996). Cities have long been recognized as some of the most important types of tourist destinations that feature magnificent tangible and intangible assets (Law, 1993) however, urban tourism research has not reflected its degree of importance relative to other types of destinations (Edwards, Griffin & Hayllar, 2008; Gilbert & Clark, 1997). Therefore, this study seeks to contribute to the literature with an examination of residents’ perceived tourism impacts on quality of life in a mature urban destination within a European context. More specifically the historic city of Cologne, Germany will provide the setting for this research.

Tourism in Cologne

Cologne is a cultural metropolis offering residents and visitors a wide-ranging spectrum of sights and activities; including an extensive range of museums, theatres and musical events; many opportunities for sports and recreation, including a variety of professional sports teams; a lively restaurant, bar and club scene; extensive high-street shopping, as well as many smaller, individualized shops and boutiques. According to

Cologne's tourism board "Cologne is a feeling" (www.koelntourismus.de) which must be experienced firsthand. Cologne offers all the amenities of a metropolitan city, while retaining a friendly local atmosphere. In fact, Cologne is well known throughout Germany for its fun loving residents who exhibit their love of revelry annually in the famous "Karneval" and "Christopher Street Day" celebrations.

Cologne is also known for its rich historic ties to the Roman Empire and while well documented in the Römisch-Germanischen Museum, the footsteps of this ancient civilization can be found throughout the modern city in the form of Roman city walls, several city gates, roman aqueducts, and even roman roads spread throughout the city (Figure 1-1). Cologne also has a long history as an important pilgrimage destination within Europe. In 1164, Archbishop Rainald von Dassel brought the relics of the three Magi to Cologne Cathedral (www.koelner-dom.de). This event sparked the decision to build the famous Cologne cathedral with its twin spires; a magnificent piece of gothic architecture embedded with monumental historic, religious, and cultural significance, which is presently the most famous landmark of the area (Figure 1-2). The Cathedral is architecturally stunning and holds much interest for the local population as well as millions of national and international visitors who flock to behold this World Heritage Site every year. Present day Cologne is known as a cultural metropolis, both for its cultural history as well as the extremely lively modern cultural scene.

The city offers a broad spectrum of social and cultural activities, as evidenced by more than 100 art galleries; 36 museums; an active theatre and music scene including permanent venues for major musicals, several orchestras, as well as numerous smaller local theatre and musical venues; while also featuring many annual cultural events such

as Karneval, Christopher Street Day, literary festivals and the famous Christmas markets (Figures 1-3 and 1-4). Cologne is a mature tourism destination with wide appeal to all ages and types of travelers. The city has an international exhibition centre with over 50 international trade fairs and exhibitions annually, which draw a large segment of business travelers in addition to leisure travelers.

According to the state tourism statistics, close to 2.6 million tourist arrivals and 4.6 million overnight stays were recorded in Cologne in 2010 (www.koelntourismus.de). Cologne was the fifth most visited city in Germany in 2010 based on visitor arrival statistics, outranked only by Berlin, Munich, Hamburg, and Frankfurt (www.Reise-Magazin.de March 17, 2011). Since 1994, visitor numbers steadily increased until 2008 when both visitor arrivals and overnight stays decreased for the first time in 14 years (Table 1-1). The Cologne tourism board attributed this decrease to the general economic climate (Köln Tourismus Jahresbilanz, February 2009). In addition, it could be stipulated that the record visitor numbers garnered in 2007 were partially due to the effects of the football (soccer) World Cup 2006 which was held in Germany with the Cologne region as one of the host sites. Overall, the city has experienced phenomenal growth in visitor arrivals over the last 16 years, with an average annual increase of 6.3% based on a 101% overall increase in visitor arrivals (Köln Tourismus Jahresbilanzen). Moreover, Cologne most recently experienced a record increase in visitation of 10.7% from 2009 to 2010. Such extreme increase in visitation has highlighted the city as a major destination, and more importantly positively affects the economy. However, the annual visitor numbers is in excess of twice the resident population, and hence it is vital to assess the perceived level of impact on residents' quality of life. The importance of

resident receptiveness to visitors has been recognized as an important factor for both visitor enjoyment and overall destination appeal (Ap, 1992, Gursoy & Rutherford, 2004).

Currently, residents of Cologne are known for their friendliness; however, this could change if the negative impacts of tourism begin to outweigh the benefits. Residents' perceived negative impacts could likely translate into depreciative attitudes and behaviors towards visitors as well as the overall tourism industry, which pose a threat to the sustainability of the industry. Research in numerous destinations has generally supported the influence of residents' perceived positive tourism impacts on support for visitors as well as tourism development (Andereck & Jurowski, 2006; Andereck & Vogt, 2000; Dyer et al., 2007; Jurowski, Daniels & Pennington-Gray, 2006; Jurowski, Uysal, and Williams, 1997; King, Pizam, and Milman, 1993; Ko & Stewart, 2002; Perdue et al., 1990; Snaith & Haley, 1995). In order to alleviate negative impacts, policy makers, destination marketing and management organizations need to be aware of the residents' perceived impacts and subsequent support of the tourism industry in Cologne. It is acknowledged that such related research is lacking in Cologne and much needed given that it is a mature destination with continued growth in visitor arrivals. In Cologne, the community vision for 2020 has committed the city to improve the quality of life in their community with sustainable urban development highlighted as a goal. In addition, the importance of greater involvement of residents in the planning and development of the city has been recognized (Kölner Leitbild, 2020). Therefore, such evaluations of tourism development can be used to increase resident awareness and involvement in tourism planning in Cologne.

Theoretical Foundation

A variety of theoretical frameworks have been utilized to investigate resident impact and attitude studies over the years including equity theory, growth machine theory, life-cycle theory, power theory, social exchange theory, and most recently stakeholder theory (Easterling, 2004; Harrill, 2004). However, the predominant theory underlying resident attitude research has been social exchange theory, which evaluates the trade off between costs and benefits resulting from tourism development (Andereck et al., 2005; Ap, 1992). Recently, stakeholder theory has also garnered much attention as it emphasizes the necessity of community participation in the process of tourism development (Byrd, 2007; Getz & Timur, 2004; Moswete, 2009; Nicholas, 2007). However, the larger the stakeholder pool becomes, the more difficult it becomes to be truly inclusive, representative, and to reach consensus in the decision-making process (Hartz-Karp & Briand, 2009). Moreover, it is generally those with stakes or political power that actively participate in the process and are able to exert the most influence (Hall, 2003; Joppe, 1996; Timothy, 2002). Moreover, Hartz-Karp and Briand (2009) noted that public involvement in large cities requires many well-organized public events, which are currently not very prevalent, and even when they are of a high quality, they do not easily translate to social or political change. However, Choi and Sirakaya (2005) suggest that “sustainable tourism as an emerging paradigm seems to enhance the existing conceptual frameworks on tourism planning and development by making the residents its focal point” and that it “seeks to strike a balance between the traditional utility paradigm and its derivative, social exchange theory . . . and the new environmental paradigm” (p. 381). Hence, sustainable tourism development will be employed as the conceptual framework for this study.

Sustainable tourism has indeed garnered much attention over the past years; the concept likely emerged as both a reactive response to negative impacts of tourism, as well as a proactive orientation based on the increased awareness to the importance of a more holistic outlook due to the general sustainability discourse (Murphy & Price, 2005). The recent increase in environmental awareness by the public, coupled with a decade of identifying numerous serious pollution problems, and a rapidly growing world population, has led to global discussions regarding sustainable development (Hardy, Beeton & Pearson, 2002; Saarinen, 2006). Similar to the paradigm shift towards sustainability in the general development discourse, there has been a parallel movement within the tourism industry towards more sustainable tourism practices. Jafari (1989) suggested tourism development has moved through four platforms that range from advocacy (initial support), to cautionary (questioned due to negative impacts), to adaptancy (alternative or more responsible), and finally to knowledge-based which embraces the principles and objectives of sustainability.

There is a general agreement that sustainable tourism development should be firmly grounded within the tenets of sustainable development (Miller & Twining-Ward, 2005; Sharpley, 2000; Swarbrooke, 1999; UNEP, 2003); which challenged the assumption that the natural environment is an unlimited resource, capable of withstanding endless human consumption and pollution in the name of progress (Hardy, Beeton & Pearson, 2002). Based on the Brundtland report published by the World Commission on Environment and Development (WCED) in 1987, the United Nations Department of Economic and Social Affairs defines sustainable development as “development that meets the needs of the present without compromising the ability for

future generations to meet their own needs” (WCED, 1987, p.43). While this is the most frequently cited definition of sustainable development, there are a myriad of interpretations and explanations with no clear agreement on an ultimate definition (Butler, 1998; Sharpley, 2000). Nonetheless, Sharpley concisely expressed the elemental principles underlying sustainability as having an equitable, holistic, and long-term approach (Table 1-2) which inevitably are the same principles underlying sustainable tourism development.

Definition of Sustainable Tourism

Early work on sustainable tourism was marred by the lack of a clear consensus with respect to its definition (Goodall & Stabler, 1997; Hall & Lew, 1998; Hunter, 1997). However, since then the profound interest in the subject has led to much debate as illustrated by the proliferation of books on sustainable tourism (see Hall & Brown, 2006; Harris, Griffon & Williams, 2002; Stabler, 1997; Swarbrooke, 1999; Weaver, 2006), as well as a peer refereed academic journal (Journal of Sustainable Tourism). However, the most encompassing and widely accepted definition of sustainable tourism development was put forth by the World Tourism Organization (UNWTO):

Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability (UNWTO, 2004).

More specifically, the importance and interdependency between environmental, socio-cultural, and economic spheres are highlighted:

1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.

2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
3. Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation (UNWTO, 2004).

The definition further emphasizes the role of political leadership and stakeholder participation in the development process while also addressing tourist education and satisfaction:

Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary. Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them (UNWTO, 2004).

Dimensions of Sustainability

Based on early indicator development work by the United Nations Development Program's Commission on Sustainable Development (UNDP/CSD) the economic, environmental, and socio-cultural dimensions have become known as the "three pillars" of sustainability (Murphy & Price, 2005). While economic growth has historically been the cornerstone of development, and is still a vital aspect of sustainable development, environmental, and socio-cultural facets have become essential features of the development process in recent years (Miller & Twining-Ward, 2005). The recognition of environmental constraints to development based on resource limitations have led to the inclusion of environmental concerns within the development theory, but were also the driving force behind sustainability (Sharpley, 2000). While the socio-cultural dimension

recognizes the impact human actions have on the environment (e.g., population increase and high consumption levels), the quality of human life has also become an important facet of sustainability. These three dimensions are not mutually exclusive and must be viewed as intertwined aspects of one concept that influences each other (Swarbrooke, 1999; Nicholas & Thapa, 2009).

Several institutions such as the World Bank and the Organization for Cooperation and Development (OECD) have advocated for the inclusion of an institutional dimension in order to incorporate essential societal and cultural elements of Agenda 21 (Spannenberg, 2002). Furthermore, the difficulty of realizing the goals of sustainability without an adequate institutional system or political vehicle to plan, implement, and manage the objectives of sustainability has also been recognized (Valentin & Spangenberg, 2000, 2002; 2007; Cottrell, Vaske, Shen & Ritter, 2007). Spannenberg (2007) denotes that although the institutional dimension has been addressed in most key documents that pertain to sustainable development as “an element supporting sustainable development . . . it has been denied a role as a dimension in its own right” (p. 108). Moreover, he laments that due to this neglect the “institutional objectives such as equality, justice (including gender), and human rights are considered not as constitutive to sustainable development but as part of the governance process supporting it” (p. 109). Moreover, it is the environment fostered, as well as the policies created by the political system that enable or hinder the attainment of a better quality of life within a sustainable paradigm. However, while the institutional dimension has yet to be widely accepted in the general discourse of sustainable development, it is an essential component of the sustainable development paradigm (Spannenberg, 2007)

and further integrates level of public involvement in to the level of political governance by emphasizing a participatory decision-making process.

Sustainable Development and Quality of Life

The link between sustainable development and quality of life has been implicitly assumed in much of the sustainable development literature (Asheim, 1999; Massam, 2002; Moran, Wackernagel, Kitzes, Goldfinger & Boutaud, 2008; Portney, 2003). There are a few examples in which the connection between the two concepts has been more explicitly stated (Fahy & O’Cinnéide, 2007; Miller & Twining Ward, 2005; Noll, 2002; Patterson, Gulden, Cousins & Kraev, 2004; Vlek, Skolnik & Gatersleben, 1998). For example, it has been noted that sustainability is about maintaining our valued quality of life while being aware of the impact on the world at large (Miller & Twining Ward (2005), citing Romerll (1997), p. 39). Similarly, Fahy and O’Cinnéide (2007) argue that the prospect of increasing quality of life has been the driving force for local development, while in the past primarily achieved through economic growth. However, under the current sustainability framework “one seeks to enhance quality of life in the most resource–efficient manner” (p. 366). Therefore, local strategies and policies with respect to sustainable development are “strongly influenced by quality of life considerations” (p. 366). In fact, Eckersley (1998) describes sustainable development as a “widely accepted term to describe the goal of achieving a high, equitable and sustainable quality of life” (p. 6).

Based on the aforementioned importance given to sustainable development by local, regional, national, and international organizations, and the subsequent political policies, it has been argued that the “concept of sustainability has become the dominant model of societal development” (Noll, 2002, p. 58). Furthermore, several authors have

posited that the fundamental goal of sustainable development, and hence the ultimate goal of most governments is to increase the quality of life for present and future generations (Costanza et al., 2007; Noll, 2002; Rojas, 2009). This fundamental objective is clearly denoted in official policy documents that describe goals and objectives (e.g., policy guidelines, principles, or overall goal statements) of international organizations such as the United Nations and the European Union. For instance, based on an assessment of the UN Millennium Development Goals that were adopted by 189 nations in 2000, (addressing issues of poverty, education, gender equality, empowerment, health, and environmental sustainability), the link between the world's greatest development challenges and the underlying goal of improving quality of life for all people were clearly identified.

More explicitly, in the United Nations Rio Declaration on Environment and Development, principle 1 addressed the centrality of human beings to sustainable development and stated that “they are entitled to a healthy and productive life in harmony with nature” (UN, 1992, p. 1); while principle 8 specifically addressed the overall aim to achieve “a higher quality of life for all people” via reduction and elimination of “unsustainable patterns of production and consumption and promote appropriate demographic policies” (UN, 1992, p. 1). Most recently, deVries & Petersen (2009) conceptualized sustainable development as “a quest for developing and sustaining qualities of life” (p.1007). Specifically, they described the nexus between sustainability and quality of life as “the degree to which developing and/or maintaining a quality of life for a given (human) population has consequences which impair the

options for developing and/or maintaining an aspired quality of life, later and/or elsewhere” (p.1007).

Sustainable Tourism and Quality of Life

It has been noted that “a tourism situation cannot be classified as sustainable development if it does not consider the resulting quality of life of local residents” (Farrell, 1992 as summarized by Ko, 2005, p. 433). A true sense of the importance of this statement can be garnered by the identification of host population quality of life amongst the objectives adopted in the charter of sustainable tourism by the United Nations General Assembly (Miller & Twining-Ward, 2005). Furthermore, the European Commission’s Tourism Sustainability Group also specifically addressed community well being in their guidelines for sustainable tourism:

To maintain and strengthen the quality of life in local communities including social structures and access to resources, amenities, life support systems, avoiding any form of social degradation or exploitation (Notarstefano, 2007, p. 47).

Notarstefano recognized that the current challenge for the tourism industry is to remain competitive while embracing the principles of sustainability but more importantly that in the long term “competitiveness depends on sustainability” (p. 48). In order to achieve competitive and sustainable tourism the European Commission suggested several principles which included a holistic and integrated approach, long-term planning, involvement of all stakeholders, as well as an appropriate rhythm and pace of development which reflects the character, resources and needs of host communities and destinations. The scale and intensity of tourism development should be determined by local characteristics and focus on local community needs as the most important aspect is the improvement of resident quality of life (Miller & Twining-Ward, 2005).

A majority of the tourism impacts and concerns has been taken into consideration in the conceptualization, planning, and development of sustainable forms of tourism, and are reflected in the formulation of sustainable indicators (Choi & Sirakaya, 2005; Miller & Twining-Ward, 2005; UNWTO, 2004). It is inherent that the principles of sustainable tourism and the achievement of sustainable destinations would add to the overall quality of life of residents by minimizing the negative and maximizing the positive impacts. Based on the previous discussion, a conceptual framework within the context of the four dimensions (institutional, socio-cultural, economic, and environmental) of sustainability and quality of life is formulated and were employed as the basis for this study (Figure 1-5).

Statement of Problem

Between 1994 and 2007, Cologne experienced a 93% increase in visitors. Although the visitor numbers decreased slightly in 2008 for the first time in 14 years, the overall visitor increase since 1994 was still an astounding 85%. With almost 2.4 million visitors in 2008, the number of annual visitors is presently more than double the number of residents and the local community will undoubtedly feel some associated tourism impacts. While some effects may be more obvious in nature, such as the EUR 5.5 billion total revenue created by Tourism in Cologne during 2008 (Köln Tourismus Jahresbilanz February 2009); it is imperative to ensure that economic benefits are not offset by adverse environmental or socio-cultural impacts due to ever-increasing numbers of visitors (Archer & Cooper, 2001). The long-term consequences of such a rapidly increasing volume of visitors must be monitored and managed in order to balance the needs and welfare of the tourist and the host community. An important aspect of such activities is for Cologne's policy makers, planners, city managers, and

destination managers to understand resident's attitudes towards tourism in order to mitigate any negative consequences perceived by the community. Hence, it is vital to assess the perceived level of impact such a high volume of visitors has on the quality of life of local residents and their current level of support for tourism.

There are a plethora of studies that have examined resident perceptions of tourism impacts in which the term quality of life has been used interchangeably with that of resident attitudes or perceived impacts, and hence the term has been utilized as an expression to encompass all of the perceived impacts attributed to tourism. While some impact and attitudinal scales utilized in the tourism literature have included a quality of life item or two, the operationalization of quality of life as a distinct construct (covering the core domains identified within the quality of life literature in disciplines such as economics, sociology, and social psychology) is lacking. Hence, there is a paucity of research which investigates the impact of tourism and host population's quality of life as a concept (Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Perdue et al., 1999; Urtasun & Gutierrez, 2006). The awareness of resident perceptions of tourism impacts is vital for any tourism development to be truly sustainable. However, in order to make inferences to resident quality of life based on those perceived impacts, it is imperative to understand the relationships between the perceived impacts and resident quality of life rather than grouping all impacts under the general rubric of quality of life.

In a study which focuses specifically on tourism impacts and resident quality of life, Andereck, Valentine, Vogt and Knopf (2007) stated that:

the difference between QOL and attitude/impact studies is essentially one of measurement: attitude/impact studies largely focus on the way in which

tourism is perceived to affect the communities and the environment, whereas QOL studies are typically concerned with the way these impacts affect individual or family life satisfaction, including satisfaction with community, neighborhood and personal satisfaction (p. 484).

While the focus of measurement certainly seems valid and was addressed in this study (by employing a community quality of life measure as well as a personal quality of life measure), the overarching difference between quality of life studies and tourism impact / attitude studies appears to be due to conceptualization and operationalization. Although quality of life has been conceptualized as a multidimensional concept (Cummins, 2005; Hagerty, Cummins, Ferriss, Land, Michalos, Peterson, Sharpe, Sirgy, & Vogel, 2001; Sirgy, Michalos, Ferriss, Easterlin, Patrick, & Pavot, 2006), such an operationalization has been generally lacking within the tourism literature. There are a few notable exceptions which should be highlighted: Allen et al., (1988), Crofts and Holland (1993), Perdue et al., (1991), and Ko and Stewart (2002), examined the impact of tourism development on resident quality of life or resident perceptions of community life based on community characteristics commonly found in quality of life literature. However, based on an exhaustive literature review, the direct effect of perceived tourism impacts on resident quality of life operationalized as a multidimensional construct has only been examined by two known authors to date: Kim (2002) and Emptaz-Collomb (2009). While Kim documented significant positive effects between specific tourism impact dimensions and specific quality of life dimensions, tourism impacts were not shown to have a significant impact on overall quality of life in the state of Virginia. Similarly, in a study of nature conservancy residents in rural Namibia, Emptaz-Collomb (2009) found that the positive effects of tourism were limited to certain quality of life domains and restricted to households involved in tourism. Interestingly, Emptaz-Collomb suggested that tourism's

contribution to individuals's quality of life was rather moderate due to governance issues; which highlights the importance of including an institutional dimension within the sustainability framework (Spannenberg, 2007).

Furthermore, as resident support for tourism has been recognized as a fundamental requirement within the sustainable tourism paradigm, it will serve as the dependent variable for this study (see Andereck & Vogt, 2000; Dyer et al., 2007; Gursoy et al., 2002; Jurowski & Gursoy, 2004; McGehee & Andereck, 2004; Perdue et al., 1990).

Contribution of Study

The present study seeks to contribute to the current academic body of knowledge by addressing the effect of perceived tourism impacts on resident's personal and community quality of life and the ensuing support for tourism. The paucity of research that examines the impact of tourism on the host population's quality of life as a concept, and the lack of confidence in quality of life operationalization within the tourism literature has been noted by researchers (Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Perdue et al., 1999; Urtasun & Gutierrez, 2006). Furthermore, while most scholars have segmented tourism impacts within the economic, environmental and socio-cultural dimensions of sustainability, there has been inconsistency in the dimensions that result from confirmatory/exploratory factor analysis in empirical studies (Andereck & Vogt, 2000; Ap & Crompton, 1998). Therefore, the main contribution of this research is to examine the relationship between the conceptualized dimensions of perceived tourism impacts (economic, environmental, socio-cultural, and institutional (Valentin & Spangenberg, 2000), and their effect on resident's perceived personal and community quality of life.

Secondly, much of the tourism literature on sustainability and resident attitudes and or impacts has focused on natural or rural areas in developed nations or general development in less developed nations, while developed, urban or more mature destinations often associated with mass tourism have been limited (Butler, 1990; Chen, 2001; Diedrich & García-Buades, 2008; Gilbert & Clark, 1997; Hinch, 1996; Pennington-Gray, 2005; Sheldon & Abenoja, 2001; Snaith & Haley, 1999). Therefore, this study seeks to respond to the gap in the literature by investigating tourism impacts within a developed and urban environment. The third contribution of this study is to examine tourism impacts on resident quality of life within a European context as the majority of related research have focused on North America. More specifically, the historic city of Cologne in Germany has been identified as a mature, urban tourism destination and served as the study site.

Fourthly, from a practical standpoint, empirical findings with respect to tourism impacts as perceived by Cologne residents, their effect on resident and community quality of life, and subsequent resident support for tourism may provide an important component for future tourism development planning and management. With the number of annual visitors that is presently more than double the number of residents, the local community undoubtedly experiences varying degrees of associated impacts. Moreover, in a recent citywide meeting regarding Agenda 21 and the sustainability of Cologne there was a call to further institutionalize the principles and aims of sustainability into the political agenda; to increase the dialog between city leaders and residents, as well as a call for greater transparency (Köln Agenda, June, 2009). Hence, as tourism is an

integrated function of the urban environment, the overarching sustainable development policies of the city of Cologne will also benefit from this research.

Purpose of Study

The purpose of this study is to examine resident perceptions of tourism impacts in the city of Cologne, the effect of those impacts on resident quality of life, and subsequent support for tourism. Figure 1-6 represents the proposed conceptual model that illustrates the hypothesized relationships between key variables in this research. The model proposes both direct and indirect relationships between the exogenous variables (perceived tourism impacts: economic, environmental, socio-cultural and institutional) and the endogenous variables (community quality of life, personal quality of life, and support for tourism). Quality of life (personal and community) is hypothesized to be a mediating variable, which may be both a cause and effect variable. Based on previous literature, the following hypotheses are formulated and were empirically tested:

I. Economic Impacts

- H1a. There is a direct relationship between perceived economic impacts and resident support for tourism.
- H1b. There is an indirect relationship between perceived economic impacts and resident support for tourism mediated by community quality of life.
- H1c. There is an indirect relationship between perceived economic impacts and resident support for tourism mediated by personal quality of life.
- H1d. There is a direct relationship between perceived economic impacts and community quality of life.
- H1e. There is a direct relationship between perceived economic impacts and personal quality of life.

II. Environmental impacts

- H2a. There is a direct relationship between perceived environmental impacts and resident support for tourism.

- H2b. There is an indirect relationship between perceived environmental impacts and resident support for tourism mediated by community quality of life.
- H2c. There is an indirect relationship between perceived environmental impacts and resident support for tourism mediated by personal quality of life.
- H2d. There is a direct relationship between perceived environmental impacts and community quality of life.
- H2e. There is a direct relationship between perceived environmental impacts and personal quality of life.

III. Socio-cultural Impacts

- H3a. There is a direct relationship between perceived socio-cultural impacts and resident support for tourism.
- H3b. There is an indirect relationship between perceived socio-cultural impacts and resident support for tourism mediated by community quality of life.
- H3c. There is an indirect relationship between perceived socio-cultural impacts and resident support for tourism mediated by personal quality of life.
- H3d. There is a direct relationship between perceived socio-cultural impacts and community quality of life.
- H3e. There is a direct relationship between perceived socio-cultural impacts and personal quality of life.

IV. Institutional Structure

- H4a. There is a direct relationship between perceived institutional structure and resident support for tourism.
- H4b. There is an indirect relationship between perceived institutional structure and resident support for tourism mediated by community quality of life.
- H4c. There is an indirect relationship between perceived institutional structure and resident support for tourism mediated by personal quality of life.
- H4d. There is a direct relationship between perceived institutional structure and community quality of life.
- H4e. There is a direct relationship between perceived institutional structure and personal quality of life.

V. Quality of Life

- H5. There is a direct relationship between community quality of life and personal quality of life.



Figure 1-1. Roman city wall (Source: http://www.smart-travel-germany.com/image-files/colognecitywall_large.jpg last accessed Sept. 16, 2010)



Figure 1-3. Christmas market (Source: http://i.dailymail.co.uk/i/pix/2009/11/14/article-1227769-07317A62000005DC-865_468x328.jpg last accessed Sept. 16, 2010)



Figure 1-2. Cologne Cathedral (Source: http://upload.wikimedia.org/wikipedia/commons/7/78/Koelner_Dom.jpg last accessed Sept. 16, 2010)



Figure 1-4. Tanzbrunnen, popular location for open air events (Source: http://www.koeln-deutz.de/images/freizeit/37_Koeln_Kongress-Tanzbrunnen-OpenAir-02.jpg last accessed Sept. 17, 2010)

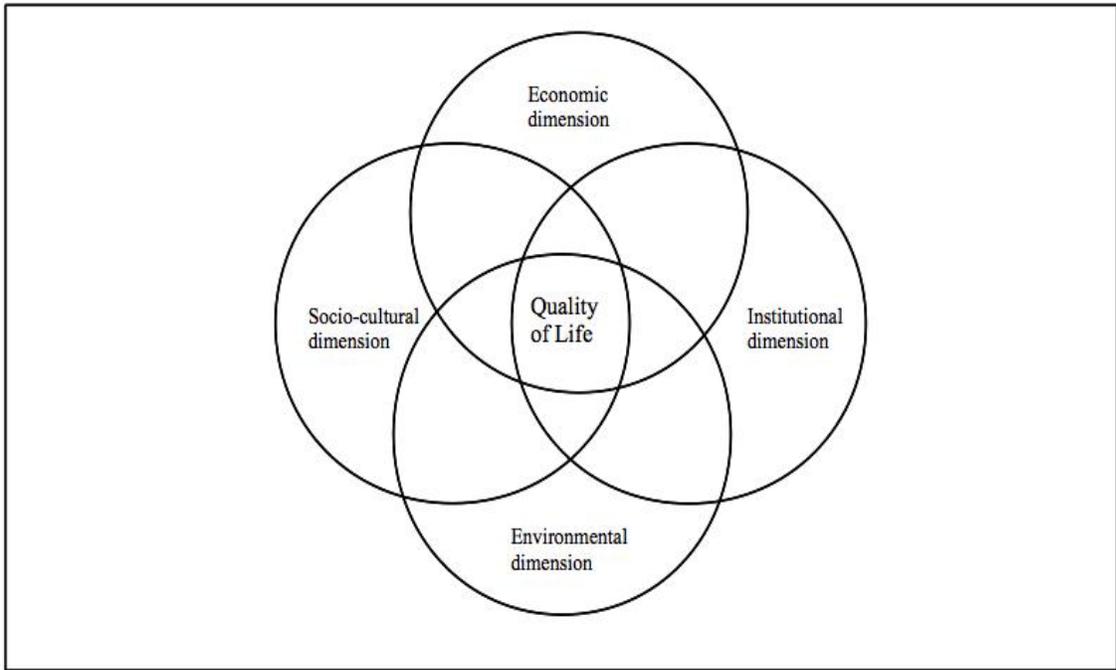


Figure 1-5. Theoretical conceptualization of tourism sustainability and quality of life

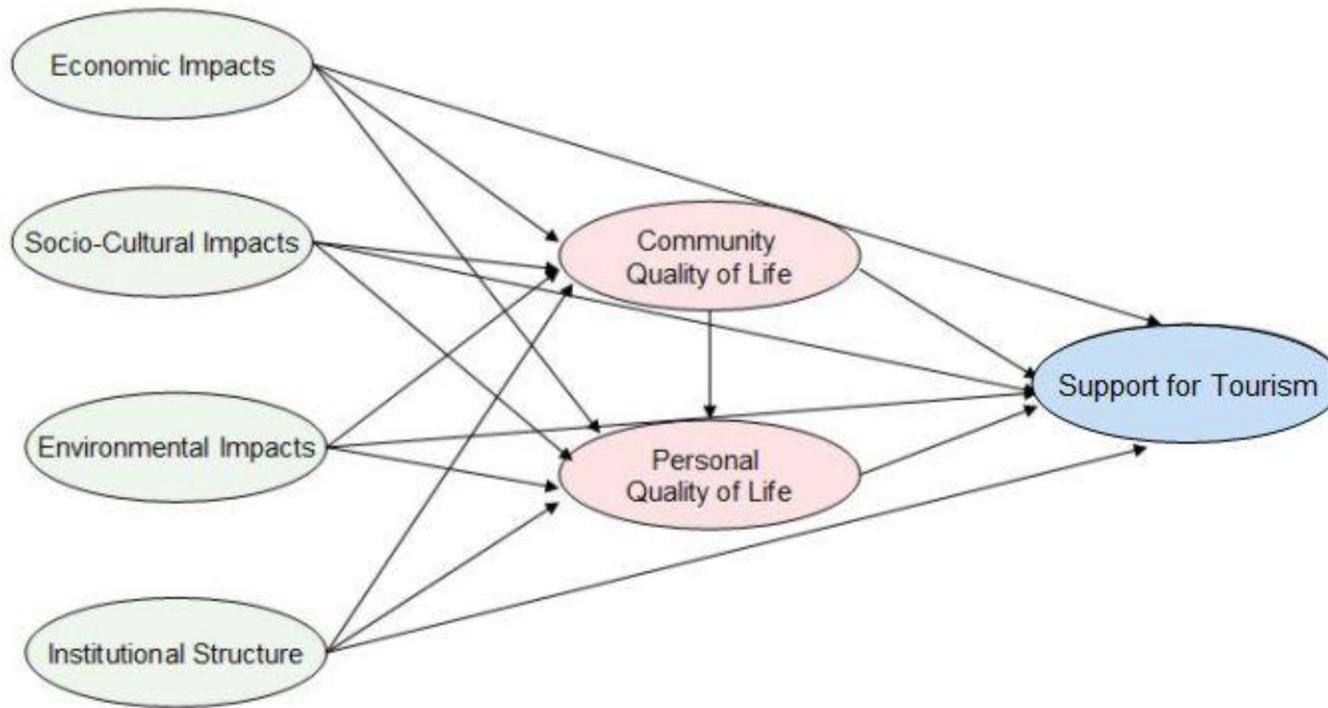


Figure 1-6. Conceptual model of tourism impacts, quality of life and support for tourism

Table 1-1. Cologne tourism statistics from 2000 – 2010

Year	Visitor arrivals ^a	Overnight stays ^a
2010	2,595,360	4,574,449
2009	2,343,504	4,133,244
2008	2,384,775	4,308,701
2007	2,487,251	4,480,211
2006	2,423,256	4,382,428
2005	2,329,055	4,211,579
2004	2,128,686	3,850,084
2003	1,876,084	3,427,350
2002	1,825,850	3,300,456
2001	1,796,904	3,257,918
2000	1,739,282	3,065,611
1999	1,686,806	2,959,002
1998	1,614,875	2,809,365
1997	1,521,544	2,734,271
1996 ^b	1,449,942	2,665,588
1995	1,363,291	2,622,860
1994	1,290,842	2,421,669
Percent change between		
2000 - 2010	+49%	+49%
1994 - 2010	+101%	+89%

^a Source: Landesdatenbank NRW; ^b Date of World Heritage Inscription, Cologne Cathedral

Table 1-2. Principles and objectives of sustainable development

Fundamental principles	<p><i>Holistic approach:</i> development and environmental issues integrated within a global social (political, socioeconomic and ecological context^a)</p> <p><i>Futurity:</i> focus on long-term capacity for continuance of the global ecosystem</p> <p><i>Equity:</i> development that is fair and equitable and which provides opportunities for access to and use of resources for all members of all societies, both in the present and future</p>
Development objectives	<p>Improvement of the quality of life for all people: education, life expectancy, opportunities to fulfill potential</p> <p>Satisfaction of basic needs; concentration on the nature of what is provided rather than income</p> <p>Self-reliance: political freedom and local decision making for local needs</p> <p>Endogenous development</p>
Sustainability objectives	<p>Sustainable population levels</p> <p>Minimal depletion of non-renewable natural resources</p> <p>Sustainable use of renewable resources</p> <p>Pollution emissions within the assimilative capacity of the environment</p>
Requirements for sustainable development	<p>Adoption of a new social paradigm relevant to sustainable living</p> <p>International and national political and economic systems dedicated to equitable development and resource use</p> <p>Technological systems that can search continuously for new solutions to environmental problems</p> <p>Global alliance facilitating integrated development policies at local, national and international levels</p>

Source: Sharpley (2000, p. 8. Reprinted with permission from Channel View Publications); ^a Parenthesis added by author due to incomplete sentence in the original, addition made with reference to the original text.

CHAPTER 2 LITERATURE REVIEW

The literature review is based on the conceptual model and hence four areas are addressed: resident perceptions of tourism impacts including the economic, environmental, socio-cultural, and institutional dimensions; quality of life; the connection between perceived tourism impacts and quality of life; and resident support for tourism.

Resident Perceptions of Tourism Impacts

Historical Background

The seminal works by Doxey (1975) and Butler (1980) have led to a better understanding of tourism's impact on destinations, communities, and the subsequent effect on resident quality of life. Doxey's Irridex model (1975) explains host community responses to different stages of tourism development. Doxey's Irridex model (1975) addressed community response to tourism development and postulated that residents progress through four stages, beginning with euphoria in the early phase, then moving from apathy to annoyance, and then possibly to antagonism towards tourists as the destination experiences increased visitation along with the cumulative effect of development. Doxey (1975) noted that the irritation with rapid or unplanned development was "fundamentally a fear of identity loss" (p.198) voiced by both residents and visitors alike.

Butler's (1980) destination life cycle model illustrates the dynamic evolution of destinations over time, and described basic stages of destination development based on the product lifecycle concept. Butler proposed that initially a lack of access, facilities, and local knowledge limit initial exploration to a few adventurous visitors. With growth in awareness and popularity of the destination coupled with the gradual involvement of the

community to provide visitor facilities often leads to rapid development that result in initial social and environmental pressures. As the negative impacts increase and the destination's environment is negatively impacted, the rate of increase in visitor numbers decline. Overall, the destination reaches the consolidation stage, which is marked by the presence of major international chains and franchises that cater to tourists. The destination marketing organizations seek to increase visitor numbers and extend the season, while a major part of the area's economy becomes dependent on tourism. However, additional negative impacts are experienced by resident population and general resentment is evident at this stage. Once the destination reaches a stagnation point the original attractiveness of the area has likely been lost, while social and environmental carrying capacities have been reached or exceeded, and the popularity of the area has waned. At this point, a destination can either decline or the community can intervene and rejuvenate itself. The model has been criticized for its simplicity (Haywood, 1986; Wall 1982), and while Butler (2005) himself recognized that the model is generalized and essentially simplistic, it remains a core tourism development theory as destinations have experienced this evolution of change.

The early contributions of Plog's (1972) tourist segmentation and Cohen's (1972; 1979) tourist typologies and experiences sought are key studies from the demand side of tourism, while Plog also used the idea of a destination life cycle, Doxey (1975) and Butler (1980) also offer complimentary work to assess community impacts from the supply side of tourism. Collectively, these early works offer a foundation to understand the tourism phenomenon from both demand and supply perspectives.

Tourism Development

Tourism has been examined and defined from a demand and supply side and definitions have varied, however, an encompassing and inclusive definition was offered by Goeldner and Ritchie (2006) who state:

tourism may be defined as the processes, activities and outcomes arising from the relationships and the interactions among tourists, tourism suppliers, host governments, host communities, and surrounding environments that are involved in the attracting and hosting of visitors (p. 5).

This definition is broad and inclusive, giving one a sense of the range of participants involved in the tourism phenomena. However, travel and tourism is an experience greater than the sum of its parts: it is more than just transportation, accommodation, and other such hospitality services; it is more than the eating, drinking, sightseeing, shopping, and any myriad of activities and forms of entertainment sought by the tourists. The quality of the tourism experience depends on the tangible and intangible aspects of the environment in which any of the above activities take place: including cultural, natural, and built environments (Goeldner & Ritchie, 2006). In fact, Carmichael (2006) noted that “social factors, such as the friendliness of local people, the language spoken, family structures, occupations, urban layout, population density, poverty levels, and living conditions” (p. 117) are all part of the tourism environment and influence experiences for residents and visitors alike.

It has been argued that the fundamental objective of tourism development lies in achieving a desirable or improved quality of life for residents of the host destination by improving economic opportunity / prosperity and protecting cultural and natural resources (Ap, 1992; Ap & Crompton, 1998; Bachleitner & Zins, 1999; McCool & Martin, 1994; McKool, Moisey & Nickerson, 2001; Murphy & Price, 2004; Perdue et al., 1990).

As such, tourism has been consistently promoted as a development tool by a wide range of national and international development institutions over the years (Hawkins & Mann, 2007) and sizeable financial development assistance has been given to global tourism development since the 1970s (Lindberg, Molstad, Hawkins, & Jamieson, 2001) likely based on the anticipated economic impact and ensuing expectations of a higher quality of life (Andereck & Jurowski, 2006; Ap & Crompton; 1998; Jurowski et al., 2006).

While economic growth and job creation have been the driving force behind much tourism development, negative economic, environmental, and socio-cultural impacts of tourism have also been evident. Based on this recognition, many governments and organizations have adopted a sustainable tourism paradigm. By integrating the economic, environmental, and socio-cultural needs of the present tourists and host communities while protecting the needs of future generations, sustainable tourism aims to maximize the positive and minimize the negative impacts of tourism (UNWTO, 2004). Although it is imperative to view the dimensions of sustainability as inextricably intertwined, tourism impacts have been discussed in terms of the traditional three pillars of sustainability. Hence, the following section will discuss the economic, environmental, and socio-cultural aspects of sustainability within a tourism context in order to gain a better understanding of the current body of knowledge regarding tourism impacts as perceived by community residents.

Economic dimension

Traditionally, international tourist arrivals and receipts are utilized to assess the overall economic impacts of tourism (Hawkins & Mann, 2007). Global international arrivals have increased from 25 million in 1950 to an estimated 924 million in 2008, and a continued long term annual growth rate of about 4% is expected until 2020 (UNWTO,

2009). Concurrently, since 2004 there has also been a substantial growth in international tourism receipts with an annual increase of 5.6% in 2006-2007. In monetary terms, the overall export income generated by international arrivals translates into almost US\$ 3 billion a day (UNWTO, 2009). Based on such figures, it has been widely accepted by many local, regional, and national communities that tourism can have significant positive economic impacts through both direct (i.e. foreign exchange earnings) and multiplier effects in income and employment (Vanhove, 2005). While tourism has certainly felt the effects of the current economic crisis, tourism is expected to be a significant part of the recovery process. For example, the UNWTO Secretary-General, Taleb Rifai stated that “tourism can play a critical role in the recovery process as a sector with a unique resurgence capacity and an immense potential in terms of employment creation and sustainability” (UNWTO, 2009).

Economic impact assessments: There has been a surge of economic impact assessments of tourism to demonstrate that local communities and particularly governmental entities accrue the net economic benefits of tourism. Tyrell and Johnston (2006) explain economic impact analysis as the tracking and measuring of cumulative monetary payments as they move through a regional economy i.e., a measure of economic activity or income. A popular economic analysis tool used in tourism development planning is the cost-benefit analysis, which estimates net economic benefits of proposed projects (Tyrell & Johnston). However, criticisms of such economic impact assessments have been voiced based on the validity and appropriateness of some studies. Crompton (2006) argues that such studies have been used with the aim of legitimizing a predetermined political position rather than being utilized for impartial

decision-making. Partially motivated by a desire for standardized, comparable reports, but also as a mechanism to increase the international recognition of tourism as an important industry, the World Tourism Organization and the United Nations has promoted the use of tourism satellite accounting (TSA). Tyrell and Johnston (2006) define the accounting system as quantifying the “direct impacts by visitors as well as residential expenditures on tourism at home, capital investments by governments in travel infrastructure, and the manufactured products that are tourism dependent” (p.6). While not explored in detail here, there are many more instruments at hand which are frequently utilized to measure the economic impact of tourism at national, regional, and local levels.

Although tourism obviously has the ability to create positive economic benefits for host communities, there are underlying international political and social structures that influence the realization of such benefits. Furthermore, there has been recent criticism that economic development based on free-market principles does not adequately reflect the environmental costs of production and consumption (Holden, 2008). Nevertheless, tourism has been promoted by local, regional, national, and international organizations as a positive economic development tool resulting in economic growth through increased investment, development, infrastructure spending, and employment opportunities, resulting in increased income, gross national product and standard of living (Goeldner & Ritchie, 2006; Easterling, 2004). Therefore, many studies have investigated the perceptions of tourism related economic impacts over the years (Table 2-1) and have indeed documented positive perceptions such as increased employment (Ap & Crompton, 1998; Belisle & Hoy, 1980; Carmichael et al., 1996; Faulkner &

Tideswell, 1997; Gilbert & Clark 1997; Johnson et al., 1994; Liu & Var, 1986; Milman & Pizam, 1988); increased standard of living (Akis et al., 1996; Belisle & Hoy, 1980; Gilbert & Clark 1997; Haralambopoulos & Pizam, 1996; Johnson et al., 1994; Liu & Var, 1986; Long et al., 1990; Pizam, 1978); enhanced investment, development, and infrastructure (Akis et al., 1996; Ap & Crompton, 1998; Sharpley, 1994); increased economic growth (Perdue et al., 1990; Sheldon & Var, 1984); and improved economic quality of life (McCool & Martin 1994; Perdue et al., 1990). Unfortunately, negative economic impacts of tourism development such as increased cost of living, inflation, seasonality of employment, as well as unequal distribution of economic development benefits (Akis et al., 1996; Carmichael et al., 1996; Easterling, 2004; Faulkner & Tideswell, 1997; Goeldner & Ritchie, 2006; Haralambopoulos & Pizam, 1996; Liu et al., 1987; Long et al., 1990; Perdue et al., 1987; Pizam, 1978; Ross, 1992; Vanhove, 2005; Var et al., 1985).

In order to make tourism a successful element of economic development it is very important that the benefits outweigh the costs in the eyes of the community. Therefore, the economic success of tourism development depends on several issues:

- the amount of tourist expenditures retained within the local community rather than being subject to leakage
- the minimization of leakages that do occur
- the level and quality of employment generation
- the equitable opportunity for enterprise generation
- the equitable distribution of benefits

(Source: Holden, 2008; Nichols, 2006)

Many of these concerns have been addressed with the recent focus on sustainable community development approaches. Ideally, such participatory developments not only empowers the local community, but an emphasis on social needs as an integral component of economic development can create more opportunities and results in a more balanced distribution of benefits (Tosun, 2006). Although participatory approaches are not without problems, they have focused the discussion towards integrating the disparate social and political power structures inherent in any community.

Environmental dimension

Environmental sustainability addresses the preservation and management of natural resources, particularly non-renewable resources that are critical in terms of life support functions. These include but are not limited to natural resources such as air, water, land, fauna, and flora as well as all natural and built physical environments i.e., natural landscapes such as coastlines, mountains, forests and built landscapes such as villages, towns, and cultivated or farmed land (UNEP & UNWTO, 2005; Nicholas 2007). The orientation towards natural resources is highly dependent on social values. Greenwood (2006) highlighted two perspectives with respect to environmental resource sustainability. The first is based on neoclassical economic ideas of limits that advocates resource use to maximize human welfare over time (very weak sustainability); while the second is grounded in ecology and promotes resource preservation based on environment-oriented ideas of limits (very strong sustainability) with emphasis on intrinsic values. Different cultures have diverse orientations towards nature; some of the criticisms of mainstream western development are based on the preoccupation of wealth creation, which historically have little regard for harmful environmental effects

(Castro, 2004). However, due largely to the environmental movement and the subsequent sustainability discourse, the environmental effects of many industries have now been recognized (Murphy & Price, 2005). It has been acknowledged that negative environmental impacts of tourism occur when visitor levels exceed environmental carrying capacity limits (Table 2-2 for documented environmental impacts within the tourism literature). While sustainable development does not apply absolute limits, it does imply “limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities” (WCED, 1987, p. xi).

Tourism can place considerable pressure and even cause degradation of the physical environment; disruption to wildlife; exert strain on host communities; compete for the use of scarce resources such as land and water; and make significant contributions to local and global pollution (UNEP & UNWTO, 2005; Holden, 2008). While many of the environmental impacts can be related to infrastructure development (transportation networks and tourism facilities), actual tourist behaviors can also have a major impact. However, if not monitored and managed appropriately, the negative impacts of tourism development will threaten the viability of tourism itself by destroying the very assets it relies upon (Choi & Sirakaya, 2006; Glasson, Godfrey & Goodey, 1995; Inskeep, 1991; McCool, 1995; Neto, 2003; Plog, 1974; UNEP & UNWTO, 2005).

Thus, it is in tourism's own self-interest to preserve natural resources as it dependent on those assets as an industry. Moreover, tourism also has the potential to play a positive role in environmental protection, although the benefits of tourism refer to the protection of natural resources from more damaging forms of human behavior

(Holden, 2008), particularly in rural areas and/or developing nations. By providing additional or alternative forms of livelihood to host communities via tourism development (which relies on natural resources to a great extent), the economic value of the environment increases and local communities have direct incentives to protect it. Indeed, tourism can provide direct economic revenues to help finance the protection of natural resources through avenues such as entrance fees, excursion fees, or lodging taxes (McKercher & du Cros, 2002).

Socio-cultural dimension

One of the challenges currently facing the tourism industry is the homogenization of destinations. If the intangible aspects of communities such as heritage, culture, and lifestyle are not protected, the very attraction on which much of the success of the tourism industry is based will be lost (Swarbrooke, 1994). It is important to protect both the tangible and intangible socio-cultural aspects of communities at all levels from a product differentiation as well as a human rights perspective. Tourists affect communities by their mere presence and the type of impact is dictated partially by volume, type of visitor, their conduct, and the interpersonal relations with the host community (Butler, 1975, as cited in Carmichael, 2006; Cohen, 1988; Freestone & Gibson, 2004; Goeldner & Ritchie, 2006; Shackley, 1999; Urry, 1990). In addition, any given impact may be perceived as either positive or negative by different community members (Goeldner & Ritchie, 2006). However, several social problems have been identified in the literature, such as: erosion of social fabric within communities; loss of community character; increased intergenerational conflict; change in family structures; increased crime, prostitution and gambling; commercialization, modification, and exploitation of culture, religion, and the arts, and loss of authenticity (Easterling, 2004;

Goeldner & Ritchie, 2006; Shackley, 1999). From this list, it is evident that tourism has the power to influence behaviors and value systems to the detriment of the host community. Conversely, tourism can engender positive socio-cultural impacts such as: revitalizing of traditional practices; preserving or strengthening cultural identity, fostering community pride; increasing demand for local products such as handicraft and arts; increasing understanding of diverse cultures; and promoting cultural exchanges (Andereck et al., 2007; Ap & Crompton, 1998; Easterling, 2004; Goeldner & Ritchie, 2009; Lui & Var, 1986; Perdue et al., 1990) (Table 2-3).

The ultimate purported socio-cultural benefit of tourism is that each traveler has the potential to be “an ambassador for Peace” which is heavily promoted by the International Institute for Peace through Tourism (IIPT). The basic principle is that through the direct contact between people of different cultures a greater cross-cultural understanding and cooperation is fostered which ultimately promotes greater peace on earth (IIPT, 2008). If hosts and guests (or residents and tourists) respect the social and cultural differences between peoples and learn to value diverse heritages and ways of life, then tourism will certainly add to their respective quality of life.

Institutional dimension

The difficulty of realizing sustainability goals without an adequate political structure or institutional system to plan, implement, and manage the objectives of sustainability has been recognized by several organizations such as the World Bank and the Organization for Cooperation and Development (OECD) (Spannenberg, 2002). Although most key documents pertaining to sustainable development address the importance of local community involvement, this essential aspect has not been included as a dimension within the sustainability framework (Spannenberg, 2007). The German

Wuppertal institute (Valentin & Spangenberg, 2000, 2002; 2007) addressed this by conceptualizing a four dimensional sustainability framework including an institutional dimension which attends to the governance process emphasizing public participation and involvement (Cottrell & Vaske, 2006; Cottrell, Vaske, Shen & Ritter, 2007; Shen & Cottrell, 2008). While the economic, environmental and socio-cultural dimensions address the state of particular resources, the institutional dimension addresses the social and political structures necessary to plan, implement and manage the maintenance of those resources.

Cottrell and colleagues (Cottrell & Vaske, 2006; Shen & Cotrell, 2008; Shen, Cottrell & Hughes, 2009) recently examined perceived tourism impacts utilizing four dimensions of sustainability (namely economic, socio-cultural, environmental, and institutional). More specifically, in a study investigating the relationship between resident perceptions of tourism and community satisfaction, Cottrell et al. (2007) found the institutional dimension predicted community satisfaction in both Chinese and Dutch communities. However, the authors suggested that further research should strive to refine the items used to measure the institutional dimension as it is proposed that there are several sub-dimensions including access to decision making, communication processes, politics, and democracy. While the institutional dimension has yet to be widely accepted in the general discourse of sustainable development, it further integrates the involvement of local communities into the sustainable tourism framework.

Summary

As illustrated by this brief literature review, there are a plethora of studies that have investigated the impacts of, and attitudes towards tourism by host populations over the last twenty to thirty years. McGehee and Andereck (2004) suggested that the

difference between attitude and impact studies seems to be a matter of semantics, as they tend to include similar measures. Indeed, there seems to be a general agreement among scholars with respect to the types of impacts communities experience as a result of tourism. The operationalization of tourism impacts has been fairly consistent with a focus on the economy, the environment, and community life. However, since researchers have used confirmatory or exploratory factor analysis in segmenting the impacts, impact dimension and respective items are varied within the literature (Andereck et al., 2007; Ap & Crompton, 1998). In order to address this instability, a thorough literature review of previous tourism attitude and impact studies was undertaken and the recurring items were identified (Table 2-4). Based on this review, the items were conceptually classified into four dimensions of sustainability and included in this study.

Quality of Life

The notion of quality of life is instinctively understood by most people as an overall assessment of the conditions, experiences, and satisfaction with life. Although there is no agreed upon definition, scholars have defined quality of life by including both the quality of life circumstances as well as the perceptions and feelings towards those circumstances (Diener, 2006). While the quest for answers pertaining to the nature of the good life date back to Plato and Aristotle (Hagerty et al., 2001); the desire to monitor quality of life to enhance public policy decisions has been around since the 1960s (Noll, 2002). At this time, there was a renewed interest in the measurement of human welfare and social development as the dominant goal of increasing economic production and material wealth was replaced with the current sustainable model of human development, which incorporates the immaterial aspects of life (Diener & Suh, 1997;

Noll, 2002). Previously, development assessments by policy makers were based solely on economic indicators such as Gross Domestic Product (GDP) however; a growing international movement recognizes that material wellbeing, or economic measures alone are not a sufficient indicator of the broader quality of life or well-being of a country (Diener & Suh, 1997; NEF, 2009; The Economist, 2005).

Alternative Measures of Human Development

In response to the argument that economic measures must be combined with social and environmental measures in order to offer a more comprehensive indication of quality of life (Andereck & Jurowski, 2006), several alternative measures of human development, progress, or welfare have been created. Examples include the Human Development Index, the Genuine Progress Indicator, Index of Social Progress, and the Economist Intelligence Unit's quality of life index. Summary measurements of human development such as these often consist of relatively few dimensions. For example, the United Nation's Human Development Index (HDI) combined three basic indicators, life expectancy, educational attainment, and income to form a composite index. Such indices have proven useful for relatively easy and quick comparison at an international level (particularly between more developed and less developed nations) however, much detail is lost with the use of composite indexes due to the aggregation of data.

More detailed information regarding social conditions and well-being have been collected via annual social reporting activities in much of Europe, Canada, and Australia, while many countries in Asia, Africa, and Latin America have also begun to issue periodic national social reports (Miringoff & Miringoff, 1999). Inter-European monitoring activities include regular surveys by the European Commission and Eurostat (the statistical office of the European community) know as Eurobarometer surveys, the

European System of Social Indicators (Zentrum für Sozialindikatorenforschung based in Germany, known as GESIS), the Euromodule, the European Social Survey initiated by the European Science Foundation, and the European Community Household panel. The European Foundation for the Improvement of Living and Working Conditions (Eurofound), is a European Union body which has also undertaken regular public opinion analyses since 1973, and recently released the results of their second European quality of life survey. In a recent comparison of the different European quality of life surveys, Noll (2008) found similarities within domains covered as well as some use of the same indicators, albeit with slightly different word formatting and measurement scales. While some surveys are conducted bi-annually (Eurobarometer), others are only administered every five to ten years (European Value Study). While Noll (2008) lamented limitations with sample sizes, varying inclusions of countries, as well as with “methodological standards and rigour” (p. 17); he nevertheless concluded that the surveys provide rich sources of data for comparative quality of life research in Europe.

The key aim of such initiatives is to further understand the living conditions, social issues, and challenges of society so that they may be addressed through the ongoing political process, which has as its fundamental aim the well being of its constituents. In this vein, the New Economics Foundation (NEF), an independent think tank based in the United Kingdom, has proposed National Accounts of Well-being in order to “provide policy-makers with a better chance of understanding the real impact of their decisions on people’s lives” (p. 3). Hence it is evident that a new level of importance has been accorded to the concept of quality of life, or well being, at sub-national, national, and international levels.

Conceptualization

Two distinctive approaches have been taken in the conceptualization of the quality of life construct (Glaetzer, 2006; Noll, 2002; 2004; 2008): the “resource or capabilities” approach which emphasizes human agency versus a “utilitarian or needs-based approach” (Noll, 2004, p. 160) which focuses on the satisfaction of needs and desires of individuals. These two approaches have been defined as much by their conceptualization and operationalization of quality of life: the resource or capabilities approach focuses on objective measures while the utilitarian approach focuses on subjective measures.

Objective approach

Objective indicators are measures of living conditions, generally focusing on observable and quantifiable indicators (often standardized and fairly easily available in the public domain) such as measures of economic production, pollution, literacy, life expectancy, and crime. For example, the Scandinavian level of living approach focuses exclusively on objective indicators, as the individual’s command over resources or ‘capabilities’ is seen as determining life chances (Noll, 2004). The notion of ‘capabilities’ was developed by Amartya Sen, the Nobel laureate in economics who also believes that quality of life should be measured in terms of the capacity to do or be something. However, Noll (2004) points out:

The use of objective indicators starts from the assumption that living conditions can be judged to be favourable or unfavourable by comparing real conditions with normative criteria like values, goals or objectives. An important precondition, however, is that there is a societal or even political consensus about three key issues: first, about the dimensions that are relevant for welfare considerations; second, about good and bad conditions; third, about the direction in which society should move. (p. 158)

Furthermore, Diener (1997) makes a valid argument that even objective indicators suffer from measurement problems based on several examples: the underreporting of certain statistics (such as rape), the difficulty of measurement in nations with inadequate record keeping, or the subjective decisions in selecting and measuring variables (p. 195).

Subjective approach

Subjective indicators have been mainly associated with the American socio-psychological research tradition, which emphasized the individual assessment and evaluation of life. According to this tradition, individual satisfaction with life and happiness are the ultimate goals of social development (Noll, 2004). However, subjective measures of quality of life alone have also been criticized, as satisfaction with life is partly dependent on individual aspirations (Erikson, 1993 as cited in Noll, 2004). Furthermore, Cummins (2000) suggested that subjective measures of quality of life are under a state of homeostasis, in which individuals have normative levels of subjective well being. More specifically, he demonstrated that when asked questions such as “how satisfied are you with your life as a whole?” the mean response scores are fairly consistent. For example, western population responses measured on a standardized scale ranging from 0-100% consistently produced a mean and standard deviation of 75 +/- 2.5; while the inclusion of non-western samples results in a mean and standard deviation of 70 +/- 5. Hence, “if two standard deviations are used to describe a normative range of values, it can be predicted that western population means will fall within 70-80% SM, and the means of all western and non-western populations will fall within 60-80% SM” (Cummins, 2000, p. 61). It is argued that this homeostatic system serves to keep people feeling positive about themselves and their life even when

exposed to diverse life situations. However, it should be noted that the homeostatic set point applies to the reflective measure of overall life satisfaction but not to the formative quality of life domains due to the different level of abstractions (Cummins, 2003, p. 164).

Current conceptualization

Up until recently, most studies focused on either the objective or the subjective approach of operationalizing quality of life however; currently the prevailing conceptualization encompasses both objective and subjective considerations (Costanza et al. 2006; Cummins, 1996, 2005; Hagerty et al. 2001; Noll, 2002). The relationship between objective and subjective indicators has been explored and findings suggest that they are poorly correlated (Cummins, 2000; McCrea, Shyy & Stimson, 2006). However, Cummins (2000) found that while objective and subjective “indicators are fairly independent, their degree of dependency increases when the objective conditions of living are poor” (p. 68). Although objective measures may not be good predictors of overall subjective quality of life, McCrea et al. (2006) suggested that objective circumstances are related to satisfaction with specific life domains and hence, the latter may mediate the relationship between objective indicators and overall life satisfaction.

Cummins (2005) articulated four important principles with respect to the conceptualization of quality of life construct:

- it is multidimensional and influenced by personal and environmental factors and their interactions
- it has the same components for all people
- it has both subjective and objective components
- it is enhanced by self-determination, resources, purpose in life, and a sense of belonging (p. 700).

While the second principle allows for variations based on individual values and circumstances, Cummins (2005) argues that in order to move from a concept of quality of life to a theory, a core set of “essential and fundamental building blocks of quality of life that are common to us all” (p. 700) must be identified. In a recent overview of the quality of life research movement by prominent scholars, Ferriss (Sirgy et al.,2006) identified several aspects of a comprehensive quality of life theory should encompass: socially defined standard of living, level of living (as evidenced by the physical attributes of the family), toxic/clean physical environment and climate, satisfaction and benefits derived from social participation in social agencies and institutions of the locale, general satisfaction, happiness, and characteristics and structure of the social system that produces the quality of life (p. 376). While there have been numerous methods in the classification and measurement of the different dimensions (Cummins, 2005; Fahey, Nolan & Whelan, 2003; Moscardo, 2009), there has been some commonality in the basic domains (Table 2-5).

Moreover, Hagerty et al. (2001) identified seven domains from the literature that cover the core construct of quality of life:

- relationship with family and friends
- emotional well being
- material well-being
- health
- work and productive activity
- feeling part of one’s local community
- personal safety

Although Hagerty et al. (2001) developed fourteen criteria for their review of twenty-two of the most popular quality of life indexes, two are of particular importance with respect to the domains of quality of life. Firstly, “the domains in aggregate must

encompass the totality of life” (p. 7) i.e., all of the domains taken together must represent the total construct ‘quality of life’. Secondly, “each domain must encompass a substantial but discrete portion of the QOL construct” (p. 7) as judged by the amount of unique variance contributed by each domain to the aggregate quality of life score. The authors suggest that redundancy can be inferred by domain inter-correlations exceeding 0.9.

Operationalization

In their review of the most popular quality of life indexes, Hagerty et al., (2001) identified only two indexes in which each domain could be measured by both subjective and objective measures: Veenhoven’s Happy-Life Expectancy Scale (HLE, 1996) and Cummins’s Comprehensive Quality of Life Scale (COMQOL, 1993).

Veenhoven’s happy-life expectancy scale

Veenhoven (1996) combined the objective measure of life expectancy with the subjective measure of happiness to create an indicator of “how long and happy people live in a country” (p. 19). Veenhoven made a strong argument for creating an indicator based on ‘ends’ rather than ‘means’ as he felt it was important to assess how well people were “flourishing” or attaining the end goal the ‘good life’; rather than measure means of attaining the good life (such as economic affluence) due to the difficulty of choosing which criteria are important in the attainment of ‘the good life’ within a culture, not to mention across different cultures. However, Veenhoven recognized that “because it is an ultimate output measure, it tells us little about required input” (p. 27), and hence it is impossible to discern possible causes in changes of quality of life. Furthermore, discerning changes in a measure which utilizes life-expectancy rates is by nature long-term and while happiness rates alone may be more sensitive to change they have been

shown to be fairly stable (Veenhoven, 1996). Hence the Happy-Life Expectancy Scale is a measure similar to the Human Development Index; it is not an appropriate tool to aid short-term policy decision-making.

Cummins's comprehensive quality of life scale

Cummins's Comprehensive Quality of Life Scale (ComQoL, 1993) is based on seven domains: material well-being, health, productivity, intimacy, safety, place in community, and emotional well-being (Cummins, 1997). The ComQoL is purported to encompass both objective and subjective components for each domain. Each objective domain measure consists of "an aggregate score based on three objective indices relevant to that domain" (p. 9). For example, the material well being domain consists of three measures: type of accommodation, income, and personal possessions. However, upon closer examination the objective indices relies on individual recollections or judgments regarding time spent in certain activities ranging from daily, weekly or monthly periods which are generally measured on a five-point scale anchored by "almost always" and "almost never". It could be argued that this type of measurement is still rather subjective as they are personal assessments of life situations rather than independently collected statistical data such as housing costs, cost of goods and service, and wages which are generally routinely collected in all western nations at the community level. The 21 objective measures of the ComQoL failed to demonstrate construct validity at the level of domains due to lack of seven dimensions of three items each. As the seven items that represents the seven dimensions of the ComQoL performed well, they were the basis for a new subjective scale called the International Well-being Index (IWI) (Cummins et al., 2003). This index has been tested and applied in at least 20 languages and in numerous countries by the International Wellbeing

Group (2006). While solely a subjective measure, the IWI encompasses the core domains of quality of life identified in the literature (Table 2-6).

Weighting of Domains

In addition to the utilization of different domains and indicators, different weights have also been applied which adds to the complexity of a comparative analysis between the indices. Hagerty and Land (2007, p. 460) state that many quality of life indices such as Diener's (1995) Value Based Index of National Quality of Life; Estes's (1984, 1988, 1997) Index of Social Progress; Johnston's (1988) Comprehensive Quality of Life Index; Land, Lamb, and Mustillo's (2001) Index of Child and Youth Well-Being; Morris's (1979) Physical Quality of Life Index (PQOL); and Veenhoven's (1996) Happy Life-Expectancy Index apply equal weights to the indicators although limited reasons or justifications for this practice has been given. Interestingly, there was considerable agreement across all the EU member states that health, income, and family life are the most important contributors to a good quality of life (Noll, 2004). Some researchers have chosen to include individual importance measures for each social indicator (e.g., Cummins' Comprehensive Quality of Life Scale as well as Andereck and Jurowski's Tourism Quality of Life index), although these have not shown to substantially increase prediction validity with regards to the overall quality of life measures (Hagerty et al. 2001; Trauer & Mackinnon, 2001; Wu & Yao, 2006).

Although weighting satisfaction scores by the importance accorded to that domain by an individual is intuitively appealing, Cummins (2002) illustrated the fallacy of creating such a multiplicative composite as it is "actually an interaction term derived from two main variables" (p. 2). He highlighted five problems associated with such endeavors:

- Likert scale data are quasi-interval not ratio, and hence the meaning of the product cannot be understood in terms of each constituent variable
- The psychological values of equivalent scale points for satisfaction and importance have asymmetrical psychological meaning as they use different labeling scales.
- Similarly, equal changes in scores along each scale do not have the same corresponding perceptual meanings.
- Multiplicative composites are non-linear in nature.
- The composite has failed to explain any additional variance beyond the use of each variable individually.

Cummins concluded that importance “may not be a useful construct to measure” (p. 3) but if it is used then it should be treated as a separate variable (see Cummins 2002 for a more detailed discussion). In addition, by employing statistical modeling using actual individual’s importance ratings as well as general uniform distributions, Hagerty and Land (2007) illustrated that equal weighting strategies actually minimize disagreement of directionality among individuals’ weights in quality of life indices when the assumption of positive weighting of attributes and the use of general additive models are not violated. Specifically, Hagerty et al. (2007) found that:

- positive correlations among social indicators result in high agreement regardless of variation in weights
- disagreement is rare and only occurs when individual weights are bimodal and negatively correlated (the surveys of real weights tend to be unimodal and generate high agreement)
- maximizing agreement for a quality of life index can be achieved by “using the average weight from a survey of individuals’ importance” (p. 486).

The importance ratings utilized were not from the same source as the quality of life indices tested so although these findings must be further verified they do position current practices of equal weighting “on sound theoretical footing” (p. 486).

Summary

Based on this review, the present study utilized a comprehensive definition of quality of life by Noll (2004) which states that quality of life is “multidimensional concept which encompasses both material and immaterial, objective and subjective, individual and collective aspects of welfare” (p. 6). While quality of life has been conceptualized as encompassing both objective and subjective measures (Christensen, 1995; Costanza et al. 2006; Cummins, 1996, 2005; Hagerty et al. 2001; Noll, 2002; 2004) there are currently few instruments that utilize both types of measures. Veenhoven’s Happy Life-Expectancy Scale (1996) and Cummins Comprehensive Quality of Life Scale (COMQOL, 1993) have been identified as two instruments that are in this category. However, Veenhoven’s Happy Life-Expectancy Scale is a long-term measure by nature and does not make distinctions between the dimensions of well being.

Since this study is concerned with the impact of tourism on resident quality of life, it is important to examine the relationship between specific tourism impacts and specific aspects of resident quality of life if resulting implications are to be addressed through policymaking. Therefore, instead of a global measure of satisfaction with life, a deconstruction measure was utilized to operationalize the concept quality of life for this study. While Cummins COMQOL represents such a measure, it has been replaced with the International Well-being Index (Cummins et al., 2003) which is solely a subjective measure. Currently there are no appropriate instruments for this study which measure quality of life that utilizes both objective and subjective measures. While it is acknowledged that such a measure would be preferable, it is not within the scope of this study to create such a measure, and therefore an established subjective measure will be utilized.

Perceived Tourism Impacts and Quality of Life

The perceptions of tourism impacts and the attitudes towards tourism have been studied at great length, and an implicit connection with resident quality of life has frequently been made. Many tourism scholars have addressed this relationship, in some cases explicitly using the term “quality of life” (Ap, 1992; Allen et al., 1993; Andereck et al., 2005; Andereck & Vogt, 2000; Ap & Crompton, 1993; Bachleitner & Zins, 1999; Burns, 1996; Choi & Sirakaya, 2005; Diedrich & Garcia-Buades, 2008; Gilbert & Clark, 1997; Gu & Ryan, 2008; Gursoy, et al., 2002; Johnson, Snepenger & Akis, 1994; Jurowski & Gursoy, 2004; Lankford & Howard, 1994; Long et al., 1990; McCool and Martin, 1994; Milman & Pizam, 1988; Socher, 1992; Vargas-Sanchez, Plaza-Mejia & Porras-Bueno, 2008; Wang & Pfister, 2008). However, some of these studies have employed the expression quality of life in discussions of perceived impacts of tourism, thus linking the effects to resident quality of life without actually using the term in the operationalization of impacts. For example, Gursoy, Jurowski et al., (2002) stated that “once a community becomes a destination, the quality of life of the local residents is affected by the consequences of this development” (p. 80). While certainly extending the resident attitude literature with their modeling approach, the term quality of life was not utilized to assess resident support for tourism in either perceived costs or benefits. As Carmichael (2006) stated, “often, quality of life is merely inferred from an array of impacts measured” (p.126).

In an exploratory study in Austria, more specifically in the cities of Vienna, Innsbruck, Salzburg, and the provinces of Tyrol and Vorarlberg, Socher (1992) made extensive use of the term quality of life. However, Socher drew conclusions that concerned resident quality of life, but lacked concrete measurement of the concept

other than resident perceptions of economic impacts (e.g., income, employment, local prices for consumer goods, services and real estate, financing of cultural buildings and services), environmental impacts (e.g., traffic and congestion, air and noise pollution), and cultural impacts (e.g., tourist behaviors, loss of local language, cultural commodification, security and crime, servile position of hosts). Based on this study, Socher concluded that negative tourism impacts dominated resident evaluations of their quality of life due to a lack of information with regards to the positive impacts. While this study added to the theoretical argument with respect to the importance of quality of life studies in tourism, this research was unfortunately not comprehensive.

The concept of quality of life has been included in tourism models. Crouch and Ritchie (1999) conceptualized destination competitiveness as an economic base that provides a foundation for quality of life, hence linking tourism to prosperity and a high standard of living. It was recognized that tourism could be a vehicle not only for economic growth but also for broader social goals, and overall social well-being was deemed to include economic prosperity, environmental stewardship, and quality of life. However, the focus of their work was on the economic prosperity and standard of living rather than overall quality of life.

A few studies have attempted to link the implicit connection between tourism impacts/attitudes and quality of life by including a measure of resident quality of life. However, this has been to a limited degree as it generally consists of a single item indicator (Table 9). Generally, based on the single item indicator, residents perceived tourism to positively impact overall resident quality of life. For example, Long et al., (1990) included a quality of life item along with variables that measured perceived

resident impacts. As expected, impact perceptions increased significantly with increased level of tourism development; quality of life displayed the most significant change in perceptions across level of development. More specifically, as level of development increased, a higher percentage of respondents agreed with the statement “tourism has increased the quality of life in this area” (p. 6).

Relatively few tourism studies have operationalized quality of life as a multidimensional construct, although a few have used multiple items. Carmichael, Peppard and Boudreau (1996) used four variables to measure quality of life in a longitudinal study to examine the impact of a tribal casino on three communities in Connecticut:

- There is more crime near my home than before the casino was built
- The casino has created traffic congestion problems near my home
- The casino is making my town a less desirable place live
- The historic value of my town is affected by the casino.

While the items have different meanings and certainly address aspects of resident quality of life, they are by no means representative of the quality of life domains consistently found in the social indicator literature. Nonetheless, the authors noted that residents felt that the casino had significantly reduced the quality of life in their towns.

Perdue, et al. (1999) also operationalized quality of life using four items in their study to examine the impact of gaming tourism on resident quality of life:

- I would like to move away from _____
- I am satisfied with ___ as a place to live
- The future of ___ looks bright
- Taking everything into account (family, work, leisure, self, etc.), how satisfied are you with the quality of life in ____.

Although these studies have advanced the tourism and quality of life literature by operationalizing quality of life as a construct in its own right, further advances could

possibly be gained by making use of the large body of literature concerning quality of life and its subsequent operationalization.

Botkin, McGowan, and DiGrino (1991) are a notable exception as they utilized a slightly altered version of the satisfaction with life scale by Diener et al. (1985):

- In most ways my life is close to ideal.
- The conditions of my life are excellent.
- I am satisfied with my life.
- I have gotten most of the important things I want in life.

This single construct scale represents variations on the global life satisfaction theme.

The original scale consisted of five items and was measured using a seven-point scale rather than the five-point scale as implemented by Botkin et al. (1991). The excluded item stated, “If I could live my life over, I would change almost nothing” (p. 72). Although the scale was altered without any explanation given as to why, it is an exceptional use (or partial use) of an established ‘quality of life scale’ by tourism scholars.

Hence, it is evident that there is a paucity of research that specifically focuses on the effect of tourism development on resident quality of life as a concept (Carmichael, 2006; Perdue et al., 1999; Urtasun & Gutierrez, 2006). As previously mentioned, there are a few exceptions which should be highlighted: Allen et al., (1988); Crofts and Holland, (1993); Perdue et al., (1991); and Ko and Stewart, (2002) all examined the impact of tourism development on resident perceptions of community life based on community characteristics commonly found in quality of life literature.

Two of these studies utilized objective indicators in an effort to understand the effect of tourism on resident quality of life. More specifically, Perdue et al. (1991) included levels of population, income, education, health, welfare, and crime in an examination of tourism’s effect on resident’s community quality of life in North Carolina.

More specifically, the level of tourism development was shown to have an effect on net population migration, types of jobs, educational expenditures, overall levels of education and quality of available health-care facilities. Crofts and Holland (1993) also utilized objective indicators and found that tourism had a positive effect on income, health recreation, personal services, and per capita sales while negatively affecting the level of poverty.

The majority of tourism impact studies however use subjective measures, as exemplified by Allen et al. (1988) who examined resident perceptions of community life satisfaction based on level of tourism development in their community. Tourism related retail sales as a percentage of community gross sales receipts were used to operationalize tourism development. Seven dimensions of community life (based on earlier work by Allen et al., 1987) were rated by residents on importance and satisfaction: public services, economics, environment, medical services, citizen involvement, formal education, and recreation services and opportunities. Findings suggested that level of tourism development impact certain dimensions of community life. More specifically, as tourism development increased, satisfaction with resident's opportunity for public service and the perceived importance of citizen involvement decreased. Conversely, the importance of environmental concerns increased with tourism development. Furthermore, findings suggested that negative effects were most likely to be evidenced at the upper level of development. Of particular interest was the finding that resident's satisfaction with some aspects of community life was more a function of population size than level of tourism development, which was attributed to the availability of certain services and opportunities.

Ko and Stewart (2002) investigated the link between perceived tourism impacts, resident attitudes, and community satisfaction. More specifically, a model that included resident' personal benefits from tourism development, perceptions of tourism impacts, community satisfaction, and attitudes towards additional tourism development was proposed and empirically tested. Community satisfaction was operationalized as a multidimensional construct comprised of seven latent factors: public service satisfaction, formal education satisfaction, environmental satisfaction, recreation opportunities satisfaction, economic satisfaction, citizen involvement and social opportunities, and medical services satisfaction. However, reliability analysis showed weak Cronbach's alpha values for some factors, particularly the economic satisfaction scale. As hypothesized, the perception of positive impacts of tourism had a positive direct effect on overall community satisfaction and on attitude for additional tourism development. Similarly, the perception of negative tourism impacts had a negative direct effect on overall community satisfaction and on attitude for additional tourism development. Furthermore, no significant relationship between personal benefits of tourism development and perceived negative tourism impacts was found. Interestingly, while the personal benefits from tourism development did not have a significant direct effect on overall community satisfaction, an indirect effect via perceived positive tourism impacts was identified.

As evidenced by several book chapters and recent journal articles (Andereck & Jurowski, 2006; Andereck, et al., 2007; Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Urtasun & Gutierrez, 2006) it is evident that the topic of resident quality of life has gained in interest recently within the tourism literature.

Anderek and Jurowski even created a tourism specific quality of life index based on earlier work by Massam and Everitt (2001). Their tourism quality of life (TQOL) index combined three measures in order to investigate resident perceptions of the costs and benefits of tourism and their affect on resident quality of life:

- residents' assessment of the importance of quality of life indicators
- resident's assessment of their satisfaction with indicators
- resident's assessment of tourism's influence on the indicators

The index was created using 38 "tourism-related quality-of-life items" (p. 138) which purported to measure the subjective dimension of community quality of life. The authors made the implicit connection between tourism impacts and resident quality of life and created a comprehensive and well-rounded list of such impacts, which without a doubt affect resident quality of life. However, tourism impact items were used in the creation of the index and subjected to a principal component exploratory factor analysis to develop tourism quality of life domains rather than operationalizing quality of life utilizing the domains identified in the quality of life literature. Nevertheless, the index was innovative in combining the importance of tourism impacts, resident satisfaction with those same impacts, as well as tourism's influence on them.

Andereck et al. (2007) also applied the TQOL index in a cross-cultural context by investigating the differences in perceived importance, satisfaction, and tourism influence on quality of life variables between Hispanic and Anglo respondents. Based on a priori groupings the variables were subdivided into three sets of measures: a negative tourism and quality of life scale, and three positive tourism and quality of life scales (economic, socio-cultural, and environmental impacts). It was interesting to note that the domains identified in the authors' previous study were not utilized. However, as the authors

stated, tourism impact studies and resident attitude studies have found a multitude of different dimensions based on factor analysis and each time dimensions are subject to different interpretations and uses depending on the study purpose and items used.

Two known studies have bridged the gap between the tourism and quality of life literature by operationalizing quality of life as a multidimensional construct including specific life domains: Emptaz-Collomb (2009) and Kim (2002).

Notably, Kim (2002) utilized four quality of life domains in an examination of perceived tourism impacts and quality of life in various stages of tourism development: material well-being, community well-being, emotional well-being, and health and safety well-being. In particular, Kim investigated the effect of specific tourism impact dimensions (economic, social, cultural, and environmental) on explicit life domains, which subsequently were posited to affect overall life satisfaction. Stage of tourism development was postulated as a mediating variable between the specific tourism impact and quality of life domains. Although findings did not support a moderating effect of tourism development stage between tourism impact and resident quality of life domains; nor did tourism impact dimensions have a significant effect on resident's general life satisfaction; each posited relationship between a specific tourism impact dimension and resident satisfaction with a specific quality of life domain was supported. More specifically, economic impacts had a positive effect on material well-being; social impacts had a positive effect on community well-being; cultural impacts had a positive effect on emotional well-being; and environmental impacts had a positive effect on emotional well-being. The specific relationships between tourism impact domains and quality of life domains were formulated a priori although unfortunately no theoretical

background for each posited relationship was provided. Nonetheless, the findings revealed that different tourism impact dimensions do in fact affect individual quality of life domains, even if no effect on overall quality of life was documented.

Most recently, in an examination of the relationships between tourism, human well-being and conservation in rural Africa, Emptaz-Collomb (2009) created a multidimensional quality of life index that included both subjective and objective measures of health, wealth, education, economic, social, infrastructural and political life. The author indicated that the index was largely based on the well being index developed by Cahyat, Gönner, and Haug (2007) for the Center for International Forestry Research (CIFOR) and the Personal Wellbeing Index created by the International Wellbeing Group (2006). However, the resulting index was adapted to the study site using a participatory approach by including residents of five area conservancies in the Caprivi strip, Namibia. The quality of life index created is therefore very specific to this particular study site and the results have to be viewed within the context of a rural location within a developing nation. Although Emptaz-Collomb did not find higher quality of life levels for communities with tourism compared to those without tourism; findings at the individual level indicated that tourism contributions to people's quality of life were limited to certain domains and restricted to residents involved with tourism. Thus, the differentiation between tourism impacts at the community and individual levels was highlighted and should be further explored. Both Kim (2002) and Emptaz-Collomb (2009) made significant contributions to the tourism literature by using an interdisciplinary approach and advancing the conceptualization and operationalization of quality of life within the tourism context.

Summary

There are a plethora of studies that have examined resident perceptions of tourism impacts in which the term quality of life has been used interchangeably with that of resident attitudes or perceived impacts, and hence the term has been utilized as an expression to encompass all of the perceived impacts attributed to tourism. While some impact and attitudinal scales utilized in the tourism literature have included a quality of life item or two, the operationalization of quality of life as a distinct construct (i.e., covering the core domains identified within the quality of life literature in disciplines such as economics, sociology, and social psychology) is sparse. Hence, there is a paucity of research that investigates the impact of tourism and host population's quality of life as a concept (Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Perdue et al., 1999; Urtasun & Gutierrez, 2006).

Resident Support for Tourism

Research has utilized tourism impacts as predictors variables (Jurowski et al., 1997; Lankford & Howard, 1994; Liu & Var, 1986; McCool & Martin, 1994; McGehee & Andereck, 2004; Milman & Pizam, 1988; Perdue et al., 1990; Sheldon & Var 1984; Sirakaya et al., 2002) as well as mediating variables on community satisfaction (Allen et al., 1988; Perdue et al., 1991; Ko & Stewart, 2002; Ross, 1992) and support for tourism development (Chen, 2001; Gursoy et al., 2002; Gursoy & Rutherford, 2004; Dyer et al., 2007; Jurowski et al., 1997; Ko & Stewart, 2002; Perdue et al., 1990; Perdue et al., 1995). The underlying domains of perceived tourism impacts have varied between studies and hence the resulting relationship with tourism support has been somewhat inconsistent. Some studies have categorized tourism impacts into economic, socio-cultural, and environmental dimensions (Chen, 2001; Jurowski et al., 1997; Yoon et al.,

2001), while others have segregated the impacts into costs and benefits (Gursoy et al., 2002; Ko & Stewart, 2002; Perdue et al., 1990). Furthermore, others have segmented impacts as positive and negative into as many as five dimensions (Dyer et al., 2007; Gursoy & Rutherford, 2004; Pennington-Gray, 2005).

Research in numerous destinations has generally supported the influence of residents' perceived positive tourism impacts on support for tourism (Andereck & Jurowski, 2006; Andereck & Vogt, 2000; Dyer et al., 2007; Gursoy et al., 2002; Jurowski et al., 1997; King, Pizam & Milman, 1993; Ko & Stewart, 2002; Perdue et al., 1990; Snaith & Haley, 1995). More specifically, most studies have found a positive relationship between perceived economic benefits and support for tourism development (Allen et al., 1988; Chen, 2001; Dyer et al., 2007; Gursoy & Rutherford, 2004; Jurowski et al., 1997; Lui & Var, 1986; Pennington-Gray, 2005; Perdue et al., 1990). Some have also found the inverse relationship between negative impacts and support for tourism (Ko & Stewart, 2002), although others found no significant effect of perceived costs of tourism on support for tourism (Gursoy et al., 2002).

The findings with respect to the relationship between perceived socio-cultural impacts and support for tourism have been inconsistent. Several studies have found a negative relationship between social costs and support for tourism development (Chen, 2001; Gursoy et al., 2002; Milman & Pizam, 1988; Sirakaya, et al., 2002; Tosun, 2002). However, both positive and negative relationships between social benefits and costs respectively and support for tourism have been rejected (Dyer et al., 2007; Gursoy & Rutherford, 2004). Similarly, a positive relationship between cultural benefits and resident support for tourism development have been identified (Dyer et al., 2007;

Gursoy & Rutherford, 2004), while a negative relationship between cultural costs and support was not substantiated (Dyer et al., 2007; Gursoy & Rutherford, 2004). Negative environmental impacts have had a negative effect on resident support for tourism (Chen, 2001; Yoon et al., 2001), although Jurowski et al. (1997) found no significant effects of environmental impacts on resident support for tourism.

Overall, not all tourism impacts have had an effect on resident support for tourism development (Yen & Kerstetter, 2009). Owing to the variety of different perceived tourism impact items and dimensions utilized in the literature, the resulting relationships with support for tourism are somewhat mixed. There is a need to further examine the relationship between perceived tourism impacts and support for tourism based on the conceptual dimensions of sustainability. In addition, support for tourism could also be influenced or mediated by residents' perception of their quality of life as a result of tourism in their community. Hence, the role of quality of life as a mediating variable needs to be further explored as this link has yet to be comprehensively determined in the literature.

Operationalization

Resident support for tourism has been operationalized by very general single items such as support for further development (Dyer et al., 2007, Chen, 2001); more specific single items based on location of the study (such as support for nature based tourism, Jurowski et al., 1997), or as willingness to pay a local tax for tourism development (Snaith & Haley, 1995); support for several types of tourism development ranging from nature based development, large attractions, cultural or historic attractions, to special events (Gursoy et al., 2002; Jurowski et al., 1997; Yoon, Gursoy & Chen, 2001); to very explicit tourism development options (Andereck & Vogt, 2000). McGehee

and Andereck (2004) used eight items to measure residents support for future tourism development: items addressed tourism's role in the community, future potential, community pride, as well as the government's role in the promotion of tourism.

Interestingly, Yen and Kerstetter (2009) recently found that attitude towards current tourism development is a distinct construct from attitudes towards future tourism development. As this is a baseline study and Cologne is a mature and well developed urban destination offering such a wide variety of sights and activities, this study employed residents' attitude towards the current tourism situation.

Summary

As illustrated by this literature review, there are a plethora of studies that have investigated the impacts of, and attitudes towards tourism by host populations. There seems to be a general agreement among scholars with respect to the types of impacts communities experience as a result of tourism and their operationalization has been fairly consistent with a focus on the economy, the environment, and community life. As many of these studies have been conducted in light of sustainability efforts, the importance of community governance has also been highlighted. Hence, the addition of a fourth dimension encompassing institutional structures has been recently suggested (Spannenberg, 2007) and implemented (Cottrell & Vaske, 2006; Cottrell, Vaske, Shen & Ritter, 2007; Shen & Cottrell, 2008). Researchers have striven to identify impacts that cover all facets of sustainability in order to help communities successfully plan, manage, and monitor both positive and negative impacts of tourism, which inevitably affect resident's quality of life. It is inherent that the principles of sustainable tourism and the achievement of sustainable destinations would add to the overall quality of life of residents by minimizing the negative and maximizing the positive impacts. However,

while previous impact and attitude studies have utilized the term quality of life as an expression to encompass all of the perceived impacts attributed to tourism, the operationalization of quality of life as a distinct construct (covering the core domains identified within the quality of life literature) has been lacking. Hence, there is a paucity of research which investigates the impact of tourism and host population's quality of life as a concept (Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Perdue et al., 1999; Urtasun & Gutierrez, 2006). Moreover, there are only two known tourism studies that have operationalized quality of life as a multidimensional construct based on the dimensions consistently identified within the quality of life literature (Emptaz-Collomb, 2009; Kim, 2002).

Therefore, a conceptual framework within the context of the four dimensions of sustainability (economic, environmental, socio-cultural and institutional) has been developed to investigate the effects of perceived tourism impacts and institutional structure on the quality of life of residents and their ensuing support for tourism development.

Table 2-1. Positive and negative economic impacts

Economic impact	Research Citations
Increased employment opportunities	Ahmed, 1986; Ap & Crompton, 1998; Belise & Hoy, 1980; Boissevain, 1979; Brayley et al., 1989; Carmichael et al., 1996; Davis et al., 1988; Faulkner & Tideswell, 1997; Forster, 1964; Gilbert & Clark, 1997; Hudman, 1978; Johnson, Snepenger & Akis, 1994; Keogh, 1990; Lawson et al., 1998; Liu & Var, 1986; Mansperger, 1995; Milman & Pizam, 1988; Prentice, 1993; Rothman, 1978; Schroeder, 1996; Tomljenovic & Faulkner, 1999; Tyrell & Spaulding, 1984; Weaver & Lawton, 2001
Increased standard of living	Akis et al., 1996; Belisle & Hoy, 1980; Gilbert & Clark, 1997; Haralambopoulos & Pizam, 1996; Johnson, Snepenger & Akis, 1994; Milman & Pizam, 1988; Laflamme, 1979; Liu & Var, 1986; Long et al., 1990; Pizam, 1978
Increased infrastructure development	Akis et al., 1996; Ap & Crompton, 1998; Belisle & Hoy, 1980; Fritz, 1982; Liu & Var, 1986; Milman & Pizam, 1988; Sharpley, 1994; Sheldon & Var, 1984;
Increased economic growth	Ahmed, 1986; Brayley et al., 1989; Cooke, 1982; Greenwood, 1972; Perdue, Long & Allen, 1990; Sheldon & Var, 1984
Increased cost of living	Carmichael et al., 1996; Faulkner & Tideswell, 1997; Greenwood, 1972; Lawson et al., 1998; Liu & Var, 1986; Prentice, 1993; Stynes & Stewart, 1993
Increased prices (food, services, goods, land, etc.)	Ahmed, 1986; Akis et al., 1996; Bystrzanowski, 1989; Haralambopoulos & Pizam, 1996; Hudman, 1980; Husbands, 1989; Lawson et al., 1998; Liu et al., 1987; Long et al., 1990; Lovel & Feuerstein, 1992; Perdue et al., 1987; Perdue, Long & Allen, 1990; Pizam, 1978; Ross, 1992; Schroeder, 1992; Stonich, 1998; Var et al., 1985
Increased cost of public services	Tyrell & Spaulding, 1984
Unequal distribution of benefits	Belisle & Hoy, 1980; Brougham & Butler, 1981; Freitag, 1994; Getz, 1994; Johnson et al., 1994; Lindberg et al., 2001; Prentice, 1993; Stonich, 1998; Tosun, 2001
Employment is seasonal /temporary	Jordan, 1980; Lovel & Feuerstein, 1992; McCool, 1994; Sharpley, 1994; Stonich, 1998; Tooman, 1997; Tosun, 2001
Increased economic instability	Gee et al., 1984

Sources: Ap & Crompton (1998); Andereck & Vogt (2000); Easterling (2004)

Table 2-2. Positive and negative environmental impacts

Environmental impact	Research Citations
Preservation of natural environment or no detrimental effect	Belisle & Hoy, 1980; Lui & Var, 1986; Liu, Sheldon & Var, 1987; Sethna & Richmond, 1978;
Preservation of historic buildings & monuments	Sethna & Richmond, 1978; Sheldon & Var, 1984; Liu, Sheldon & Var, 1987;
Improvement of areas appearance	Perdue, Long, & Allen, 1990; Bystranowski, 1989
Increased pollution	Akis et al., 1996; Brunt & Courtney, 1999; Caneday & Zeiger, 1991; Gilbert & Clark, 1997; Goksan, 1978; Gunn, 1988; Haulot, 1974; Lankford 1994; Lawson et al., 1998; Lovel & Feuerstein, 1992; Pizam, 1978; Rothman, 1978; Snaith & Haley 1995; Tyrell & Spaulding, 1984
Overcrowding	Akis et al., 1996; Ap & Crompton, 1998; Brougham & Butler, 1981; Liu & Var; 1986; Pizam; 1978; Rothman, 1978; Thomason, Crompton & Kamp, 1979; Wahab, 1978; Var et al., 1985
Traffic and parking congestion	Akis et al., 1996; Ap & Crompton, 1998; Brougham & Butler, 1981; Brunt & Courtney, 1999; Black & Nickerson, 1997; Caneday & Zeiger, 1991; Carmichael, Peppard & Boudreau, 1996; Christensen & Nickerson 1996; King, Pizam, & Milman 1993; Lindberg & Johnson 1997; Liu & Var, 1986; Liu, Sheldon, & Var, 1987; McCool & Martin 1994; Mok, Slater, & Cheung, 1991; Perdue, Long, & Allen, 1990; Pizam, 1978; Rothman, 1978; Sheldon & Var, 1984; Snaith & Haley, 1995; Tyrell & Spaulding, 1984; Var et al., 1985
Destruction of natural environment (including beauty & tranquility)	Akis et al., 1996; Ap & Crompton, 1998; Brayley et al., 1989; Cater, 1987; Faulkner & Tideswell, 1997; Goksan, 1978; Haulot, 1974; Wahab, 1978
Conflict over local wildlife resources	Cooke, 1982; Gunn, 1988; Kendall & Var, 1984

Sources: Ap & Crompton (1998); Andereck & Vogt (2000); Easterling (2004)

Table 2-3. Positive and negative socio-cultural impacts

Socio-cultural impact:	Research Citations
Improves quality of life	Allen, Hafer, Long & Perdue (1993); Bystrzanowski, 1989; McCool and Martin, 1994; Milman & Pizam, 1988; Long, Perdue & Allen, 1990
Promotes cultural exchange	Belisle & Hoy, 1980; Brougham & Butler, 1981; Clements et al., 1993; Liu, Sheldon, & Var, 1987; Liu & Var, 1986; Sheldon & Var, 1984
Increased Understanding of Different Cultures	Ap & Crompton, 1998; Liu, Sheldon & Var, 1987; Sheldon, & Var, 1984; Liu & Var, 1986; Mathieson & Wall, 1982; Milman & Pizam, 1988; Pizam, 1978; Sheldon & Var, 1984
Revitalization of traditional culture/practices	Besculides, 2002; deKadt, 1979; Esman, 1984
Preserves / strengthens cultural identity	Liu & Var, 1986; Evans, 1976
Increase in community pride	Ap & Crompton, 1998; Delamere & Hinch, 1994
Increased demand for local art	Ap & Crompton, 1998; Deitch, 1977; Liu & Var, 1986
Increase in community services & facilities	Belisle & Hoy, 1980; Brunt & Courtney, 1999; Liu & Var, 1986; Milman & Pizam, 1988; Pizam, 1978; Sheldon & Var, 1984
Increase in cultural events & heritage	Gilbert & Clark, 1997; Liu & Var, 1986; Liu, Sheldon, & Var, 1987;
Loss of community character & relationships	Allen et al., 1988, Bisilliat, 1979; Brayley et al., 1990; Delamere & Hinch, 1994; Faulkenberry et al., 2000; Krippendorf, 1987
Loss of authenticity	Boynton, 1986; Brougham & Butler, 1981; Cohen, 1988;
Loss of native language	Coppock, 1977; Cybrisky, 1970; White, 1974 Brunt & Courtney, 1999; King, Pizam, and Milman
Increase in crime	1993; Lankford 1994; Lindberg and Johnson 1997; Mok, Slater, and Cheung 1991 Belisle & Hoy, 1980; Cohen, 1988; Lankford 1994;
Increased prostitution	Lindberg & Johnson 1997; Liu, Sheldon & Var, 1987; Liu & Var, 1986; Mok, Slater & Cheung, 1991;
Intensification of labor burden	Brayley et al., 1990; Freitag, 1994
Worsening of resident attitudes/declining hospitality	Bryden, 1973; Doxey, 1975; Dogan, 1989; Husbands, 1986; Liu & Var, 1986; Munt, 1994

Sources: Ap & Crompton (1998); Andereck & Vogt (2000); Easterling (2004)

Table 2-4. Tourism impact / attitude themes identified from the literature

<p>Economic</p> <ol style="list-style-type: none"> 1. Standard of living 2. Employment opportunities 3. Quality of employment 4. Community tax revenues 5. Economic growth 6. Cost of living 7. Quality of local services 8. State of infrastructure 	<p>Environmental</p> <ol style="list-style-type: none"> 1. Quality of natural environment 2. Preservation of natural environment 3. Quality of historic buildings & monuments 4. Land use conflict 5. Environmental pollution i.e. noise, litter 6. Overcrowding 7. Traffic & parking congestion 8. Preservation of historic buildings & monuments
<p>Socio-cultural</p> <ol style="list-style-type: none"> 1. Community character 2. Sense of community (identity / pride) 3. Cultural events 4. Recreational opportunities 5. Local traditions / practices 6. Demand for local goods 7. Cultural exchange / understanding 8. Local hospitality 9. Community services & facilities <p>10. Crime</p>	<p>Institutional</p> <ol style="list-style-type: none"> 1. Trust in political system 2. Trust in legal system 3. Influence of stakeholders 4. Leadership 5. Transparency of decision-making process 6. Good communication 7. Stakeholder involvement 8. Respect for all stakeholders 9. Accessibility of government officers & leaders 10. Community development in line in with community vision

Table 2-5. Comparison of life domains utilized in quality of life conceptualization

Eurofound (2007)	European System of Social Indicators ^a	Comprehensive Quality of Life Scale (ComQoL) ^b	Human Needs ^c	German Social Accounts ^d	Swedish Welfare Tradition ^d
Health	Health	Health	Reproduction	Health	Health & access to healthcare
Economic resources	Income, standard of living, consumption patterns	Material well-being	Subsistence	Income & wealth Expenditure	Economic resources & consumer protection
Family life	Household & family	Emotional well-being Intimacy	Affection Unders tanding	Household & families	Family & social relationships / integration
Housing	Housing			Housing	Housing & local amenities
Employment	Labor market and working conditions	Productivity		Labor market	Employment & working conditions
	Education & vocational training			Education & training	Knowledge & access to education
Community life		Community			
Environment	Environment			Environment	
	Social & political participation & integration		Participation	Lifestyle & participation	Political resources
	Leisure, media & culture		Leisure		Recreation & culture
	Crime and public safety	Safety	Security	Crime & justice	Security of life & property
	Social security				
	Transport			Transportation	
			Creativity/ emotional expression		
			Spirituality		
			Identity		
			Freedom		
	Population			Population	
	Total life situation				

Sources: ^a Noll, 2002; ^b Cummins, 1993; ^c Costanza et.al., 2006; ^d Fahey, Nolan & Whelan, 2003

Table 2-6. Comparison of PWI domains with the core domains identified in the literature

Personal Well-being Index (Cummins, 2003)	Core quality of life domains (Hagerty et al., 2001)
Standard of living	Material well-being
Health	Health
Achieving in life	Work and productive activity
Personal relationships	Relationship with family and friends
Spirituality/religion (recently added)	Emotional well being
Safety	Personal safety
Community connectedness	Feeling part of one's local community
Future security (added after 9/11)	

Table 2-7. Single-item measures of quality of life

Statements used	Authors
Tourism increases quality of life	Allen, Hafer, Long & Perdue, 1993 ^a ; Ko & Stewart, 2002 ^b
Tourism development increases the quality of life in an area	Andereck & Vogt, 2000 ^b
Tourists in my community disrupt my quality of life	Choi & Sirakaya, 2005 ^b
My quality of life has deteriorated because of tourism	
Because of tourism in this community, overall quality of life has improved	Diedrich & Garcia-Buades, 2008 ^a
The quality of life of residents has been improved because of the presence of tourism	Gilbert & Clark, 1997 ^a
Tourism can improve the quality of life in (name of destination)	Gu & Ryan, 2008 ^a
Tourism has increased the quality of life in this area	Long, Perdue & Allen, 1990 ^c
The quality of life in my community has improved because of tourism	McCool and Martin, 1994 ^b
What impact has the current level of tourism had on quality of life in general	Milman & Pizam, 1988 ^d
Tourism has improved the quality of life	Vargas-Sanchez, Plaza-Mejia & Porras-Bueno, 2008 ^b
Quality of life in my community has improved because of tourism facilities in this community	Wang & Pfister, 2008 ^b
The general quality of life has become better because of tourism development in my region	Zhang, Inbakaran & Jackson, 2006 ^b

^a 7 point Likert-type agreement scale, anchored by strongly agree and strongly disagree; ^b 5 point Likert-type agreement scale, anchored by strongly agree and strongly disagree; ^c 4 point Likert-type agreement scale, anchored by strongly agree and strongly disagree; ^d 5 point Likert-type agreement scale, anchored by significantly improved and significantly worsened

CHAPTER 3 METHODS

The procedures used in the examination of resident perceptions of tourism impacts, their effect on quality of life, and subsequent support for tourism are described in this chapter. First, a description of the study site is provided, followed by the procedure of participant selection, and details of the survey instrument. Second, the data analysis procedures are explained, including testing of the measurement, and structural models.

The Study Site

Cologne, or Köln as it is known in German, is a historic city located along the river Rhine in the federal state of Nordrhein-Westfalen and is the fourth largest city in Germany with approximately one million inhabitants (Figure 3-1). Cologne's most famous landmark is its majestic Cathedral, which was inscribed as a World Heritage site in 1996 as it is a monument "of outstanding universal value being an exceptional work of human creative genius, constructed over more than six centuries and a powerful testimony to the strength and persistence of Christian belief in medieval and modern Europe" (UNESCO, 1996). The city covers a geographical area of approximately 405 square kilometers (156 square miles), of which approximately 33% is composed of built environment while roads and other transportation networks make up almost 16% of the total area. Cologne is also one of the greenest cities in Germany, with approximately 24% of the total area consisting of inner-city parks and greenways including a green belt surrounding the city. While the city is relatively large, the high population results in a population density of 2524 residents per square kilometer (.4 miles) which gives the

average resident a personal living space of approximately 37 square meters (400 square feet) (<http://www.koeln.de>).

Due to its location along the river, Cologne has a long history as an important center for trade and is still home to the second-largest inland harbor in Germany. Furthermore, the region features a vast transportation network (Figure 3-2) including the Cologne/Bonn international airport, access to supra-regional motorways, and is a key hub in Europe's railroad network, which has helped to maintain its importance as a major economic center. In fact, over 40% of the total gross domestic product of the European Union is generated within a radius of only 300 km around the city of Cologne and the region has an export ratio of over 44% (www.willkommeninkoeln.de). Cologne's economy is based on large service and trade sectors including automobile, chemical, pharmaceutical, electrical and mechanical engineering, insurance, information technology, and food production industries (Table 3-1). Within the service sector, the media and telecommunications industries have established Cologne as the primary location of broadcasting, film, television, and video production within Germany (Urban Audit, 2009).

The historic city of Cologne, Germany constitutes the setting for this research. Due to the region's stature as a major economic center, coupled with the city's diverse cultural landscape and historic significance, Cologne attracts an immense number of visitors annually. While this mature urban destination has a wide appeal to many different travel segments, the city also has an exhibition centre that features over fifty international trade fairs and exhibitions annually, drawing a large segment of business travelers to the city in addition to the more traditional leisure segments. Furthermore, Cologne cathedral is the most frequently visited

building in Germany (www.koelntourismus.de) and while inscribed as a World Heritage Site in 1996, it has been a major destination for pilgrims and tourists for over 800 years.

Selection of Participants

Data for this study were collected between February 2010 and August 2010. The study adopted a quantitative methodology utilizing a survey questionnaire format. Since Cologne is divided into nine boroughs, a stratified sampling procedure (Babbie, 2001) was implemented to achieve a representative random sample of residents within each geographic borough (Table 3-2). Residents were approached in the central shopping districts, central business districts, and major bus and train stations of each borough. All participants were first asked a filter question (Appendix A) to determine residence within the Cologne city limits and to determine they were over 18 years of age. If a site had multiple roadways or entrance points, interviewers rotated and included all possible entries. A random sample from each site was requested to complete an on-site voluntary "intercept survey". Every third adult was intercepted and asked to complete the survey with a brief explanation of its purpose. Furthermore, participants were assured that all responses were completely anonymous and confidential. Each survey took an average of 12 to 15 minutes to complete. As a rule of thumb, Kline (1998) recommends a desirable ratio of 20 participants to each model parameter while conceding that a 10:1 ratio is more realistic. The proposed model (Figure 3-4) had 68 parameters and hence a sample size of 720 was targeted.

The surveys were conducted on weekdays and weekends. Saturday and Sunday were designated weekend days while Mondays through Friday were weekdays. An equal distribution of weekday and weekend days was targeted. Sampling occurred between the hours of 9:00 am and 6:00 pm, and interviewers strove to obtain an equal

distribution of mornings and afternoons (Table 3-3). The lead researcher and an assistant interviewer, both of whom are bilingual, conducted the interviews. Furthermore, four local university students familiar with appropriate survey procedures contributed to the data collection at irregular intervals. Due to extremely adverse weather conditions notably during the winter months, it was extremely difficult to garner respondents willing to take the time to respond to a survey in an outdoor environment. Therefore, an additional avenue was offered to residents to complete the survey online from the comfort of their homes; 77 residents took advantage of this option. Overall, 925 residents were approached onsite and a combined total of 633 surveys were completed, which yielded a total response rate of 68%.

Instrumentation

The survey instrument consisted of a 1-page, double-sided questionnaire with a total of 76 questions categorized into five sections (Appendix B). The first section addressed resident quality of life operationalized using Cummins International Wellbeing Index which incorporated two single items that measured overall satisfaction with life. The second section reflected resident support for tourism in Cologne and consisted of four items. In the third section, community concerns with respect to tourism impacts in the economic, environmental, socio-cultural, and institutional arenas were assessed utilizing thirty-six items. Finally, in the fourth section, resident's demographic and socio-economic characteristics such as gender, age, education, employment, income, and length of residence were included.

Prior to translation, three tourism faculty members at the University of Florida who were familiar with tourism concepts and impacts research assessed the face and content validity of the instrument. Then, the questionnaire was translated into the

German language by the principal investigator who is bilingual (Appendix C). The translation was subsequently checked by two different bilingual speakers to verify for nuances, accuracy, and meaning. Finally, the survey was pilot-tested for clarity among six residents at the study site. Based on the test, minor modifications were made with respect to the wording of two items.

Perceived Tourism Impacts

Residents' general attitudes towards tourism impacts in Cologne were measured on a seven point scale where 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree (Table 3-4). Each identified theme was operationalized using items adapted from the literature (see Andereck & Jurowski, 2006; Andereck & Vogt, 2000; Ap & Crompton, 1998; Choi & Sirakaya, 2005; Cottrell, Vaske, Shen & Ritter, 2007; McGehee & Andereck, 2004; Perdue, Long & Allen, 1990; Sirakaya-Turk, Ekinci & Kaya, 2008). The institutional items were adapted from Cottrell, Vaske, Shen & Ritter (2007), and the European Foundation "European Quality of Life Survey" (2007).

Quality of Life

The International Well-being Index (Cummins et al., 2003) was used to operationalize quality of life. The IWI has been applied and validated in 20 languages in numerous countries. Moreover, Renn, Pfaffenberger, Platter, Mitmansgruber, Cummins, and Höfer (2009) recently confirmed the validity and reliability of the IWI in Austria based on a German language translation of the scale. The IWI consists of two subscales: Personal, and National Well-being indices. Both were measured on an 11-point Likert type scale anchored in range by completely dissatisfied and completely satisfied (Table 3-5).

Personal Quality of Life

The personal quality of life of residents in Cologne was assessed based on the Personal Well-being scale (PWI), and consisted of eight items of satisfaction that corresponded to eight quality of life domains deconstructed from the global question: “How satisfied are you with your life as a whole?” (PWI English Manual, 2006).

Additionally, although not part of the PWI, Cummins suggested that it may be useful to include the global satisfaction measure to test construct validity and hence was also included.

Community Quality of Life

The community quality of life of residents in Cologne was assessed utilizing the National Well-being index (NWI) which consisted of six items: satisfaction with economic situation of the country, state of the environment, social conditions, national or local government, business, and national security (Renn et al., 2009). According to Cummins (personal comm. 2009), the NWI can be applied at a local or regional level. Hence, the scale was included with reference to Cologne rather than Germany as a whole, and the global satisfaction question was accordingly worded as follows:

“Thinking now not about your own life, but about the situation in Cologne generally, how satisfied are you with life in Cologne?”

Resident Support for Tourism

Support for tourism was operationalized using four items measured on a seven point scale where 1=strongly disagree, 2=disagree, 3=somewhat disagree 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree. The items were adapted from the literature (Andereck & Vogt, 2000; McGehee & Andereck, 2004; Yen & Kerstetter, 2009) and are illustrated in Table 3-6.

Treatment of Data

Data for the study were entered using the Statistical Package for the Social Sciences (SPSS) version 18 and the proposed conceptual model was assessed using Mplus version 6 structural equation analysis software. Structural equation modeling (SEM) was selected as a statistical methodology to estimate and test hypotheses about a model that specifies causal relationships among observed variables. SEM is currently widely used in the behavioral and social sciences and encompasses a wide variety of models and methods of multivariate analyses, including factor analysis as well as observed and latent variable models (Satorra, 2008). Although structural equation modeling is a priori, it may be applied as a blend of exploratory and confirmatory analyses (Kline, 2005) and was appropriate for this investigation due to the desirability of testing an overall model rather than individual coefficients.

The SEM analysis consisted of a two-step process as recommended by Anderson and Gerbing (1988). First, the measurement model was assessed. More specifically, the latent constructs were evaluated using confirmatory factor analysis (CFA) to examine how the individual indicators related to the latent factors. The second step assessed the structural model that examined the hypothesized relationships between the constructs. In particular, the causal dependencies between exogenous and endogenous variables were evaluated. In order to empirically test the proposed conceptual model and the formulated hypotheses, the fit of the measurement and structural models was determined by examining the goodness of fit chi-square (χ^2) statistic. Although it is customary to examine the goodness of fit chi-square (χ^2) it has been criticized for the

following reasons (Algina¹, 2008):

- any saturated model may fit the data perfectly, but it will be too complex to interpret
- non-saturated models only fit data approximately, they seldom fit well and almost always have to be rejected
- large enough sample size will always affect the chi-square for a non-saturated model and any non-saturated model will be rejected.

Therefore, four additional goodness of fit indices were utilized, the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), the root mean square error of approximation (RMSEA; Steiger, 1998), and the standard root mean square residual (SRMR). The criterion for goodness of fit for both CFI and TLI is $\geq .95$, while the criterion for goodness of fit for RMSEA and SRMR are $\leq .09$ and $\leq .06$ respectively. Furthermore, full information analysis of the data was employed. All the hypotheses were related to the conceptual model and were examined after the measurement model was prepared. Additionally, the validity and reliability of measures employed were also examined. Cronbach's coefficient alpha was utilized to assess the reliability of scores on the items utilized as indicators for the latent variables.

Data Analysis Procedures

Descriptive statistics were first examined to define the sample profile and examine the distributions of the variables to examine if the underlying statistical assumptions were met. Kline (2005) states that variables with an absolute skew index greater than 3.0 are generally problematic and furthermore, absolute values of the kurtosis index greater than 10 may also indicate a problem (p.50). Based on the aforementioned standards, none of the analyzed variables experienced skewness or kurtosis.

¹ Algina, personal communication, 2008

Furthermore, there were no signs of multicollinearity as the highest intercorrelation between individual variables was .68 which is below the recommended criterion of $>.85$ (Kline, 2005). Although the effect of violating assumptions of normality generally do not cause severe problems as inflated chi-square statistics and underestimated standard errors can be accounted for by utilizing appropriate scaled and adjusted test statistics which have been developed for this purpose. Hence, diagonally weighted least squares estimation using the asymptotic covariance matrix and the robust maximum likelihood (also known as MLR analysis) estimations were utilized in combination with the two-stage process (Algina², 2008; Anderson & Gerbing, 1988) and the Satorra-Bentler scaled chi-square (χ^2) goodness of fit statistic (1994) was adopted.

A sample size of 720 was targeted, however, due to time, weather, and budget restrictions the final sample size resulted in a total of 633, even though the sampling period was extended to encompass a six-month period. Although the recommended ratio of 10 participants to each model parameter was not achieved, the constructs were initially specified in that individual items served as indicators of the latent construct in order to glean as much information from the individual items as possible. It was decided prior to data collection should the case arise that the targeted sample size not be attained, parceling would be an acceptable methodology to improve the variable to sample size ratio and hence increase the stability of the parameter estimates if needed. As the relations among constructs are of foremost interest in the present study, parceling is warranted as an appropriate statistical method (Algina², 2008; Little, Cunningham, Shahar & Widaman, 2002).

² Algina, personal communication 2008

Prior to testing the measurement properties of the entire model, individual confirmatory factor and reliability analyses were conducted for each construct to determine validity. Prior to analysis, a number of items were reverse coded in order to ensure consistent directionality. It has been suggested that items with factor loadings of less than .4 should be deleted, and hence only attributes with loadings greater than .4 were included in further analysis (Hatcher, 1994). Cronbach's coefficient alpha was used for reliability analysis, in which coefficients of .70 or higher have been suggested as acceptable levels of reliability (Nunnally & Bernstein, 1994). Figure 3-4 illustrates the proposed measurement model in terms of the latent variables and their indicators. More specifically, each of the latent variables economic, environmental, and socio-cultural impacts, had 8, 8, and 10 observed indicators respectively, while the latent construct institutional structure had 10 observed indicators. Personal quality of life had 6 observed indicators; community quality of life had 8 observed indicators, and resident support for tourism had 4 observed indicators.

Tourism Impacts

Residents' general attitudes towards tourism impacts were conceptually grouped within the four proposed dimensions of sustainability (economic, environmental, socio-cultural, and institutional) and measured on a seven point scale ranging from 1=strongly disagree to 7=strongly agree. The items were subjected to a hierarchical confirmatory factor analysis of polytomous variables (probit factor analysis) as linear factor analysis is an inappropriate model due to the possibility of lower and higher value predictions than the actual possible score based on the scale available to respondents. Hence, mean-adjusted weighted least squares estimation (WLSM) using the asymptotic covariance matrix was used as recommended for categorical and ordinal data (Muthen,

1993 as cited in Kline, 2005). The tourism impact measurement model had a statistically significant Chi-square ($\chi^2 = 6112.245$, $df (318)$, $p = 0.000$) and the CFI, the TLI, and RMSEA did not meet the criterion for good fit (with values of .83, .81, and .17 respectively).

A possible reason for the lack of fit could be the decision to specify the model utilizing individual items as indicators of the latent constructs even though the sample size did not meet the recommended ratio of 10 participants to each model parameter. However, a more likely explanation concerns the indicators utilized to measure tourism impacts. Although the items have consistently been used in tourism impact studies and represent well-established impact dimensions, they do not constitute a validated tourism impact scale. As discussed in the literature review, although the conceptualization of tourism impacts have been consistently based on the economic, environmental and socio-cultural dimensions of sustainability, operationalization has not been as consistent, and hence impact dimensions and items are varied within the literature (Andereck et al., 2007; Ap & Crompton, 1998). Furthermore, a fourth dimension was added for the purpose of this study based on work by Cottrell et al. (2005); Shen and Cottrell (2008), and Shen et al. (2009).

However, scale development was not within the scope of this study, but rather an examination of the relationship between the conceptualized dimensions of perceived tourism impacts and their effect on resident's perceived personal and community quality of life. In this respect, the present study was exploratory in nature and so each dimension was examined individually in order to assess unidimensionality and reliability. The individual tourism impact dimension resulted in tolerable goodness of fit statistics

(Table 3-8) when considered in combination with the factor loadings (Table 3-9) and reliability analyses (Table 3-10). All of the indicators specified to measure a common underlying factor had relatively high standardized loadings that indicated convergent validity. In particular, the economic dimension initially consisted of eight indicators, however the items “temsono increases our cost of living” and andngases our cost of initially consisted of eight indicators, however the n particular, tility analyses (Table 3-10). All of the indicators specifiedad an acceptable alpha value of .78. Within the environmental dimension, three items had factor loadings less than .4: “tourism enhances the preservation of our natural environment”, “tourism enhances the preservation of our historic buildings and monuments” and “tourism increases traffic and parking congestion.” The remaining five indicators had an acceptable alpha value of .72. The only item within the socio-cultural dimension that failed to load adequately was “tourism increases the level of criminal activities” and the nine remaining items had an alpha value of .79. The institutional dimension also had three items which had factor loadings less than .4: “residents have opportunities to get involved in tourism decision making,” “community development is in line in with the community vision,” and “there are many good leaders in this town.” The remaining items had an alpha value of .85.

Based on these results, the decision was made to parcel the items within each tourism impact dimension. There are several alternative options for specifying constructs ranging from total disaggregated models (in which each individual item serves as an indicator of a latent construct); partial disaggregated models (the combination of small sets of items from a scale to form indicator parcels); to total

aggregated models (in which all of the items of a scale are summed or averaged to create a single indicator of a construct) (Coffman & MacCallum, 2005).

Total disaggregation: The advantage of using items as individual indicators is the amount of information provided about each item. For example, the strength of the relationship between the item and the latent factor as well as information regarding the error variances. However, Little, Cunningham, Shahar and Widaman (2002) acknowledged that compared to aggregated level data, individual level data will most likely have a “lower reliability, lower communality, a smaller ratio of common-to unique factor variance, and a greater likelihood of distributional violations. Items also have fewer, larger, and less equal intervals between scale points than do parcels” (p.154). There are also concerns regarding the number of parameters required to model item level data versus aggregate level data and the overall fit of the structural model (Little et al., 2002). Depending on the model and the number of variables, using individual items can lead to very large covariance matrices which can make it less likely that the model will fit well, even if the estimated coefficients are similar to their population values (Coffman & MacCallum, 2005; Williams & O’Boyle, 2008). Therefore, it has been argued that when sample sizes are small partial disaggregation models, or parceling is a preferred methodology (Coffman & MacCallum, 2005; Little et al., 2002; Williams & O’Boyle, 2008).

Partial disaggregation: The combination of small sets of items from a scale to form indicator is known as item parceling and has been defined as “summing or averaging together two or more items and using the resulting sum or average as the basic unit of analysis” (Bandalos & Finney, 2001, p. 269). There are different methods

of parcel construction ranging from random assignment, item to construct balance, a priori questionnaire construction, the use of different algorithms, or assignment based on correlated uniqueness (Little et al., 2002; Williams & O'Boyle, 2008). While researchers have reported that parceling is preferable to disaggregated analyses (Coffman & MacCallum, 2005; Holt, 2004; Little et al., 2002; Williams & O'Boyle, 2008) it should be noted that item parceling is controversial in the factor analysis literature (Algina³, 2008; Holt, 2004; Little et al., 2002). Critics of the parceling method focus mainly on concerns of dimensionality of the construct and the meaning of parameter estimates (Little et al., 2002). In fact, both opponents and supporters agree that when latent constructs are not unidimensional then parceling is particularly problematic. Hence, the main assumption underlying the parceling method is the unidimensionality of the latent construct (Holt, 2004; Little et al., 2002; Williams & O'Boyle, 2008). In fact, Bandalos and Finney (2001) advise that parceling should be implemented only under conditions of unidimensionality.

The advantages of parceling are largely based on a reduction in estimated parameters and reliability. The reduction of the measured variables in a model lead to smaller correlation matrices (Coffman & MacCallum, 2005) and fewer model parameters as there is only one measurement error variance term per parcel, which in turn result in smaller parameter to sample size ratios thus providing greater stability of the estimates (Möbius, 2003). In sum, Little et al. (2002) suggest that the various fit indices are expected to be more acceptable when parcels rather than individual items are utilized due to three main psychometric and estimation advantages of parcels:

³ Algina, personal communication 2008

- they are more parsimonious (fewer estimated parameters)
- less chances of correlated residuals or dual loadings to emerge due to fewer indicators and smaller unique variances
- reduced sources of sampling error.

Furthermore, item parceling can reduce the effects of nonnormality and improve the continuity of indicators (Holt, 2004) therefore avoiding the limited number of scale points for item scores and the ensuing need for probit analysis (Algina⁴, 2008; Kline, 2005; Little et al., 2002). Hence, Kline (2005) suggests that in cases where the parcels have a fairly normal distribution, a normal theory method such as maximum likelihood (ML) may be used to estimate the model. For circumstances in which normal distribution assumptions are not met, robust maximum likelihood (RML) estimation offers a suitable technique which has the same parameter estimates as ML but utilizes the asymptotic covariance matrix to compute corrected standard errors and the minimum fit function chi-square.

Total aggregation: When all of the items from a multi-item scale used to assess a construct are summed or averaged, the result is a single indicator of the latent variable. It is important to specify this new variable as a latent variable so that measurement error can be included in the model. Hence, a key aspect of this methodology is the inclusion of a reliability correction (Algina⁵, 2008; Coffman & MacCallum, 2005; Williams & O'Boyle, 2008). The error variance is estimated based on a reliability estimate such as coefficient alpha: $S_E^2 = S_X^2 (1 - \alpha)$, if the observed variable is standardized the equation can be simplified to: $S_E^2 = (1 - \alpha)$ (Algina⁵, 2008). However, this methodology underestimates the unique variance as it only accounts for error variance and does not

^{4&5} Algina, personal communication 2008

incorporate the specific variance component of unique variance (Coffman & MacCallum, 2005; Williams & O'Boyle, 2008). While the reliability correction avoids the assumption that the scale has no measurement error, it has been suggested that partial disaggregation models are preferable as its reliability estimate includes both common and specific variance (Coffman & MacCallum, 2005).

Parcel construction

Little et al. (2002) suggest a goal in constructing parcels for use in larger models is creating parcels which are equally balanced in terms of their difficulty and discrimination. This is achieved by specifying a single-construct model including all items associated with the construct and using the loadings as a guide to create item parcels which contain a balanced mixture of high and low loadings (Little et al., 2002). For example, the economic dimension contained 6 items after the items with loadings of less than .4 had been removed. The three items with the highest loadings (items 1, 2, and 3) were used to anchor three parcels, and then the items with the next highest loadings (items 4, 5, and 6) were added to the anchors in reverse order so that the highest and lowest loading items were grouped together in one parcel. This procedure resulted in three parcels with two items each: parcel 1 contained items 1 and 6; parcel two contained items 2 and 5; and parcel 3 contained items 3 and 4. If more items were available, this procedure would be continued. The specific item groupings for each factor based on individual CFA analyses are reported in Table 3-9.

The tourism impact measurement model based on parceling resulted in a statistically significant Chi-square ($\chi^2 = 223.62$, df (48), $p = 0.000$), and although the CFI, the TLI, and RMSEA improved, they did not meet the criterion for good fit (values of .92, .90, and .08, respectively). Examination of the modification and expected change

indices revealed that an improvement in model fit would be achieved if the second socio-cultural parcel were allowed to load on the economic dimension. The parcel contained the item “there is an increased demand for local goods due to tourism” which can certainly be classified as an economic factor in addition to its socio-cultural value. The other two items concerned community character and a positive cultural exchange which, while not directly economic in nature, can both have a significant influence in creating an appealing environment which attracts both visitors and investors alike. As the modification could be theoretically justified, the parcel was allowed to load on both the economic and the socio-cultural dimensions. The evaluation of the revised model revealed a statistically significant Chi-square ($\chi^2 = 165.613$, df (47), $p = 0.000$). The CFI was .95, the TLI was .93, the RMSEA .06, and the SRMR was .05 which were acceptable levels of fit.

It should be noted that the Satorra-Bentler chi-square cannot be used for chi-square difference testing of nested models. Satorra and Bentler (1999) developed an appropriate chi-square difference test utilizing the scaled Satorra-Bentler chi-square which was used to compare the original (simpler) and the modified (more complex) measurement models. The Satorra-Bentler model comparison test yielded $\chi^2_{(1)} = 80.12$ (Appendix E) which indicated that the simpler (original) measurement model should be rejected in favor of the more complex (modified) model.

Quality of life

The international well-being index is composed of two sub-scales (personal and community) measured on an eleven point scale. Both scales were subjected to a confirmatory factor analysis utilizing the robust maximum likelihood method of

estimation. The only item from the personal quality of life sub-scale which had a factor loading less than .4 was satisfaction with spirituality or religion. The factor loadings of the remaining items are illustrated in Table 3-11 and had a satisfactory Cronbach's reliability coefficient of .87 (Table 3-12). All items from the community quality of life had factor loadings of above .4 (Table 3-13) and a Cronbach's alpha value of .84 (Table 3-14). Both sub scales exhibited good convergent and discriminant validity. The PWI was conceptualized as an index covering the basic domains of well-being or quality of life, and hence the domain level items were aggregated as recommended by Cummins (2006). A summated scale was calculated for each sub-scale and Cronbach alpha was utilized to include measurement error for both sub-scales in the overall measurement model.

Resident support for tourism

Four items were employed to evaluate resident support for tourism which were measured on a seven point scale. The individual items were subjected to a hierarchical confirmatory factor analysis of polytomous variables (probit factor analysis) as linear factor analysis is an inappropriate model due to the possibility of lower and higher value predictions than the actual possible score based on the scale available to respondents. Hence, WLSM analysis was again utilized (Muthen, 1993 as cited in Kline, 2005). The item "the tourism sector in Cologne is currently not sustainable enough" had a factor loading below .4 and was hence excluded from further analysis. The factor loadings for the remaining three items were all around .5, and hence while tolerable are not optimal. As expected, the reliability analysis revealed a rather low Cronbach's alpha score of .45 (Table 3-15). In order to account for the low reliability of the construct it was decided to

create a summated single indicator of the latent variable so that measurement error based on a Cronbach's alpha reliability correction could be included in the model.

Testing the Measurement Model

The modified measurement model consisted of seven latent constructs: economic impacts; environmental impacts; socio-cultural impacts; institutional structure; community quality of life; personal quality of life; and resident support for tourism (Figure 3-5). The latent tourism impact variables each consisted of three parcels (groupings of individual impact items), while additive indexes were created for community quality of life, personal quality of life, and resident support for tourism. The overall measurement model was assessed using robust maximum likelihood (MLR analysis) estimation and resulted in a statistically significant Chi-square ($\chi^2 = 217.279$, $df = 71$, $p = 0.000$) while the CFI, RMSEA and SRMR all met the criterion for good fit (with values of .95, .06, and .05 respectively). Although the TLI did not meet the criterion for good fit, it was at .92. The measurement model met a satisfactory level of fit based on the goodness of fit indices, and hence the structural model could be assessed. The correlations between observed measurements, their means, and their standard deviations are presented in Table 3-16.

Testing the Structural Model

In order to empirically test the proposed conceptual model and the formulated hypotheses, the causal dependencies between exogenous and endogenous variables were evaluated using MLR estimation. As every exogenous variable was specified to affect every endogenous variable, the measurement model and the structural model were statistically equivalent. The examination of the modification and expected change indices revealed no notable changes which would have improved the model fit.

Establishing Mediation in SEM

Some of the formulated hypotheses postulate indirect relationships between variables. Mediation in SEM requires four steps (Barron & Kenny, 1986) which will be briefly explained. Based on the Figure 3-3, there are three variables, X, M and Y, and X affects Y either directly or indirectly. c is equal to the total effect of X on Y, a is the direct effect of X on M, and b is the direct effect of M on Y. The first three steps must establish the significance of c , a , and b respectively. c' is the direct effect of X on Y and must be non-significant for complete mediation. If complete mediation fails and if the total effect is larger than the direct effect, then M is said to partially mediate the relationship between X and Y. Hence, the four steps are as follows:

- Step 1: The total effect of X on Y (c in Figure 3-3) must be significant.
- Step 2: The direct effect of X on M (a in Figure 3-3) must be significant.
- Step 3: The direct effect of M on Y (b in Figure 3-3) must be significant.
- Step 4: The direct effect of X on Y (c' in Figure 3-3) must be non-significant for complete mediation.



Figure 3-1. Map of Germany highlighting Cologne. Source: <http://muslimmedianetwork.com>. Last accessed December 19, 2010.

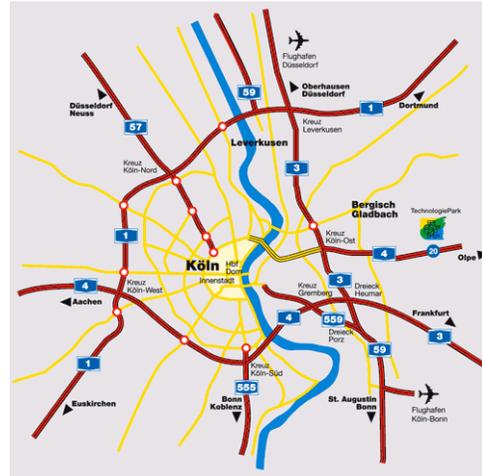


Figure 3-2. Cologne transportation network Source: www.tb.g.de/img/bilder-allgemein/900_anfahrt_grossraum.gif. Last accessed December 19, 2010.

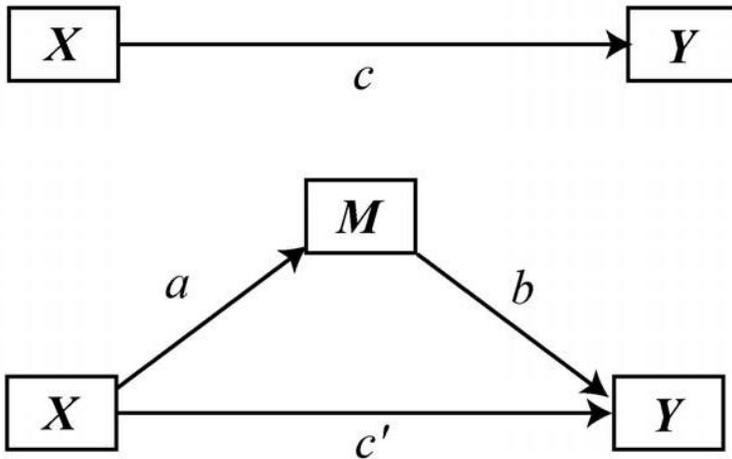


Figure 3-3. Simple mediation model (Barron & Kenny, 1986)

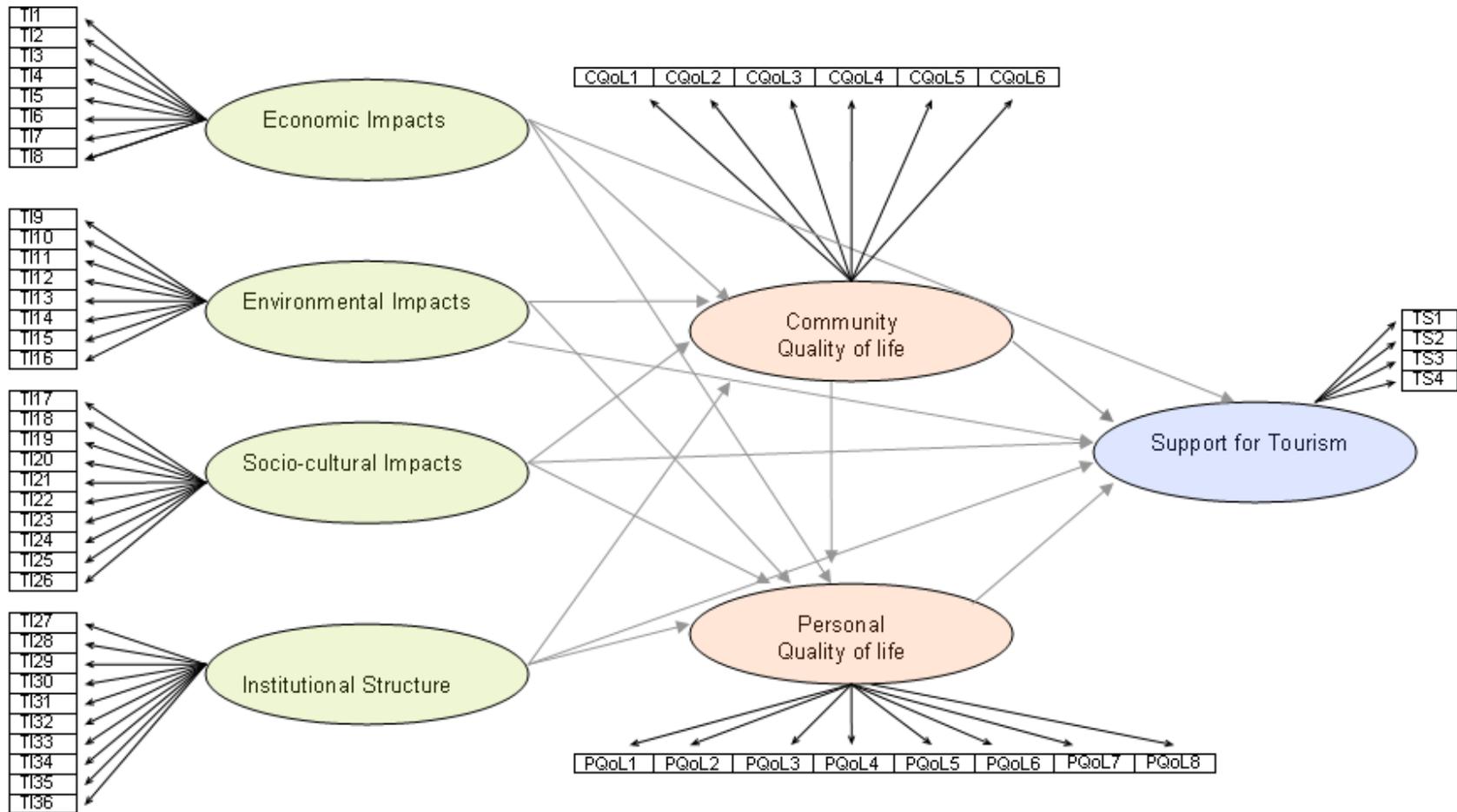


Figure 3-4. Proposed measurement model of tourism impacts, quality of life and support for tourism

T11=improves standard of living; T12=creates jobs; T13=decreases quality of employment; T14=increases tax revenue; T15=good for economy; T16=increases cost of living; T17=improves infrastructure; T18=decreases quality of local services; T19=negatively impacts quality of natural environment; T110=enhances preservation of natural environment; T111=negatively impacts quality of historic b & m; T112=enhances preservation of historic b & m; T113=increases pollution; T114=increases exhaustion of water & energy resources; T115=increases overcrowding; T116=increases traffic & parking congestion; T117=negatively impacts communities character; T118=increases sense of community pride; T119=increases cultural events; T120=increases recreational opportunities; T121=conserves local traditions & practices; T122=increases demand for local goods; T123=provides cultural exchange & increases cultural understanding; T124=Decreases local friendliness; T125=increases criminality; T126=increases community services; T127=trust political system; T128=trust legal system; T129=access government officers & leaders; T130=many good leaders; T131=transparency of decision-making processes; T132=good communication; T133=resident involvement in tourism decision making; T134=community voices respected by decision makers; T135=residents can influence community decisions; T136=community development is in line with community vision; PQoL1=standard of living; PQoL2=health; PQoL3=achieving in life; PQoL4=personal relationships; PQoL5=safety; PQoL6=part of community; PQoL7=future security; PQoL8=spirituality or religion; CQoL1=economic situation; CQoL2=environment; CQoL3=social conditions; CQoL4=government; CQoL5=business; CQoL6=local security; TS1=current tourism appropriate; TS2=industry not sustainable enough; TS3=actively encourage tourism; TS4=local government should restrict tourism

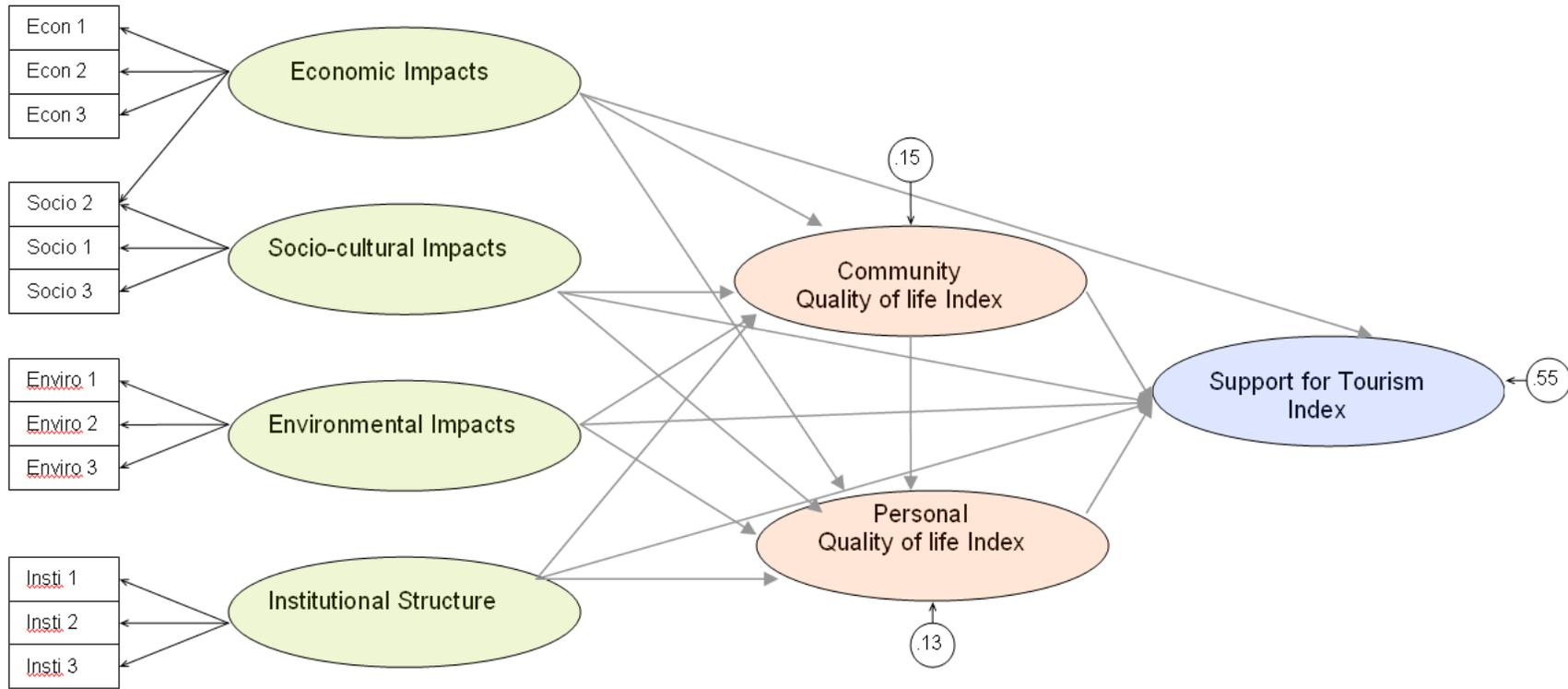


Figure 3-5. Modified measurement model of tourism impacts, quality of life and support for tourism

Econ parcel 1 = economy, quality of employment ; Econ parcel 2 =job opportunities, quality of local services ; Econ parcel 3 = tax revenue, standard of living; Socio-cultural parcel 1 = cultural events, sense of community pride, local friendliness; Socio-cultural parcel 2 =cultural exchange & understanding, demand for local goods, community character; Socio-cultural parcel 3 = recreational opportunities, community services, local traditions & practices; Environmental parcel 1 = quality of historic buildings and monuments, preservation of historic buildings and monuments; Environmental parcel 2 = quality of natural environment; community overcrowding; Institutional parcel 1 = community voices respected, trust in political system, good leaders; Institutional parcel 2 = good communication, transparency of decision making process, access to government officers & leaders; Institutional parcel 3 = residents influence in community decisions, trust in legal system

Table 3-1. Employment contributions by sectors

Economic sector ^a	Percent (%)
Agriculture, Forestry & Fisheries	0.1
Manufacturing	17.3
Service	82.6
Total	100

^a Industrie-und Handelskammer zu Köln, 2009 (Cologne Economic Region);

Table 3-2. Employed persons subject to social insurance contributions 2008

Economic sector ^a	
Agriculture, Forestry & Fisheries	1,672
Manufacturing & Construction	198,349
Trade	125,687
Hospitality	23,771
Transport & warehousing	45,578
Information & Communication	43,655
Financial & insurance services	47,079
Real estate & housing	6,560
Provision of other public & private sector services	294,338
Total	786,884 ^b

^a Industrie-und Handelskammer zu Köln, 2009 (Cologne Economic Region);

^b Discrepancy in source

Table 3-3. Sampling of local residents based on population

Community	Population (N)	Population (%)	Sample (N)	Sample (%)
Innenstadt	127,033	12.5	139	22.1
Rodenkirchen	100,936	9.9	54	8.6
Lindenthal	137,552	13.5	73	11.6
Ehrenfeld	103,621	10.2	66	10.5
Nippes	110,092	10.8	54	8.6
Chorweiler	80,870	7.9	50	7.9
Porz	106,520	10.5	58	9.2
Kalk	108,330	10.6	59	9.4
Mülheim	144,374	14.2	76	12.1
TOTAL	1,019,328	100.0	629 ^a	100.0

^a Total N = 633, 4 respondents preferred not to report their specific borough of residence

Table 3-4. Data collection schedule

Week	Sampling days	Location	Participants	Weekly total
02.15.10	Thursday	Kalk	22	60
	Friday	Innenstadt	11	
	Saturday	Lindenthal	16	
	Sunday	Innenstadt	11	
02.22.10	Monday	Innenstadt	10	22
	Tuesday	Porz	8	
	Wednesday	Porz	4	
08.03.10	Monday	Chorweiler	3	13
	Tuesday	Chorweiler	4	
	Thursday	Chorweiler	4	
	Saturday	Mülheim	6	
	Sunday	Mülheim	6	
03.15.10	Wednesday	Chorweiler	9	29
	Thursday	Rodenkirchen	13	
	Friday	Innenstadt	7	
03.29.10	Monday	Chorweiler	5	46
	Tuesday	Kalk	9	
	Wednesday	Chorweiler	10	
	Thursday	Ehrenfeld	22	
04.19.10	Friday	Innenstadt, Lindenthal, Ehrenfeld, Nippes, Kalk, Mülheim	3, 3, 2, 4, 1, 3	62
	Saturday	Innenstadt, Lindenthal, Ehrenfeld, Nippes, Porz, Kalk, Mülheim	3, 6, 1, 2, 3, 4, 2	
	Sunday	Nippes, Mülheim	11, 14	
04.26.10	Monday	Innenstadt, Porz	14, 11	37
	Tuesday	Lindenthal	12	
05.03.10	Wednesday	Innenstadt, Mülheim	5, 10	71
	Thursday	Chorweiler	12	
	Saturday	Rodenkirchen, Lindenthal	23, 8	
	Sunday	Ehrenfeld	13	
05.24.10	Friday	Innenstadt, Lindenthal	12, 10	45
	Saturday	Innenstadt, Rodenkirchen	19, 4	
06.07.10	Saturday	Ehrenfeld, Mülheim	15, 6	26
	Sunday	Nippes	15	
06.14.10	Saturday	Rodenkirchen, Ehrenfeld	7, 4	25
	Sunday	Mülheim	14	
06.21.10	Monday	Nippes	9	20
	Tuesday	Porz, Kalk	7, 4	
07.26.10	Friday	Innenstadt, Rodenkirchen, Lindenthal, Kalk, Mülheim	9, 2, 3, 2, 2	

Table 3-4. Continued

Week	Sampling days	Location	Participants	Weekly total
	Saturday	Innenstadt, Rodenkirchen, Lindenthal, Ehrenfeld, Chorweiler, Porz, Kalk, Mühlheim	7, 1, 2, 1, 1, 6, 4, 2	
	Sunday	Innenstadt, Lindenthal, Ehrenfeld, Kalk, Mühlheim	3, 4, 2, 3, 5	59
08.23.10	Friday	Porz, Kalk	9, 7	16
	Internet		77	77
TOTAL				633

Table 3-5. Operationalization of tourism impacts

Tourism impact factors ^a

Economic:

- Tourism improves our standard of living
- Tourism creates job opportunities for local people
- Tourism decreases the quality of employment in this area
- Tourism increases the community's tax revenue
- Tourism is good for our community's economy
- Tourism increases our cost of living (goods and services more expensive)
- Tourism has improved the local infrastructure (roads, public transport, electricity net)
- Tourism decreases the quality of local services to the community (emergency & utilities)

Environmental:

- Tourism negatively impacts the quality of our natural environment
- Tourism enhances preservation of our natural environment
- Tourism negatively impacts the quality of our historic buildings & monuments
- Tourism enhances the preservation of our historic buildings & monuments
- Tourism increases environmental pollution i.e. noise, litter
- Increasing exhaustion of water & energy resources due to tourism
- In recent years, my community has become overcrowded because of tourists
- Tourism increases traffic & parking congestion in Cologne

Socio-cultural:

- Tourism negatively impacts our community's character
- Tourism has increased our sense of community pride
- Tourism increases the number of cultural events offered in our community
- Tourism increases the recreational opportunities residents can enjoy
- Local traditions and practices have been conserved or restored due to tourism
- There is an increased demand for local goods due to tourism
- Tourism provides cultural exchange and increases cultural understanding
- Local friendliness has decreased due to tourism
- Tourism increases the level of criminal activities
- Tourism has increased community services (restaurants, shopping, cultural facilities)

Institutional:

- I trust our political system
- I trust our legal system
- I feel I can access government officers & leaders
- There are many good leaders in this town
- There is transparency of decision-making processes in our community
- There is good communication between residents and community leaders
- Residents have opportunities to get involved in tourism decision making
- Community voices are respected by decision makers
- Residents can influence community decisions
- Community development is in line with the community vision

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree

Table 3-6. Operationalization of quality of life

International Well-Being Index	
Personal Well-being Index ^a	
	<ol style="list-style-type: none"> 1. How satisfied are you with your standard of living? 2. How satisfied are you with your health? 3. How satisfied are you with what you are achieving in life? 4. How satisfied are you with your personal relationships? 5. How satisfied are you with how safe you feel? 6. How satisfied are you with feeling part of your community? 7. How satisfied are you with your future security? 8. How satisfied are you with your spirituality or religion?
National Well-being Index (adapted for research site) ^a	
	<ol style="list-style-type: none"> 1. How satisfied are you with the economic situation in Cologne? 2. How satisfied are you with state of the environment in Cologne? 3. How satisfied are you with social conditions in Cologne? 4. How satisfied are you with government in Cologne? 5. How satisfied are you with business in Cologne? 6. How satisfied are you with local security in Cologne?

^a Measured on an eleven point-likert type scale anchored by the phrases completely dissatisfied and completely satisfied.

Table 3-7. Operationalization of resident support for tourism

Questionnaire statement ^a	
	<ol style="list-style-type: none"> 1. The current level of tourism development in Cologne is appropriate 2. The tourism sector in Cologne is currently not sustainable enough 3. I support the active encouragement of tourism in Cologne 4. Local government should restrict tourism development in Cologne

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree

Table 3-8. Goodness of fit indices for individual tourism impact dimensions

Variable	Satorra-Bentler Chi-square	CFI ^a	TLI ^b	RMSEA ^c
Personal	195.44* df (9)	.96	.93	.18
Environmental	88.84* df (5)	.95	.89	.16
Cultural	105.21* df (14)	.98	.97	.10
Economic	1014.61* df (14)	.91	.86	.34

^a Bentler's Comparative Fit Index, criterion for good fit $\geq .95$; ^b Tucker Lewis Index, criterion for good fit $\geq .95$; ^c Root Mean Square Error of Approximation, criterion for good fit $\leq .06$; * $p = 0.000$;

Table 3-9. Factor loadings and parcel construction for tourism impact dimensions

Questionnaire Statement ^a	Factor loading	Parcel
Economic		
Tourism is good for our community's economy	.82	1
Tourism creates job opportunities for local people	.81	2
Tourism increases the community tax revenue	.68	3
Tourism improves our standard of living	.62	3
Tourism decreases the quality of local services to the community ^b	.57	2
Tourism decreases quality of employment in this area ^b	.54	1
Environmental		
In recent years, my community has become overcrowded because of tourists ^b	.71	1
Increasing exhaustion of water & energy due to tourism	.66	2
Tourism enhances the preservation of our historic buildings & monuments	.62	3
Tourism negatively impacts the quality of our historic buildings & monuments ^b	.54	3
Tourism negatively impacts the quality of our natural environment ^b	.54	2
Socio-Cultural		
Tourism increases the number of cultural events offered in our community	.77	1
Tourism provides cultural exchange and increases cultural understanding	.73	2
Tourism increases recreational opportunities residents can enjoy in our community	.67	3
Tourism has increased the community services	.63	3
There is an increased demand for local goods due to tourism	.61	2
Tourism has increased our sense of community pride	.54	1
Local traditions and practices have been conserved or restored due to tourism	.52	3
Tourism negatively impacts our community character ^b	.42	2
Local friendliness has decreased due to tourism ^b	.40	1

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree;

^b Items were reverse coded prior to analysis

Table 3-9. Continued

Questionnaire Statement	Factor loading ^a	Parcel
Institutional		
Community voices are respected by decision makers	.85	1
There is good communication between residents and community leaders	.79	2
Residents can influence community decisions	.79	3
There is transparency of decision-making processes in our community	.77	2
I trust our political system	.68	1
I trust our legal system	.64	3
I feel I can access government officers & leaders	.46	2
There are many good leaders in this town	.38	1

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree;

^b Items were reverse coded prior to analysis

Table 3-10. Reliability analysis of tourism impacts

Questionnaire Statement ^a	Mean	SD ^c	Corrected Item Total Correlation	Alpha if Item Deleted
Economic				
Tourism decreases quality of employment in this area ^b	5.04	1.49	.43	.76
Tourism improves our standard of living	5.08	1.53	.47	.75
Tourism decreases the quality of local services to the community (emergency & utilities) ^b	5.16	1.65	.46	.75
Tourism increases the community tax revenue	5.22	1.50	.53	.73
Tourism creates job opportunities for local people	5.72	1.32	.63	.71
Tourism is good for our communities economy	5.80	1.27	.62	.72
Overall Scale (n = 592) .78				
Environmental				
Tourism increases environmental pollution i.e. noise, litter ^b	3.47	1.61	.48	.67
Increasing exhaustion of water & energy resources due to tourism ^b	4.18	1.65	.50	.66
In recent years, my community has become overcrowded because of tourists ^b	4.39	1.79	.55	.64
Tourism negatively impacts the quality of our natural environment ^b	4.43	1.65	.44	.68
Tourism negatively impacts the quality of our historic buildings & monuments ^b	5.27	1.65	.40	.70
Overall Scale (n = 611) .72				
Socio-Cultural				
Tourism has increased our sense of community pride	4.57	1.71	.42	.76
Tourism increases the recreational opportunities residents can enjoy	4.69	1.50	.51	.74
Local traditions and practices have been conserved or restored due to tourism	4.69	1.54	.44	.75
Tourism has increased the community services	4.98	1.44	.51	.76

a Measured on a 7 point scale anchored by strongly disagree and strongly agree;

b Items were reverse coded prior to analysis; c Standard deviation

Table 3-10. Continued

Questionnaire Statement ^a	Mean	SD ^c	Corrected Item Total	Alpha if Item Deleted
Local friendliness has decreased due to tourism _b	5.12	1.62	.31	.78
There is an increased demand for local goods due to tourism	5.20	1.29	.50	.75
Tourism negatively impacts our community character _b	5.20	1.72	.30	.78
Tourism increases the number of cultural events offered in our community	5.42	1.28	.64	.73
Tourism provides cultural exchange and increases cultural understanding	5.72	1.38	.59	.73
Overall Scale (n = 581)			.79	
Institutional				
There is good communication between residents and community leaders	3.27	1.49	.65	.81
There is transparency of decision-making processes in our community	3.34	1.46	.67	.81
Community voices are respected by decision makers	3.67	1.41	.73	.80
I trust our political system	3.92	1.68	.58	.82
Residents can influence community decisions	3.93	1.47	.68	.81
I feel I can access government officers & leaders	4.34	1.54	.39	.84
I trust our legal system	4.62	1.61	.54	.82
Overall Scale (n = 591)			.85	

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree;

^b Items were reverse coded prior to analysis; ^c Standard deviation

Table 3-11. Factor loadings for personal quality of life

Questionnaire Statement ^a	Factor loading
How satisfied are you with what you are achieving in life?	.78
How satisfied are you with your standard of living?	.72
How satisfied are you with how safe you feel?	.71
How satisfied are you with feeling part of your community?	.69
How satisfied are you with your future security?	.68
How satisfied are you with your personal relationships?	.67
How satisfied are you with your health?	.60

^a Measured on an eleven point-likert type scale anchored by the phrases completely dissatisfied and completely satisfied.

Table 3-12. Reliability analysis of personal quality of life

Questionnaire Statement ^a	Mean	SD ^b	Corrected Item Total Correlation	Alpha if Item Deleted
How satisfied are you with your future security?	6.61	2.12	.63	.85
How satisfied are you with feeling part of your community?	7.27	2.01	.67	.84
How satisfied are you with your standard of living?	7.32	1.95	.65	.85
How satisfied are you with what you are achieving in life?	7.37	1.89	.72	.84
How satisfied are you with how safe you feel?	7.40	1.88	.66	.85
How satisfied are you with your health?	7.42	2.21	.56	.86
How satisfied are you with your personal relationships?	7.78	2.19	.62	.85
Overall Scale (n = 614) .87				

^a Measured on an eleven point-likert type scale anchored by the phrases completely dissatisfied and completely satisfied; ^b Standard deviation

Table 3-13. Factor loadings for community quality of life

Questionnaire Statement ^a	Standardized factor loading
How satisfied are you with the economic situation in Cologne?	.77
How satisfied are you with business in Cologne?	.74
How satisfied are you with social conditions in Cologne?	.70
How satisfied are you with government in Cologne?	.68
How satisfied are you with state of the environment in Cologne?	.63
How satisfied are you with local security in Cologne?	.60

^a Measured on an eleven point-likert type scale anchored by the phrases completely dissatisfied and completely satisfied.

Table 3-14. Reliability analysis of community quality of life

Questionnaire Statement ^a	Mean	SD ^b	Corrected Item Total Correlation	Alpha if Item Deleted
How satisfied are you with government in Cologne?	4.91	2.07	.63	.83
How satisfied are you with the economic situation in Cologne?	5.62	1.97	.70	.82
How satisfied are you with state of the environment in Cologne?	5.74	2.05	.58	.83
How satisfied are you with business in Cologne?	5.77	1.85	.66	.83
How satisfied are you with social conditions in Cologne?	5.85	1.99	.64	.82
How satisfied are you with local security in Cologne?	6.25	2.03	.55	.84
Overall Scale (n = 615)				.84

^a Measured on an eleven point-likert type scale anchored by the phrases completely dissatisfied and completely satisfied; ^b Standard deviation

Table 3-15. Reliability analysis of resident support for tourism

Questionnaire Statement ^a	Mean	SD ^b	Corrected Item Total Correlation	Alpha if Item Deleted
The current level of tourism development in Cologne is appropriate	4.91	1.21	.52	.37
I support the active encouragement of tourism in Cologne	4.33	1.94	.50	.34
Local government should restrict tourism development in Cologne ^b	5.43	1.64	.51	.32
Overall Scale (n = 621) .45				

^a Measured on a 7 point scale anchored by strongly disagree and strongly agree;

^b Items were reverse coded prior to analysis; ^c Standard deviation

Table 3-16. Correlations among measurement constructs

Variable	Econ 1	Econ 2	Econ 3	Enviro 1	Enviro 2	Enviro 3	Socio 1	Socio 2	Socio 3	Insti 1	Insti 2	Insti 3	PQoL	CQoL	TSupp
Econ 1	1.00														
Econ 2	0.62	1.00													
Econ 3	0.50	0.54	1.00												
Enviro1	0.28	0.33	0.15	1.00											
Enviro 2	0.39	0.40	0.21	0.51	1.00										
Enviro 3	0.22	0.21	0.16	0.43	0.46	1.00									
Socio1	0.46	0.38	0.38	0.17	0.20	0.16	1.00								
Socio 2	0.56	0.57	0.54	0.29	0.32	0.27	0.57	1.00							
Socio 3	0.25	0.24	0.36	-0.03	0.00	-0.04	0.52	0.43	1.00						
Insti 1	0.10	0.10	0.16	0.06	0.05	0.09	0.18	0.19	0.15	1.00					
Insti 2	0.03	0.00	0.12	0.10	-0.01	0.17	0.15	0.11	0.11	0.59	1.00				
Insti 3	-0.06	-0.07	0.06	0.03	-0.07	0.10	0.11	0.06	0.06	0.58	0.78	1.00			
PQoL	0.16	0.12	0.05	0.14	0.00	0.01	0.10	0.18	0.17	0.07	0.14	0.08	1.00		
CQoL	0.15	0.12	0.12	0.14	0.03	0.11	0.26	0.20	0.24	0.29	0.40	0.39	0.36	1.00	
TSupp	0.33	0.31	0.39	0.28	0.25	0.32	0.35	0.43	0.24	0.25	0.27	0.21	0.16	0.24	1.00
Mean	10.84	10.90	10.33	4.39	9.46	7.90	15.10	16.12	14.39	11.92	7.94	7.17	51.16	34.14	14.73
SD	2.24	2.39	2.48	1.79	2.62	2.66	3.17	3.20	3.42	3.17	2.52	2.65	10.63	8.93	3.36

Note: Econ 1 to 3 = economic impact parcels 1 to 3; Enviro 1 to 3 = environmental impact parcels 1 to 3; Socio 1 to 3 = socio-cultural impact parcels 1 to 3; Insti 1 to 3 = institutional structure parcels 1 to 3; PQoL = personal quality of life; CQoL = community quality of life; TSupp = tourism support

CHAPTER 4 RESULTS

Profile of Participants

Of the 633 participants, 53% were females and 47% were males. The majority were between ages 26 and 45 (49%), while 25% were aged between 46 and 65. Respondents were fairly well educated with 29% having received a university degree. Furthermore, of those who completed a high school level education, 26% did so at the highest level. The German educational system has three levels of high school education: basic high school (Hauptschule), mid-level high school (Realschule), and a more advanced level high school at which one can receive two different diplomas-Fachabitur or Abitur. The Abitur is the University entrance diploma which is a prerequisite in order to apply to University. This finding is not surprising, as previously mentioned, Cologne's economic structure is based on the service sector (82%) hence attracts a highly educated and professional workforce.

While 56% of the respondents reported a monthly household income up to EUR 2500 (before taxes), 23% reported earning between EUR 2500 and EUR 4000 (before taxes), and 21% disclosed earning above EUR 4000 (before taxes). The majority of the respondents were salaried employees (43%) of which 9% were in managerial positions. About 18% were either students or in professional or vocational training which is not surprising as Germany has a very structured educational system. After high school there are generally two avenues one can pursue: higher education through the university system or vocational or professional training programs which are a mixture of formal education and on the job learning experience. Twelve percent of respondents

were no longer in the workforce due to retirement, 6% were homemakers, and 5% were currently unemployed (Table 4-1).

Frequencies of Variables

Tourism Impacts

This construct is based on the dimensions of sustainability and evaluated the resident's perception of economic, environmental, and socio-cultural impacts of tourism in Cologne, as well as the perception of the city's institutional structure. Table 4-2 illustrates the descriptive statistics of perceived tourism impacts and institutional structure. Overall, residents held positive perceptions of tourism impacts, more detailed descriptions of each dimension are noted below.

Economic Impacts

Generally, residents felt that the economic impacts of tourism were rather positive. More specifically, the majority (85%) of respondents felt that tourism was good for the local economy, with 37% expressing strong agreement with the statement. Similarly, 34% of respondents strongly agreed that tourism creates job opportunities for local people, while 50% generally agreed (somewhat agree combined with agree). Furthermore, almost 70% agreed that tourism increased the communities' tax revenues and improved their standard of living (69% and 68% respectively), while about 20% felt neutral towards both statements. Residents did not perceive that tourism decreased the quality of local services to the community (64%); decreased the quality of employment in the area (60%); or increased their cost of living (41% disagreed that tourism increased costs of living while 32% were neutral).

In sum, participants felt tourism was good for the community, created job opportunities, increases community tax revenue, and generally improved the standard

of living. Respondents did not perceive tourism to negatively affect the quality of local services or employment but were unsure whether tourism had an impact on their cost of living or made improvements to the local infrastructure.

Environmental Impacts

The perceived environmental impacts were also generally quite optimistic with 85% of participants agreeing that tourism enhances the preservation of historic buildings and monuments, and 68% felt that there were no negative impacts on the quality of the historic buildings and monuments due to tourism. However, participants had a little more difficulty assessing similar impacts on the natural environment. While almost 50% felt that tourism did not enhance the preservation of the natural environment, 28% were neutral with respect to this impact. Similarly, about 50% felt that tourism did not impact the quality of the natural environment negatively, while 22% were neutral. However, more specific environmental impacts such as noise and litter pollution were perceived to increase through tourism (79% of participants agreed, of whom 25% slightly agreed, 41% agreed, and 34% strongly agreed). Ambivalence was also felt towards the statement that tourism increases the exhaustion of water and energy resources (approx. 31% neutral, 34% positive, and 36% negative responses). More agreement was expressed towards the statement that tourism increased traffic and parking congestion in Cologne, as almost 80% felt this to be true. However, traffic congestion and insufficient, overpriced parking is already a much lamented problem in Cologne. Overcrowding due to tourism was not viewed as an overarching problem as almost 50% disagreed with the statement that the community has become overcrowded due to tourism in recent years, and almost 20% were neutral. This may perhaps be

attributed to the fact that Cologne is known to suffer from a chronic state of overcrowding.

To summarize, although participants attributed some environmental pollution to tourism, most did not feel that tourism negatively affected the quality of the natural environment, yet ambivalence was felt towards tourism as a catalyst for environmental preservation. The role of tourism as an incentive for preservation was clearer concerning historic buildings and monuments. Moreover, even though Cologne suffers from overcrowding problems, residents did not attribute these to tourism.

Socio-cultural Impacts

The socio-cultural impacts of tourism were perceived quite positively by residents. For instance, 35% of respondents strongly agreed that tourism provides cultural exchange and increases cultural understanding, while the overall percentage of participants in agreement with this statement was 84%. Respondents also felt that tourism increases the number of cultural events (79% agreement), community services (66% agreement), and recreational opportunities (59% agreement) offered in the community. Moreover, 74% agreed that there is an increased demand for local goods due to tourism. However, although 40% of participants did not feel that tourism increases the level of criminal activities, a considerable 37% felt that tourism did contribute to an increase in criminality. Similarly, 18% of participating residents believed local friendliness had decreased due to tourism, while 20% expressed neutrality. About the same proportion of residents felt that tourism negatively impacts the community character (18%) while the majority (67%) disagreed with this statement. A large proportion were neutral in response to two statements: tourism has increased our

community pride and local traditions and practices have been conserved or restored due to tourism (both statements garnered a neutral response of 26%).

Essentially, the cultural exchange between residents and tourists, the related increase in cultural understanding; as well as the increased availability of cultural events, recreational events, and community services were viewed as particularly positive. Moreover, residents did not perceive negative impacts on the community's character or local friendliness.

Institutional structure

The perceptions of the institutional structure were mixed. Despite the fact that 66% of respondents felt that there are many good leaders in Cologne, over half felt that there is a lack of communication between residents and community leaders. Also, 42% were of the opinion that community voices are not respected by decision makers. Residents were split in their opinion with respect to their own influence in community decisions (37% agreed they had influence while 37% disagreed), while 44% did not feel that residents have the opportunity to get involved in tourism decision making. Furthermore, 50% felt there is no transparency of decision-making processes in the community while 31% were neutral. Although 45% of respondents agreed that government officers and leaders were accessible, they were divided in their opinion regarding trust in the political system: 38% distrusted the system; 39% trusted the system, while 23% were neutral on the issue. However, 57% of participants agreed that they trusted the legal system.

It should be noted that 2010 was a year with an unusually high number of political scandals which certainly influenced the results of this study. For example, in March 2009 the municipal archive of Cologne completely collapsed while reparations of a smaller cave-in were in progress. Similarly, in 2010, evidence of official miss-

management and even manipulation of official documents came to light as the city chose to ignore recommendations of engineers in order to save time and money. Furthermore, it was discovered that workers stole steel girders intended for the municipal archive and sold them to scrap metal merchants. In conjunction with the collapse of the municipal archive, the Public Attorney began a criminal investigation into possible fraud regarding manipulations and ensuing safety concerns of the construction of several “U-Bahn” stations (underground stations). A further scandal involving garbage collection came to an end in the spring of 2010 after several years of investigation; several political leaders were found guilty of fraud that involved falsification of invoices and illicit earnings.

Quality of Life

Quality of life was composed of both personal and community quality of life. Although the mean scores for satisfaction with overall personal quality of life and overall satisfaction with community quality were the same (7.6), the individual satisfaction levels with more specific items were markedly lower for community quality of life. Specific item descriptions are noted below.

Personal quality of life

Respondents were generally satisfied with their personal quality of life (Table 4-3). In fact, on a scale from 0 to 10, the means ranged between 6.04 and 7.79. Respondents were most satisfied with their personal relationships (mean = 7.8, standard deviation= 2.2), and least satisfied with their future security (mean = 6, standard deviation= 2.1). Although satisfaction with spirituality or religion had the lowest mean, almost 40% rated this item as neutral. Over 50% of respondents rated their satisfaction level at 8 for six out of eight questions. More specifically, 48% rated their satisfaction with personal

relationships above 8, while 38% rated the satisfaction level with their health, respectively. Approximately 55% rated their satisfaction with respect to safety, standard of living, and life achievement at 8 or above. Similarly, 53% of respondents rated their satisfaction with feeling part of one's community at 8 or higher. Respondents were slightly less satisfied, or perhaps more uncertain towards their future security as 42% rated their satisfaction level at 7 or lower.

Community quality of life

The mean scores for community quality of life were slightly lower than personal quality of life and ranged between 4.9 and 6.2 (Table 4-4). Respondents were most satisfied with the local security in Cologne (mean = 6.2, standard deviation= 2.1) and least satisfied with the government in Cologne (mean = 4.9, standard deviation= 2.1). Additionally, 50% of respondents rated the state of the environment, business, and social conditions as generally positive with ratings of between 5 and 8.

Tourism Support

Residents were generally supportive of tourism, with 62% agreement in the current level of tourism development in Cologne as appropriate, and 70% in disagreement with the notion that local government should restrict tourism development. However, only 50% reported that they supported the active encouragement of tourism in Cologne. Hence, it could be inferred that although residents are not negatively inclined to tourism in Cologne, they are not supportive of further increases in tourism development. Based on personal interactions with participants, this response was more likely due to the wording of the item: "I support the active development of tourism in Cologne"; as many residents were hesitant with respect to the word *active*. The statement was often interpreted as a personal active involvement rather than a community wide proactive

tourism development perspective. Respondents did not feel as if they were informed as to the level of sustainability of the tourism sector since 39% were neutral about it.

Results of Proposed Conceptual Model

Twenty-one hypotheses regarding the effects of perceived tourism impacts on resident's personal and community quality of life, and the ensuing support for tourism were empirically tested. A conceptual model was proposed and analyzed using SEM. The model proposes both direct and indirect relationships between the exogenous variables (perceived tourism impacts: economic, environmental, socio-cultural and institutional) and the endogenous variables (community quality of life, personal quality of life, and support for tourism). Quality of life (personal and community) was hypothesized as a mediating variable, which may be both a cause and effect variable. A visual representation of the resulting structural model with standardized coefficients is illustrated in Figure 4-1.

Hypotheses Tested

The hypotheses were formulated based on sustainable tourism dimensions and are discussed in four sections. Support for the hypotheses were examined via the significance of individual path coefficients between the variables of interest based on the results of the structural equation model.

Economic Impacts

- H1a. There is a direct relationship between perceived economic impacts and resident support for tourism.

The results of the SEM analysis revealed that there was a significant direct effect of perceived economic impacts on resident support for tourism (standardized coefficient of

.18; $p = .05$). Hence, the hypothesis was supported. Residents who perceive positive economic impacts of tourism were more likely to support tourism.

H1b. There is an indirect relationship between perceived economic impacts and resident support for tourism mediated by community quality of life.

While the total effect of economic impacts on tourism support was significant (standardized coefficient of .20; $p = .03$), there was no significant indirect path between perceived economic impacts and resident support for tourism through community quality of life (standardized coefficient of .00, $p = .75$) or through community and personal quality of life (standardized coefficient of -.00, $p = .59$). Therefore, there was lack of support for the hypothesis.

H1c. There is an indirect relationship between perceived economic impacts and resident support for tourism mediated by personal quality of life.

While the total effect of economic impacts on tourism support was significant (standardized coefficient of .20, $p = .03$), there was no significant indirect path between perceived economic impacts and through personal quality of life (standardized coefficient of .02, $p = .23$) or through both community and personal quality of life (standardized coefficient of -.00, $p = .59$). Therefore, there was lack of support for the hypothesis.

H1d. There is a direct relationship between perceived economic impacts and community quality of life.

The results of the SEM analysis revealed that there were no significant effects of perceived economic impacts on community quality of life (standardized coefficient of -.05, $p = .56$). Hence, there was no support for the hypothesis. However, it was interesting to note, that while not significant, the relationship was negative.

H1e. There is a direct relationship between perceived economic impacts and personal quality of life.

The SEM analysis showed that there was a significant direct effect of perceived economic impacts on personal quality of life (standardized coefficient of .22; $p = .03$).

Therefore, the hypothesis was supported. Residents feel that the economic impacts of tourism positively affect their personal quality of life.

Environmental Impacts

H2a. There is a direct relationship between perceived environmental impacts and resident support for tourism.

The results of the SEM analysis revealed that perceived environmental impacts had a significant direct effect on resident support for tourism (standardized coefficient of .24, $p = .00$). Therefore, the hypothesis was supported. Residents that perceived positive environmental impacts were more likely to report support for tourism.

H2b. There is an indirect relationship between perceived environmental impacts and resident support for tourism mediated by community quality of life.

While the total effect of environmental impacts on tourism support was significant (standardized coefficient of .23, $p = .00$), there was no significant indirect path between perceived environmental impacts through community quality of life (standardized coefficient of $-.00$, $p = .73$) or through both community and personal quality of life (standardized coefficient of $.00$, $p = .49$). Therefore, the hypothesis was not supported.

H2c. There is an indirect relationship between perceived environmental impacts and resident support for tourism mediated by personal quality of life.

While the total effect of environmental impacts on tourism support was significant (standardized coefficient of .23, $p = .00$), there was no significant indirect path between perceived environmental impacts and resident support for tourism through personal quality of life (standardized coefficient of $-.01$, $p = .25$) or through both community and

personal quality of life (standardized coefficient of .00, $p=.49$). Therefore, the hypothesis was not supported.

H2d. There is a direct relationship between perceived environmental impacts and community quality of life.

There was no significant direct effect of perceived environmental impacts on community quality of life demonstrated in the SEM analysis (standardized coefficient of .06, $p = .41$). Hence, there is no support for the hypothesis.

H2e. There is a direct relationship between perceived environmental impacts and personal quality of life.

The SEM analysis showed that there was a significant negative direct effect of perceived environmental impacts on personal quality of life (standardized coefficient of $-.15$, $p = .03$). Therefore, residents feel that the environmental impacts of tourism negatively affect their personal quality of life.

Socio-cultural Impacts

H3a. There is a direct relationship between perceived socio-cultural impacts and resident support for tourism.

The results of the SEM analysis revealed that perceived socio-cultural impacts had a significant direct effect on resident support for tourism (standardized coefficient of .22, $p = 0.01$). Therefore, the hypothesis was supported. Residents who perceive positive socio-cultural benefits of tourism were more likely to support tourism.

H3b. There is an indirect relationship between perceived socio-cultural impacts and resident support for tourism mediated by community quality of life.

While the total effect of socio-cultural impacts on tourism support was significant (standardized coefficient of .22, $p=.01$), there was no significant indirect path between perceived socio-cultural impacts and resident support for tourism through community quality of life (standardized coefficient of $-.01$, $p = .72$) or through community and

personal quality of life (standardized coefficient of .01, $p = .16$). Therefore, the hypothesis was not supported.

H3c. There is an indirect relationship between perceived socio-cultural impacts and resident support for tourism mediated by personal quality of life.

While the total effect of socio-cultural impacts on tourism support was significant (standardized coefficient of .22, $p=.01$), there was no significant indirect path between perceived socio-cultural impacts and resident support for tourism through personal quality of life (standardized coefficient of -.01, $p = .60$) or through community and personal quality of life (standardized coefficient of .01, $p = .16$). Therefore, the hypothesis was not supported.

H3d. There is a direct relationship between perceived socio-cultural impacts and community quality of life.

Perceived socio-cultural impacts had a significant direct effect on community quality of life as evidenced by the SEM analysis (standardized coefficient of .28, $p = .00$).

Therefore, residents feel that the socio-cultural impacts of tourism positively affect their community quality of life.

H3e. There is a direct relationship between perceived socio-cultural impacts and personal quality of life.

There was no significant direct effect of the socio-cultural impacts on personal quality of life (standardized coefficient of -.05, $p=.56$). However, there was a significant indirect effect (standardized coefficient of .10, $p=.00$). The only indirect path from socio-cultural impacts to personal quality of life was via community quality of life hence, the relationship between socio-cultural impacts and personal quality of life was completely mediated by community quality of life.

Institutional Structure

H4a. There is a direct relationship between perceived institutional structure and resident support for tourism.

The results of the SEM analysis revealed that perceived institutional structure had a significant direct effect on resident support for tourism (standardized coefficient of .23, $p=.00$). Hence the hypothesis was supported. Residents who feel they have the opportunity to participate in local governance, were more likely to support tourism.

H4b. There is an indirect relationship between perceived institutional structure and resident support for tourism mediated by community quality of life.

While the total effect of perceived institutional structure on tourism support was significant (standardized coefficient of .23, $p=.00$), there was no significant indirect path between perceived institutional structure and resident support for tourism through community quality of life (standardized coefficient of -.01, $p = .71$) or through community and personal quality of life (standardized coefficient of .01, $p = .14$). Therefore, the hypothesis was not supported.

H4c. There is an indirect relationship between perceived institutional structure and resident support for tourism mediated by personal quality of life.

While the total effect of perceived institutional structure on tourism support was significant (standardized coefficient of .23, $p=.00$), there was no significant indirect path between perceived institutional structure and resident support for tourism through personal quality of life (standardized coefficient of -.00, $p =.56$) or through community and personal quality of life (standardized coefficient of .01, $p = .14$). Therefore, the hypothesis was not supported.

H4d. There is a direct relationship between perceived institutional structure and community quality of life.

Perceived institutional structure had a significant direct effect on community quality of life as evidenced by the SEM analysis (standardized coefficient of .39, $p=.00$). Not only was the hypothesized relationship supported, the effect of perceived institutional structure had the strongest effect on community quality of life. Residents felt that the opportunity to participate in local governance affects their community quality of life.

H4e. There is a direct relationship between perceived institutional structure and personal quality of life.

While the SEM analysis revealed a significant total effect of perceived institutional structure on personal quality of life (standardized coefficient of .11, $p=.02$), there was no significant direct effect (standardized coefficient of $-.03$, $p=.51$). However, the indirect effect was significant (standardized coefficient of .15, $p=.00$). As the only indirect path between perceived institutional structure and personal quality of life is via community quality of life, the relationship is completely mediated by community quality of life.

Quality of Life

H5. There is a direct relationship between community quality of life and personal quality of life.

The results of the SEM analysis revealed a significant effect of community quality of life on personal quality of life (standardized coefficient of .37, $p=.00$). Furthermore, community quality of life had the strongest effect on personal quality of life. Residents feel that community quality of life affects their personal quality of life.

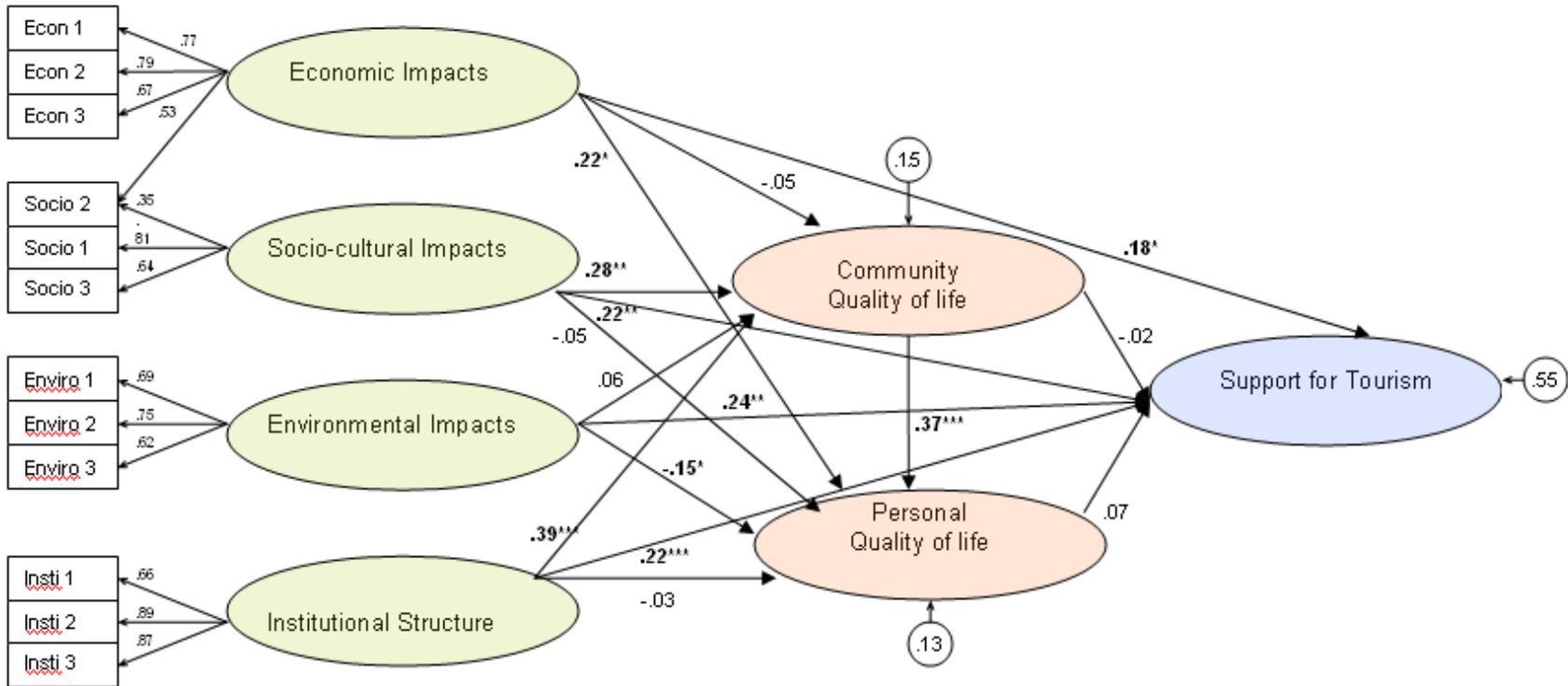


Figure 4-1. Structural model of tourism impacts, quality of life, and support for tourism with standardized coefficients

Note: * = $p < .05$; ** = $p < .01$; *** = $p < .000$

Table 4-1. Demographic profile of participants

Demographic Characteristics	Frequency	Percentage (%) ^a
Gender (n=618)		
Male	289	47
Female	329	53
Age (n=613)		
18 - 25	115	19
26 - 35	155	25
36 - 45	146	24
46 - 55	80	13
56 - 65	71	12
66 - 85	46	8
Highest level of Education (n=601)		
Basic Secondary / High School	86	14
Mid-level Secondary /High School	111	19
High-level Secondary / High School (Fach-)	157	26
Tertiary education / Community College	71	12
University degree (Studium)	175	29
Monthly household income before taxes ^b (n=516)		
EUR 1000 or less	78	15
EUR 1001 -1500	69	13
EUR 1501 - 2000	78	15
EUR 2001 - 2500	64	13
EUR 2501 - 3000	38	8
EUR 3001 - 3500	42	8
EUR 3501 - 4000	36	7
EUR 4001 - 4500	48	9
EUR 4501 - 5000	32	6
more than EUR 5001	31	6
Employment (n=591)		
Student, Professional or Vocational Training	109	18
Salaried Employee	208	35
Managerial Employee	52	9
Self-employed	41	7
Civil Servant	36	6
Homemaker	37	6
Retired	69	12
Unemployed	29	5

^a The percentages may not sum to 100 due to rounding; ^b Exchange rate: United States

Table 4-2. Descriptive statistics of tourism impacts

Questionnaire Statement ^{a e}	Mean	SD ^b	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	n
Economic:										
Tourism has improved the local infrastructure (roads, public transport, electricity net) ^d	3.98	1.72	13.3	9.3	10.7	24.6	21.8	13.2	5.1	610
Tourism increases our cost of living (goods and services more expensive) ^{c d}	4.43	1.64	4.1	7.7	14.6	32.2	12.7	13.3	15.3	608
Tourism decreases the quality of employment in this area ^c	5.04	1.50	1.1	4.3	8.5	26.4	17.2	20.1	22.4	611
Tourism improves our standard of living	5.08	1.53	3.5	3.2	6.4	19.2	23.8	24.1	19.8	626
Tourism decreases the quality of local services to the community (emergency & utilities) ^c	5.16	1.65	2.4	4.2	11.2	17.9	13.5	22.9	27.9	624
Tourism increases the community's tax revenue	5.25	1.51	2.4	3.2	5.0	20.7	18.1	25.6	24.9	618
Tourism creates job opportunities for local people	5.74	1.31	0.8	1.8	4.7	8.7	17.8	32.2	34.1	626
Tourism is good for our community's economy	5.81	1.27	1.1	1.3	1.8	10.7	18.3	29.7	37.0	616
Environmental:										
Tourism increases traffic & parking congestion in Cologne ^{c d}	2.56	1.52	26.7	32.5	19.8	9.8	4.5	3.5	3.2	622
Tourism increases environmental pollution ^c	3.47	1.61	9.0	22.1	26.1	17.5	12.1	8.0	5.2	612
Increasing exhaustion of water & energy resources due to tourism ^c	4.18	1.65	4.9	10.9	17.7	30.8	11.7	11.5	12.5	606
In recent years, my community has become overcrowded because of tourists ^c	4.39	1.79	5.2	13.1	14.9	18.2	16.7	16.6	15.3	616

^a Variables coded on a 7 point scale anchored with 1 = strongly disagree and 7 = strongly agree; ^b Standard deviation;

^c Item was reverse coded prior to analysis; ^d Item deleted after confirmatory factor and reliability analyses; ^e the percentages may not sum to 100 due to rounding

Table 4-2. continued

Questionnaire Statement ^{a e}	Mean	SD ^b	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	n
Tourism negatively impacts the quality of our natural environment ^c	4.44	1.66	4.3	8.5	17.0	22.0	18.8	16.2	13.3	624
Tourism enhances preservation of our natural environment ^{c d}	4.52	1.59	3.9	8.9	10.1	27.5	18.7	19.8	11.1	615
Tourism negatively impacts the quality of our historic buildings & monuments ^c	5.29	1.64	2.1	5.8	6.6	17.3	15.7	20.6	32.0	625
Tourism enhances the preservation of our historic buildings & monuments ^d	5.75	1.36	2.1	1.6	3.9	6.9	16.5	34.7	34.2	619
Socio-cultural:										
Tourism increases the level of criminal activities ^{c d}	4.16	1.68	5.2	12.5	19.2	22.9	16.1	12.8	11.2	615
Tourism has increased our sense of community pride	4.58	1.70	6.9	6.0	9.4	26.0	17.2	20.3	14.2	605
Tourism increases the recreational opportunities residents can enjoy	4.69	1.50	4.6	5.2	7.5	23.4	27.7	21.8	9.8	611
Local traditions and practices have been conserved or restored due to tourism	4.72	1.52	4.7	4.4	7.8	26.3	22.5	23.2	11.2	617
Tourism has increased community services (restaurants, shopping, cultural facilities)	4.98	1.44	1.9	4.2	8.7	19.1	25.9	25.6	14.6	622
Local friendliness has decreased due to tourism ^c	5.10	1.63	2.8	4.2	10.5	19.6	13.5	24.6	24.8	617
Tourism negatively impacts our communities character ^c	5.20	1.71	2.7	6.5	9.2	14.7	13.6	22.8	30.5	619
There is an increased demand for local goods due to tourism	5.22	1.29	1.3	1.8	5.7	17.3	29.0	28.7	16.2	613

^a Variables coded on a 7 point scale anchored with 1 = strongly disagree and 7 = strongly agree; ^b Standard deviation; ^c Item was reverse coded prior to analysis; ^d Item deleted after confirmatory factor and reliability analyses; ^e the percentages may not sum to 100 due to rounding.

Table 4-2. continued

Questionnaire Statement ^{a e}	Mean	SD ^b	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	n
Tourism increases the number of cultural events offered in our community	5.42	1.28	1.0	3.1	2.7	13.7	25.5	33.4	20.5	619
Tourism provides cultural exchange and increases cultural understanding	5.71	1.39	1.6	2.7	3.1	9.0	17.6	31.0	34.9	619
Institutional:										
There is good communication between residents and community leaders	3.29	1.52	14.1	19.1	21.1	25.8	11.6	5.9	2.5	612
There is transparency of decision-making processes in our community	3.34	1.46	13.4	17.3	19.4	30.5	11.7	6.4	1.3	613
Residents have opportunities to get involved in tourism decision making ^d	3.44	1.41	11.7	15.5	16.4	38.4	10.7	5.70	1.50	614
Community voices are respected by decision makers	3.67	1.43	7.5	14.9	19.6	31.3	17.2	6.7	2.8	611
I trust our political system	3.89	1.68	12.1	10.3	16.0	22.9	20.3	13.7	4.7	612
Residents can influence community decisions	3.92	1.48	6.3	12.9	17.7	26.1	23.4	10.7	3.0	606
Community development is in line with the community vision ^d	3.99	1.17	4.7	6.5	7.0	60.1	12.7	6.3	2.7	557
I feel I can access government officers & leaders	4.34	1.54	7.4	4.5	10.2	33.3	20.6	16.7	7.3	606
I trust our legal system	4.59	1.61	6.3	6.0	9.6	21.0	24.4	22.8	9.9	615
There are many good leaders in this town ^d	5.01	1.38	2.0	3.1	6.4	22.6	26.9	24.8	14.3	610

^a Variables coded on a 7 point scale anchored with 1 = strongly disagree and 7 = strongly agree; ^b Standard deviation;

^c Item was reverse coded prior to analysis; ^d Item deleted after confirmatory factor and reliability analyses; ^e the percentages may not sum to 100 due to rounding

Table 4-3. Descriptive statistics of personal quality of life

Questionnaire Statement ^{a d}	Mean	SD ^b	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	8 (%)	9 (%)	10 (%)	n
How satisfied are you with your spirituality or religion? ^c	6.04	2.53	3.5	2.5	2.5	2.7	4.3	38.4	9.0	6.5	9.5	7.3	13.8	601
How satisfied are you with your future security?	6.62	2.13	0.8	0.6	3.5	3.8	7.0	12.8	13.7	18.0	21.5	11.6	6.5	627
How satisfied are you with feeling part of your community?	7.26	2.02	0.8	1.3	1.3	2.6	2.6	8.8	10.9	18.5	24.3	19.5	9.6	626
How satisfied are you with your standard of living?	7.31	1.96	0.3	1.3	0.9	2.7	3.8	6.6	12.3	16.9	27.4	17.1	10.6	632
How satisfied are you with what you are achieving in life?	7.38	1.90	0.2	0.8	1.9	2.7	2.1	7.3	9.1	19.7	28.0	18.6	9.7	629
How satisfied are you with how safe you feel?	7.40	1.88	0.2	0.3	2.2	1.8	2.1	8.5	11.4	17.8	26.3	18.4	11.1	624
How satisfied are you with your health?	7.41	2.21	1.3	1.1	1.9	2.7	3.8	7.0	8.7	15.0	20.7	23.7	14.1	632
How satisfied are you with your personal relationships?	7.79	2.18	0.5	1.1	1.8	3.0	3.5	5.3	6.4	11.2	19.5	25.4	22.4	626

^a Variables coded on an 11 point scale anchored with 0 = completely dissatisfied and 10 = completely satisfied;

^b Standard deviation; ^c Item deleted after confirmatory factor and reliability analyses; ^d the percentages may not sum to 100 due to rounding

Table 4-4. Descriptive statistics of community quality of life

Questionnaire Statement ^{a c}	Mean	SD ^b	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	8 (%)	9 (%)	10 (%)	n
How satisfied are you with government in Cologne?	4.90	2.07	3.0	4.2	5.6	10.6	12.6	27.0	15.2	11.8	6.9	2.2	0.8	625
How satisfied are you with the economic situation in Cologne?	5.58	2.01	1.3	1.6	5.1	7.6	9.2	22.7	18.6	16.4	11.9	4.1	1.4	629
How satisfied are you with state of the environment in Cologne?	5.73	2.06	1.0	1.7	4.1	8.4	11.0	17.0	18.3	18.4	13.2	4.8	2.2	630
How satisfied are you with business in Cologne?	5.76	1.87	0.6	1.4	4.3	5.0	7.1	25.0	22.2	18.3	9.3	5.3	1.4	623
How satisfied are you with social conditions in Cologne?	5.85	2.01	1.0	1.3	3.8	5.9	10.7	20.3	16.9	19.3	13.1	4.9	2.9	627
How satisfied are you with local security in Cologne?	6.22	2.06	1.3	1.3	2.4	5.8	7.5	14.6	17.6	21.0	17.6	7.5	3.4	624

^a Variables coded on an 11 point scale anchored with 0 = completely dissatisfied and 10 = completely satisfied;

^b Standard deviation; ^c the percentages may not sum to 100 due to rounding

Table 4-5. Descriptive statistics of resident support for tourism

Questionnaire Statement ^{a e}	Mean	SD ^b	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	n
The tourism sector in Cologne is currently not sustainable enough ^{c d}	4.01	1.43	3.4	11.8	16.9	38.5	11.6	12.5	5.2	610
I support the active encouragement of tourism in Cologne	4.38	1.95	14.7	5.6	7.4	21.0	16.0	20.7	14.6	624
The current level of tourism development in Cologne is appropriate	4.90	1.22	1.4	1.6	5.8	29.0	30.1	22.6	9.5	624
Local government should restrict tourism development in Cologne ^c	5.44	1.63	1.8	4.6	7.4	16.8	11.1	20.4	38.0	624

^a Variables coded on a 7 point scale anchored with 1 = strongly disagree and 7 = strongly agree;

^b Standard deviation; ^c Item was reverse coded prior to analysis; ^d Item deleted after confirmatory factor and reliability analyses; ^e the percentages may not sum to 100 due to rounding.

CHAPTER 5 DISCUSSION

Summary of Findings

Improved quality of life for residents has been one of the fundamental objectives of tourism development by highlighting economic opportunity, prosperity, and protecting cultural and natural resources of the host destination (Ap, 1992; Ap & Crompton, 1998; Bachleitner & Zins, 1999; McCool & Martin, 1994; McKool et al., 2001; Murphy & Price, 2004; Perdue et al., 1990). Sustainable tourism aims to maximize the positive and minimize the negative impacts of tourism by integrating the economic, environmental, and socio-cultural needs of the current tourists and host communities, while concurrently protecting the needs of future generations (UNWTO, 2004). Subsequently, if residents perceive that tourism has a substantial role in the achievement of these goals, they will likely be supportive of development. The findings of this study highlight the effects of perceived tourism impacts on both personal, and community quality of life, along with residents' support for tourism in Cologne, Germany.

Residents were asked to rate their level of agreement with tourism impacts based on the four dimensions of sustainability, namely economic, environmental, socio-cultural, and institutional. It was hypothesized that resident perceptions of tourism impacts affect community and personal quality of life, as well as support for tourism. Furthermore, it was postulated that quality of life mediates the relationship between perceived impacts and support for tourism. Results revealed that residents had overall positive perceptions of tourism; were generally satisfied with their quality of life, and were supportive of tourism in Cologne. Findings support previous research whereby residents who have positive perceptions of tourism impacts generally support tourism in

their community (Andereck & Jurowski, 2006; Andereck & Vogt, 2000; Dyer et al., 2007; Gursoy et al., 2002; Jurowski et al., 1997; King, Pizam & Milman, 1993; Ko & Stewart, 2002; Perdue et al., 1990; Snaith & Haley, 1995). While past research examining resident perceptions of tourism impacts and subsequent support for tourism implied that the impact perceptions were tantamount to impacts on resident quality of life, the present study integrated an actual measure of quality of life in order to more fully understand the relationship between tourism impacts and resident quality of life.

Based on the inclusion of both community and personal quality of life constructs, the findings showed that although positive perceptions of tourism impacts may predict support for tourism, their relationship with resident quality of life might not be as straightforward as previously assumed. Moreover, perceived tourism impacts had varying effects on community and personal quality of life, and neither mediated the relationship between perceived tourism impacts and support for tourism. More specifically, resident perceptions of the institutional structure of Cologne and the socio-cultural impacts of tourism had significant direct effects on community quality of life; conversely, resident perceptions of economic and environmental impacts had significant direct effects on personal quality of life. Additionally, a negative relationship existed between perceived environmental impacts and personal quality of life and perceptions of socio-cultural tourism impacts and of institutional structure demonstrated weak indirect effects on personal quality of life mediated by community quality of life. Furthermore, community quality of life had the strongest effect on personal quality of life. A thorough discussion regarding individual effects of perceived tourism impacts on community/personal quality of life, and support for tourism is noted below.

Community Quality of Life

It was hypothesized that community quality of life is directly affected by residents' perceptions of economic, environmental, socio-cultural tourism impacts, and institutional structure. Contrary to expectations, only the perceptions of the institutional structure of Cologne and of socio-cultural tourism impacts had a significant effect on community quality of life; both effects were positive.

More specifically, community quality of life was most strongly affected by perceptions of the institutional structure, indicating that the more residents felt they were informed, consulted, and respected, the more positively they perceived their community quality of life. While there is much theoretical literature which presents reasons why political participation, democracy and political rights positively affect quality of life, relatively little empirical research has been undertaken in this area (Weitz-Shapiro & Winters, 2008). However, a recent comparison of 127 nations showed strong correlations between both democratic and technical quality of governance, and average happiness of citizens (Ott, 2010). Another current empirical investigation combined data from 20 European countries using the European Social Survey and found a statistically significant relationship between political participation and life satisfaction (Pacheco & Lange, 2010).

Furthermore, while social and political structures have always been deemed important within the sustainable development literature; they were historically not conceptualized as a dimension to coincide with the traditional economic, environmental, and socio-cultural dimensions. However, Cottrell and colleagues (Cottrell & Vaske, 2006; Shen & Cottrell, 2008; Huayhuaca, Cottrell, Gradl & Mateev, 2010) recently began including the institutional dimension as an indicator of local participation in

political governance, and have consistently found it to be a significant predictor of resident satisfaction with sustainable tourism. Similarly, past research has presented a positive relationship between perceived personal influence on decision-making and positive perceptions of tourism development (Ap, 1992; Lankford & Howard, 1994; Madrigal, 1993). Hence, positive resident perceptions of the institutional structure lead to higher levels of subjective community quality of life; underscoring the importance of community involvement as a necessary component of successful sustainable tourism development (Byrd, 2007; Choi & Sirakaya, 2005; Hardy, Beeton & Pearson, 2002, Moswete, 2009; Nicholas, 2007; Yoon, Gursoy, & Chen, 2001). The combination of these findings highlight the importance to include a dimension that addresses the social and political structures necessary to plan, implement, and manage the sustainable use of community resources. Moreover, recent discussion regarding social capital may also come into play with regard to community involvement, as “features of social organization, such as trust, norms and networks can improve the efficiency of society by facilitating coordinated actions” (Putnam, 1993, p.167).

The socio-cultural perceptions of tourism impacts also had a significant positive effect on community quality of life. Residents perceived the development of the tourism industry and the interactions with tourists as positive, and hence the experiences added to a positive perception of community quality of life. This finding is supportive of the quality of life literature, which has identified that social life and social relations are associated with community well-being (Cummins, 1997). This is evidenced in Cologne, as residents were very positive with respect to the social exchange and understanding fostered by tourism along with their general feelings of community pride, character and

friendliness. Moreover, the association between positive socio-cultural attributes and tourism may be quite apparent as cultural and recreational facilities and opportunities often play a central role in community life; as noted by Kim (2002) who found that residents' perceptions with the availability and quality of public services and facilities positively influenced community quality of life.

While the current findings further support previous studies that have documented perceived benefits such as improved community services, increased cultural and recreational opportunities, as well as an increase in cultural exchange and understanding (Liu & Var, 1986; Gilbert & Clark, 1997; McCool & Martin, 1994; Perdue et al., 1990); it should be noted that findings have also produced inconsistent results (Andereck et al., 2005; Dyer et al., 2007). For example, residents' perceived negative socio-cultural impacts of tourism that include negative effects on local traditions, values, and culture, even resulting in a commercialization or loss of local culture and identity (Cohen, 1988; Dogan, 1989). However, these impacts are more likely to be problematic in destinations where the socio-cultural differences between residents and tourists are divergent. While the residents of Cologne certainly experience negative facets of life such as crime, perhaps even changes in local friendliness, or other negative socio-cultural impacts, it is probably difficult to discern between the effects of tourism and other causes.

Based on the results, residents did not perceive that the environmental impacts of tourism affected their community's quality of life. Similarly, in an investigation of satisfaction with urban living, McCrea, Stimson, and Western (2005) found that environmental considerations were one of the least important factors that predicted

regional satisfaction. Although some Cologne residents attributed an increase in environmental pollution to tourism, most did not perceive that tourism negatively affected the quality of the natural environment, historic buildings, or monuments. Moreover, residents did not feel their community had become overcrowded through tourism. It is interesting to note that based on a recent report by the Federal Environmental Agency (2010), 87% of Germans felt that the environmental quality of their own community was good, with 16% even rating it very good. As residents indicated either neutral or rather positive perceptions of the environmental situation in Cologne, the findings may be analogous to those with respect to the negative socio-cultural impacts: the difficulty may lay in identifying exact causes of environmental problems in a major metropolis.

While it was unexpected that perceived environmental and economic impacts had no statistically significant effect on community quality of life, it was extremely surprising to identify the negative directionality of the economic impacts. Although quality of life scholars have documented the importance of economic needs to overall quality of life (Diener et al., 1995; Cummins, 1998; Diener & Suh, 1999), these studies have been conducted at the individual rather than the community level. For example, in a tourism specific study, Kim (2002) investigated the effect of economic tourism impact perceptions on the material well being domain of personal well-being but a possible effect of economic impacts on community quality of life was unfortunately not examined. However, economic growth and job creation have been the driving force behind much tourism development, and it is generally taken for granted that these factors improve resident quality of life within the host community. Residents of Cologne had overall

positive perceptions of tourism, which is in accordance with previous research (Akis et al., 1996; Ap & Crompton, 1998; Belisle & Hoy, 1980; Carmichael et al., 1996; Faulkner & Tideswell, 1997; Gilbert & Clark 1997; Haralambopoulos & Pizam, 1996; Johnson et al., 1994; Long et al., 1990; Liu & Var, 1986; McCool and Martin 1994; Milman & Pizam, 1988; Perdue et al., 1990; Sheldon & Var, 1984). Moreover, it has been documented that residents in communities that are less dependent economically on tourism have more positive perceptions of tourism impacts than residents of more economically dependent communities (Andriotis & Vaughan, 2003; McGehee & Andereck, 2004). Hence, resident's overall positive perceptions about economic impacts would be hypothesized to have a positive effect on community quality of life. This unexpected lack of statistical significance may be reflective of the nature of the study site.

Recently Schofield (2010) indicated that economic concerns were not the most pressing issue for residents in an urban environment on the outskirts of Manchester, England. Both Cologne and Manchester are large metropolitan cities that are not economically dependent on tourism. Furthermore, both cities are located in relatively economically affluent countries with strong universal social welfare systems that ensure a minimum standard of quality of life for their citizens. In fact, out of 169 countries, Germany is currently ranked tenth on the United Nations Human Development Index (UNDHI, 2011) which places it in the top six percent. The state of the local economy has been found to influence perceptions of tourism impacts and it has been suggested that residents of economically depressed areas focus more on the economic benefits of tourism and are more likely to support tourism development even if they are aware of possible negative impacts (Andereck & Vogt, 2000; Gursoy et al., 2002; Gursoy &

Rutherford, 2004). In a community that is economically diversified and not dependent on tourism, it is likely more difficult to differentiate between the economic impacts of tourism and other sectors of the economy. However, in smaller and less diversified economies that are more economically dependent on tourism, the economic impacts attributed to the tourism industry are likely to be more readily apparent to residents. Hence, it could be posited that in such communities, perceived economic impacts from tourism may have a greater effect on community quality of life.

Another possible explanation could be related to the measurement scale or level of proximity with respect to the quality of life construct. More specifically, Cummins (2003) proposed two dimensions that influence subjective quality of life evaluations: abstract-specific and proximal-distal. The abstract-specific dimension ranges from the more abstract evaluation of “life as a whole” to the more specific evaluation of quality of life domains; the proximal-distal dimension pertains to the “distance from self” and ranges from highly personal to societal/global (p.165) and may be particularly relevant in this current study. As the homeostatic system is intended to maintain a positive sense of personal wellbeing, its influence diminishes as one moves from abstract to specific, and from proximal (personal) to more distal (society) evaluations (Cummins, 2003). Therefore, the predictive effect of perceived economic impacts on quality of life may be scale-dependent. A recent study in Baltimore examined the relationship between social capital, income, and the natural environment, with life satisfaction while differentiating between individual and community life satisfaction. Results identified that while income resulted in higher satisfaction at the individual level, it was not apparent at the community level (Vemuri, Grove, Wilson & Burch, 2011). In light of this finding, Vemuri

et al. (2011) suggested that individual life satisfaction primarily focuses on an individual's psychological well-being, while neighborhood satisfaction focuses more on social interactions. This might explain why both socio-cultural and institutional aspects of life significantly affected community quality of life in this study; both are associated with social interactions, while economic and environmental aspects of life can be more closely aligned with individual psychological well-being.

Personal Quality of Life

It was hypothesized that personal quality of life is directly affected by residents' perceptions of economic, environmental, socio-cultural tourism impacts, institutional structure, and community quality of life. Similar to previous studies, community quality of life had a significant positive effect on personal quality of life (Marans, 2003; Norman, Harwell & Allen, 1997; Wagner, 1995) which indicates that as community quality of life increases, so does personal quality of life. However, the findings with regard to perceived tourism impacts were somewhat surprising, as only two of the impact dimensions significantly affected personal quality of life. Interestingly, they were impact dimensions (economic and environmental) that were statistically not significant for community quality of life.

Consistent with previous findings (Gilbert & Clark, 1997; Haralambopoulos & Pizam, 1996; Johnson et al., 1994; Liu & Var, 1986; Perdue et al., 1990), residents of Cologne generally perceived that tourism had positive effects on the local economy, job creation, community tax revenues, and standard of living. Furthermore, the majority of residents did not perceive tourism to decrease the quality of local services to the community, nor the quality of local employment. Perceived economic impacts of tourism had a significant positive effect on personal quality of life, hence as residents' positive

perceptions of economic impacts increase, so does their personal quality of life. While overall community quality of life was the strongest predictor of personal quality of life, the perceived economic impact of tourism was the second strongest predictor.

Since economic needs are central to overall quality of life (Diener et al., 1995; Cummins, 1998; Diener & Suh, 1999) and the perceptions of economic tourism impacts were predominantly positive, it was not surprising a significant effect on personal quality of life existed. This effect supports Kim (2002) who found that resident perceptions of economic tourism impacts positively affected the material well-being domain of quality of life. Furthermore, these findings are comparable with Vemuri et al. (2011) who documented that income was a predictor of higher levels of individual life satisfaction in urban areas, but not at the neighborhood level. The fact that perceptions of economic tourism impacts only had a significant positive effect on personal quality of life, and not on community quality of life is interesting, as the distinction between both types of quality of life had not previously been examined in tourism impact studies.

While some residents felt tourism increased environmental pollution, most did not negatively associate tourism with the quality of the natural environment, historic buildings, or monuments. Moreover, residents did not associate blame to tourism for Cologne's overcrowding problems. Nonetheless, although the perceptions of environmental tourism impacts had no effect at the community level, they had a significant negative effect on personal quality of life. Based on a recent report of the German Federal Environmental agency (2010), although Germans reported environmental satisfaction with their more immediate surroundings, over 80% felt that the state of the global environment is precarious, and hence environmental issues

remain a high priority among the public. Interestingly, 43% of Germans reported they were aware of environmental sustainability as a concept and between 30% and 44% (depending on the issue) felt environmental protection was fundamental to the accomplishment of economic and social challenges. Hence, in this current study, even though residents generally noted neutral to positive perceptions of tourism impacts, perhaps the environmental consciousness has become so ingrained that it is an important component of psychological wellbeing. Therefore, even though residents may evaluate the surrounding environment as fairly positive, the environmental dimension nevertheless has a negative impact on personal quality of life as improvements are always deemed possible.

The community quality of life literature has occasionally included an environmental domain that has generally focused on physical, social, economic, and safety features, rather than the natural environment (Vemuri et al., 2011). Vemuri et al. included both objective and subjective environmental indicators of environmental quality, and contrary to present findings reported positive effects on both neighborhood and personal life satisfaction. However, based on work by Cummins et al. (2001) the study utilized the global personal and neighborhood life satisfaction questions, as well as the domain specific question regarding satisfaction with the quality of the environment as the subjective indicator for environmental quality. Since this represents one of the deconstructed domains theoretically embedded in the global question, perhaps it should not be not surprising to identify a statistically significant correlation between the variables. However, as the other environmental quality indicators also resulted in positive correlations with both individual and neighborhood satisfaction, the findings

support the call for further investigations into the effect of environmental quality and quality of life (Costanza et al., 2007; van Kamp, Leidelmeijer, Marsman, & de Hollander, 2003; Vemuri & Constanza, 2006; Vemuri et al., 2011).

The socio-cultural impacts perceptions of tourism and the perceptions of the institutional structure had no significant direct effects on personal quality of life. However, the perception of institutional structure had a significant total and indirect effect on personal quality of life mediated by community quality of life, while the perceived socio-cultural impacts had a significant indirect effect mediated by community quality of life. It could be envisaged that residents viewed the opportunity to participate in the political process as more important for overall social welfare than for their personal welfare, yet obviously, it had an indirect impact on personal quality of life. Similarly, while positive socio-cultural effects were perceived to benefit the community as a whole and residents approved of such positive development within the community; perhaps they may not utilize the benefits personally, and hence only felt the indirect effect on personal quality of life.

Resident Support for Tourism

It was hypothesized that resident support for tourism was directly affected by their perceptions of economic, environmental, and socio-cultural tourism impacts, perceptions of the institutional structure, community quality of life, and personal quality of life. Results partially supported the hypotheses as perceptions of economic, environmental and socio-cultural tourism impacts, and perceptions of the institutional structure all had positive significant effects on resident support for tourism, which were very similar in strength. However, neither personal nor community quality of life directly

affected resident support for tourism, nor were any of the other relationships mediated by either personal or community quality of life.

Resident support for tourism garnered a fairly positive evaluation as 62% of respondents indicated agreement with the statement that “current level of tourism development in Cologne is appropriate”, and 70% disagreed with the notion that “local government should restrict tourism development.”, In addition, results revealed that residents generally had positive perceptions of tourism. Moreover, residents particularly recognized the positive impact of tourism on the local economy and job creation; the increase in cultural and recreational opportunities within the community; as well as the potential enhancement of historic preservation of buildings and monuments. In congruence with previous research, perceived tourism impacts were found to have a significant positive effect on resident support for tourism (Andereck & Jurowski, 2006; Andereck & Vogt, 2000; Dyer et al., 2007; Gursoy et al., 2002; Jurowski et al., 1997; King, Pizam & Milman, 1993; Ko & Stewart, 2002; Oviedo-Garcia, Castellanos-Verdugo, & Martin-Ruiz; 2008; Perdue et al., 1990; Snaith & Haley, 1995).

However, as social exchange theory has been the predominant theoretical base of tourism impact studies (Andereck et al. 2005), tourism impacts have been analyzed in a cost-benefit context and generally grouped based on their positive or negative impact on the host community (Andereck & Vogt, 2000; Gursoy et al., 2002 & 2009; Jurowski & Gursoy, 2004; Ko & Stewart, 2002; McGehee & Andereck, 2004; Oviedo-García et al., 2008; Perdue et al., 1990 & 1995; Vargas-Sanchez et al., 2009). Furthermore, the impacts have frequently been subject to factor analysis and failed to produce consistent dimensions. Therefore, possible comparisons with previous studies are somewhat

limited. However, there are some comparable findings with regard to each of the impact dimensions that will be briefly highlighted. Resident perceptions of positive economic benefits from tourism have been shown to influence resident support for tourism development (Chen, 2001; Gursoy & Rutherford, 2004; Dyer et al. 2007; Lee & Back, 2003; Shen & Cottrell, 2008; Yoon et al., 2001). Moreover, positive perceptions of socio-cultural impacts have also been found to determine resident support for tourism (Dyer et al., 2007; Gursoy & Rutherford, 2004; Jurowski et al., 1997; Lankford & Howard, 1994; Lee & Back, 2003). While some studies have illustrated that negative perceptions of environmental impacts have a negative effect on resident satisfaction or support for tourism (Chen, 2001; Shen & Cottrell, 2008; Yoon et al., 2001), others have found no significant effects on support for tourism (Jurowski et al., 1997). Finally, perceptions with respect to institutional structure have consistently been found to predict resident satisfaction with tourism (Cottrell et al., 2007; Cottrell & Vaske, 2006; Huayhuaca et al., 2010).

Conclusion

Sustainability has become the predominant development perspective over the last two decades and the fundamental principles have been found to be in congruence with the achievement of a better quality of life in community development projects. One avenue of community development has been through tourism. Based on the interdependent relationship between tourists and residents, there is a plethora of research which has investigated resident perceptions, attitudes, and support for tourism. However, past studies have lacked major reference to the social indicator literature that has utilized relevant subjective conceptualizations of quality of life. Most tourism studies inferred residents' quality of life based on responses to tourism impacts and attitudinal

scales. Therefore, previous tourism attitude and impact literature has implied that positive or negative perceptions of tourism impacts could be equated with effects on resident quality of life. Hence, it has been contingent that positive effects of tourism on resident quality of life (as measured by perceived impacts) lead to resident support for tourism. However, the dearth in literature in the examination of tourism development and residents' quality of life as a concept has been lamented by tourism scholars (Benckendorff et al., 2009; Carmichael, 2006; Crouch & Ritchie, 1999; Perdue et al., 1999; Urtasun & Gutierrez, 2006). Consequently, the present study endeavored to address this gap with the use of two indexes (personal and community) based on domain level scales (from outside the tourism discipline literature) to examine residents' perceptions of tourism (based on the dimensions of sustainability) on quality of life, and subsequent support for tourism.

Based on the inclusion of both community and personal quality of life constructs in the present model, significant differences were evidenced with regard to tourism impacts and quality of life. Also, lack of significant relationships between resident quality of life and support for tourism were identified. More specifically, while the perception of institutional structure and socio-cultural impacts of tourism had significant direct effects on community quality of life, neither economic nor environmental perceptions of tourism impacts had significant effects. However, the findings with regard to personal quality of life were completely reversed: perceived economic and environmental impacts had significant direct effects, while perceptions of socio-cultural tourism impacts and of institutional structure had no significant direct effects. Moreover, neither of the quality of life constructs had a significant impact on resident support for tourism. Therefore, two

logical questions arise: first, why do perceptions of tourism impacts have different effects at the personal and community levels; and second, why does residents' quality of life (community/personal) not have any significant impact on support for tourism?

The first question has been addressed in the preceding discussion and is related to the scale of measurement, or level of proximity concerning the quality of life construct (Cummins, 2003). Furthermore, the suggestion by Vemuri et al. (2011) that personal quality of life focuses on an individual's psychological well-being while community quality of life is associated with social interactions could also play a role. Additionally, Clarke, Islam, and Paech (2003) suggested that human well being can be approached from the perspective of Maslow's hierarchy of needs framework (1970), in which human needs are classified into five progressive categories: basic, safety, belonging, self-esteem and self-actualization. The hierarchy begins with the fulfillment of lower order needs (basic needs) and progresses to higher order needs (self-actualization). Based on the theory of tourism area life cycle (Butler, 1980) one could argue that early stages of tourism development in a community parallel the level of basic need fulfillment in an individual. Communities initially seek development benefits such as economic growth and job creation to improve local quality of life as evidenced by the by numerous tourism development projects ranging from small local initiatives to major urban revitalization projects. Hence, if one views the community as the focus of Maslow's hierarchy of needs instead of an individual, it could be postulated that initial development stages parallel basic needs fulfillment; as the destination matures and basic needs are fulfilled then the community focus moves to higher order needs.

If this thought process is applied to the current study, Cologne's basic needs are "fulfilled" (economic and environmental) hence, the focus moves to higher order needs (socio-cultural and institutional). Although this is mere supposition, in a statewide survey of Virginia, Kim (2002) hypothesized that the tourism development stage would moderate the relationship between tourism impact dimensions and particular quality of life domains. Although lack of statistically significant effects were identified, some meaningful differences were noted. Particularly relevant to the previous discussion, the moderating effects between both the economic and social impacts and their respective quality of life domains were strongest in the mature stage of development.

In order to address the second question, as to why resident quality of life fails to predict resident support for tourism, one must step back from the particular research question being investigated and look at the holistic picture. Resident quality of life is affected by numerous aspects of life and while tourism may be particularly relevant for some residents, the majority may feel very little direct impact. In fact, previous research has found that residents who are directly involved with the tourism industry have more positive perceptions and greater support for tourism (Brunt & Courtney 1999; Haralambopoulos & Pizam 1996; Jurowski et al., 1997; Lankford & Howard 1994; McGehee & Andereck 2004; Sirakaya et al., 2002). However, although quality of life failed to predict resident support, we should evaluate whether we are asking the right question. The ultimate aim of any community is the maintenance or improvement of resident quality of life, and while tourism is one possible avenue that communities may take in order to achieve this goal, tourism development is not the ultimate goal. Schofield (2010) quoted a phrase by Wheller (1993) stating, "community responsive

tourism should never be reduced to tourism promotion” which is very apt indeed. It is vital to monitor resident attitudes toward and perceptions of tourism if it is going to be part of successful and sustainable community development, and further understanding of the antecedents of resident support (or lack thereof) is another important aspect of successful development management. However, it is suggested that the ultimate aim of tourism development should focus on resident quality of life.

There is an increasing interest in quality of life by tourism scholars as demonstrated by the recent proliferation of studies investigating resident quality of life (Andereck & Nyaupane, 2010; Cecil, Fu, Wang & Avgoustis, 2010; Chancellor, Yu, & Cole, 2010; Schofield, 2010). The recent studies certainly contribute to advance the understanding of tourism and quality of life by developing more comprehensive quality of life measures than previously utilized within the tourism literature. However, none have conceptualized quality of life using a domain level representation of global quality of life as conceptualized within the social indicator literature, nor distinguished between personal and community quality of life.

Practical Implications

Although Cologne experiences visitation rates of more than double its resident population annually, the current assessment of resident perceptions towards tourism noted very positive perceptions of tourism impacts and general support for the industry. City leaders, policy makers, destination marketing and management organizations must make a more concerted effort to further institutionalize the principles and aims of sustainability into the political agenda; to increase the dialog between city leaders and residents, involve local residents in the planning and development processes as highlighted in their community vision for 2020 (Kölner Leitbild, 2020). Particularly

apparent was that 60% of respondents were unaware of the community vision, which highlights the insufficient communication between city leaders and community residents. Results indicate that the perceived institutional structure plays an important role in community quality of life, and to resident support for tourism. However, based on the numerous political scandals between 2009 and 2010, residents have a certain amount of mistrust in the political system. Moreover, residents were uncertain whether they really had any influence on community decision-making, feeling that decision makers did not respect community voices. However, residents have not lost hope as they still feel there are many good leaders who are accessible. Hence, it is imperative for the city leadership to improve the transparency of the decision-making process, increase communication with residents, and rebuild the mutual respect required for successful governance.

Implications for Future Research

While this study was an exploratory step towards investigating tourism impacts on resident quality of life and subsequent support for tourism, much work is still needed. The findings of this study support the future inclusion of quality of life as a distinct construct in resident perceptions and attitudinal studies, as they are complex and can be evaluated from both a personal and community perspective. However, it is imperative to determine the appropriate scale of measurement. Furthermore, it has been suggested that not all domains of quality of life are of equal importance, yet weighting remains a disputed topic (Cummins, 2002; Hagerty et al. 2001; Russell, Hubley, Palepu & Zumbo, 2006; Trauer & MacKinnon, 2001; Wu & Yao, 2006). As quality of life has consistently been conceptualized as a multidimensional construct, and

findings have consistently shown that specific domains are responsible for greater portions of explained variance, the issue of weighting requires further attention.

Refinement of the tourism impact construct is also warranted. While several researchers have undertaken sophisticated and rigorous development procedures to create tourism impact scales (Andereck & Jurowski, 2006; Ap & Crompton, 1998; Choi & Sirakaya, 2005; Lankford & Howard, 1994), they have resulted in a variety of dimensions, which makes it difficult for direct comparative analysis. Perhaps, this lack of consistency should act as an impetus for more qualitative work in the area of tourism impacts. More specifically, research is warranted in urban environments, as it is difficult for residents to distinguish between the effects of tourism versus other influences as tourism activities are wholly integrated into other urban physical, behavioral and functional patterns (Gilbert & Clark, 1997). While the present study endeavored to respond to a gap in the literature within the context of a European urban environment, it is recommended that this research be further refined and duplicated in similar urban locations in order to gain a better understanding of the interplay between tourism impacts, residents' quality of life, and overall support for tourism.

Based on the results of this study the following recommendations have been proposed:

- The present study proposed a conceptual model to focus on the examination of the effect of perceived tourism impacts on resident quality of life and subsequent support for tourism. As previous research has also documented antecedents of tourism perceptions and/or support, such as demographic variables, industry involvement (economic, decision making, knowledge, contact with tourists, distance residents live from tourism center), community attachment, and state of the economy, the model should be expanded to include such factors.
- The operationalization of resident quality of life should be based on established domains from the social indicator literature that represent global quality of life. A

global measure alone is not sufficient as it is too abstract and the homeostatic control regulates wellbeing at a fairly consistent level.

- The current findings noted significant differences based on the scale of measurement with regard to quality of life hence, future research must be cognizant of the important distinction between personal and community quality of life.
- Improvements in construct measurement are still needed with regards to tourism impact indicators. Although the traditional three dimensions of sustainability are consistently used in the conceptualization of impacts, fit indices in the present study warrant further attention.
- This study underscores the importance of including an institutional dimension that addresses the social and political structures necessary to plan, implement, and manage the sustainable use of community resources.

While various authors and agencies have proposed the idea of a quadruple bottom line with regard to sustainability, there have been differences in what is considered the fourth pillar. For example in a conceptual framework for climate change mitigation in the tourism sector the United Nations Environmental Programme and the UNWTO (2007) suggested climate responsiveness as a possible fourth pillar. However, this is a response behavior in the context of climate change/adaptation and tourism and can be conceptualized as a sub-dimension of the environmental pillar. As previously mentioned, the World Bank and the OECD have advocated for the inclusion of an institutional pillar. The later approach is adopted for this study and an institutional dimension was included in the sustainability framework. From a theoretical standpoint, one could advocate that the institutional dimension is perhaps one of capacity building as conceptualized by Alaerts, Blair and Hartvelt (1991) which enables an appropriate social, political and legal framework. Institutional development includes community participation and human resource development to strengthen the managerial systems needed to plan, implement and manage the objectives of sustainable development.

Delimitations

The present study was delimited to the residents of Cologne, Germany and hence findings may be limited in generalizability to similar communities, particularly urban, mature destinations. Furthermore, results of the present study should be interpreted with some caution as it was exploratory and may not have included all predictors or mediator variables. However, the aim of the study was to focus on the relationship between resident perceptions of tourism impacts and resident quality of life, and subsequent overall support for tourism.

Limitations

Resident perceptions regarding tourism impacts were the basis of this research; therefore, results do not represent actual tourism sustainability in Cologne. Furthermore, perceived impacts were prescribed by the researcher based on an extensive literature review, yet may not have represented all of the issues pertinent to Cologne. Qualitative interviews with residents and other stakeholder groups could have added to a more holistic understanding of the impact of tourism on personal and community quality of life. However, this was not within the scope of the present study due to time and resource limitations. Furthermore, self reported values could have led to some degree of social desirability bias. Although respondents were assured there were no correct answers, participants may have biased their responses toward what they perceived as correct.

APPENDIX A
FILTER QUESTION AND INFORMED CONSENT

“Hello. Do you live within the Cologne city limits? I am a doctoral student at the University of Florida and as part of my dissertation, I am asking the residents of Cologne to participate in a survey regarding tourism and quality of life. Do you possibly have a few minutes time?”

If the person declined they were politely thanked and a non-response recorded. If the resident replied positively then the protocol continued: “Are you at least eighteen years of age?” If not, the potential participant was thanked and told they were unfortunately too young to participate, otherwise the following informed consent was offered: “The survey should take approximately ten to twelve minutes and I assure you that all your responses will be completely anonymous. There are no anticipated risks, compensation or other direct benefits to you as a participant in this survey. You are free to withdraw your consent and may discontinue your participation at any time without consequences. Again, I assure you that all of your responses are completely confidential and anonymous.” After the interview, the participants were thanked for their participation and the generosity of their time.

APPENDIX B QUESTIONNAIRE ENGLISH VERSION

Resident Attitudes to Tourism & Quality of life Survey Cologne, Germany

Date: _____ Time: _____ AM/PM District: _____ Survey #: _____

SECTION 1: Resident quality of life

I am going to ask how satisfied you feel, on a scale from 0 to 10. On this scale, 0 means you feel completely dissatisfied. 10 means you feel completely satisfied. The middle of the scale is 5, which means you feel neutral (i.e. neither satisfied nor dissatisfied).

Completely unsatisfied	Neutral	Completely satisfied
0	5	10

Thinking about your own life and personal circumstances, **how satisfied are you with:**

- | | |
|--|---|
| 1. your life as a whole? | () () () () () () () () () () () () |
| 2. your standard of living? | () () () () () () () () () () () () |
| 3. your health? | () () () () () () () () () () () () |
| 4. what you are achieving in life? | () () () () () () () () () () () () |
| 5. your personal relationships? | () () () () () () () () () () () () |
| 6. how safe you feel? | () () () () () () () () () () () () |
| 7. your future security? | () () () () () () () () () () () () |
| 8. your spirituality or religion? | () () () () () () () () () () () () |
| 9. feeling part of your community? | () () () () () () () () () () () () |
| 10. Thinking now not about your own life, but about the situation in Cologne generally, how satisfied are you with: | |
| 10. your life in Cologne? | () () () () () () () () () () () () |
| 11. the state of the environment in Cologne? | () () () () () () () () () () () () |
| 12. the economic situation in Cologne? | () () () () () () () () () () () () |
| 13. the social conditions in Cologne? | () () () () () () () () () () () () |
| 14. government in Cologne? | () () () () () () () () () () () () |
| 15. business in Cologne? | () () () () () () () () () () () () |
| 16. local security in Cologne? | () () () () () () () () () () () () |

SECTION 2: Position towards tourism in Cologne

This section asks you to rate your feelings towards tourism in Cologne on a scale from 1 to 7. On this scale 1 =strongly disagree, 2=disagree, 3=somewhat disagree 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree.

strongly disagree	strongly agree
1	7

- | | |
|---|---|
| 1. The current level of tourism development in Cologne is appropriate | () () () () () () () () () () () () |
| 2. The tourism sector in Cologne is currently not sustainable enough | () () () () () () () () () () () () |
| 3. I support the active encouragement of tourism in Cologne | () () () () () () () () () () () () |
| 4. Local government should restrict tourism development in Cologne | () () () () () () () () () () () () |

SECTION 3: Perceived tourism impacts in Cologne

This section asks you to rate your feelings towards each statement regarding tourism in Cologne on a scale from 1 to 7. On this scale 1 =strongly disagree, 2=disagree, 3=somewhat disagree 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree.

strongly disagree	strongly agree
1	7

- | | |
|--|---|
| 1. Tourism improves our standard of living | () () () () () () () () () () () () |
| 2. Tourism negatively impacts the quality of our natural environment | () () () () () () () () () () () () |
| 3. Tourism creates job opportunities for local people | () () () () () () () () () () () () |
| 4. Tourism has increased community services (restaurants, shopping, cultural facilities) | () () () () () () () () () () () () |
| 5. Tourism negatively impacts the quality of our historic buildings & monuments | () () () () () () () () () () () () |
| 6. Residents have opportunities to get involved in tourism decision making | () () () () () () () () () () () () |
| 7. Tourism increases the communities tax revenue | () () () () () () () () () () () () |
| 8. Tourism negatively impacts our communities character | () () () () () () () () () () () () |
| 9. Tourism decreases the quality of local services to the community (emergency & utilities) | () () () () () () () () () () () () |
| 10. Tourism increases traffic & parking congestion in Cologne | () () () () () () () () () () () () |
| 11. Tourism provides an incentive for the preservation of our natural environment | () () () () () () () () () () () () |
| 12. Tourism is good for our communities economy | () () () () () () () () () () () () |
| 13. Tourism provides cultural exchange and increases cultural understanding | () () () () () () () () () () () () |
| 14. Local friendliness has decreased due to tourism | () () () () () () () () () () () () |
| 15. Tourism decreases the quality of employment in this area | () () () () () () () () () () () () |
| 16. Local traditions and practices have been conserved or restored due to tourism | () () () () () () () () () () () () |
| 17. Tourism provides an incentive for the preservation of our historic buildings & monuments | () () () () () () () () () () () () |

APPENDIX C QUESTIONNAIRE GERMAN VERSION

Umfrage der Kölner Bewohner zum Thema Lebensqualität

Datum: _____ Uhrzeit: _____ AM/PM Stadtteil: _____ Umfrage #: _____

Teil 1: Lebensqualität der Einwohner

Beginnen wir zunächst mit Ihren Lebensumständen. Ich werde Sie fragen wie zufrieden Sie sind, auf einer Skala von 0 bis 10. Auf dieser Skala bedeutet 0, dass Sie vollkommen unzufrieden sind. 10 bedeutet, dass Sie vollkommen zufrieden sind. Die Mitte der Skala ist 5 und bedeutet Sie sind weder zufrieden noch unzufrieden (d.h. neutral).

Vollkommen unzufrieden	0	1	2	3	4	5	6	7	8	9	10	Vollkommen zufrieden
					Neutral							

Wenn Sie an Ihr eigenes Leben und Ihre persönliche Situation denken, **wie zufrieden sind Sie:**

- | | |
|--|---|
| 1. mit Ihrem Leben im ganzen? | () () () () () () () () () () () () |
| 2. mit Ihrem Lebensstandard? | () () () () () () () () () () () () |
| 3. mit Ihrer Gesundheit? | () () () () () () () () () () () () |
| 4. mit dem, was Sie in Ihrem Leben erreichen? | () () () () () () () () () () () () |
| 5. mit Ihren persönlichen Beziehungen? | () () () () () () () () () () () () |
| 6. damit, wie sicher Sie sich fühlen? | () () () () () () () () () () () () |
| 7. mit Ihrer Sicherheit in der Zukunft? | () () () () () () () () () () () () |
| 8. mit Ihrer Spiritualität oder Ihrer Religion? | () () () () () () () () () () () () |
| 9. damit wie Sie sich als Teil Ihrer sozialen Gemeinschaft fühlen? | () () () () () () () () () () () () |

Bitte denken Sie jetzt nicht an Ihr eigenes Leben sondern an die Situation in Köln allgemein. **wie zufrieden sind Sie:**

- | | |
|---|---|
| 10. mit dem Leben in Köln? | () () () () () () () () () () () () |
| 11. dem Zustand der Umwelt in in Köln? | () () () () () () () () () () () () |
| 12. der wirtschaftlichen Situation in Köln? | () () () () () () () () () () () () |
| 13. den sozialen Bedingungen in Köln? | () () () () () () () () () () () () |
| 14. der Regierung in Köln? | () () () () () () () () () () () () |
| 15. der wirtschaftlichen Aktivität in Köln? | () () () () () () () () () () () () |
| 16. der örtlichen Sicherheit in Köln? | () () () () () () () () () () () () |

Teil 2: Einstellung zu dem Tourismus in Köln

Bitte bewährten Sie Ihre Einstellung zu dem Tourismus in Köln auf einer Skala von 1 bis 7. Auf dieser Skala ist 1 = stimme ganz und gar nicht zu, 4 = neutral, 7 = stimme voll und ganz zu.

Stimme ganz & gar nicht zu	1	2	3	4	5	6	7	Stimme voll & ganz zu
-------------------------------	---	---	---	---	---	---	---	--------------------------

- | | |
|--|---------------------------------|
| 1. Die derzeitige Entwicklung des Tourismus in Köln ist angemessen. | () () () () () () () () |
| 2. Die Tourismusbranche in Köln ist zurzeit nicht aktiv genug im Bereich Nachhaltigkeit. | () () () () () () () () |
| 3. Ich unterstütze die aktive Förderung des Tourismus in Köln. | () () () () () () () () |
| 4. Die Stadtverwaltung sollte die Entwicklung des Tourismus in Köln begrenzen. | () () () () () () () () |

Teil 3: Auswirkungen des Tourismus in Köln

Bitte bewährten Sie Ihre Einstellungen zu den folgenden Aspekten des Tourismus in Köln auf einer Skala von 1 bis 7. Auf dieser Skala ist 1 = stimme ganz und gar nicht zu, 4 = neutral, 7 = stimme voll und ganz zu

Stimme ganz & gar nicht zu	1	2	3	4	5	6	7	Stimme voll & ganz zu
-------------------------------	---	---	---	---	---	---	---	--------------------------

- | | |
|---|---------------------------------|
| 1. Tourismus verbessert unseren Lebensstandard. | () () () () () () () () |
| 2. Die Qualität unserer natürlichen Umwelt wird durch den Tourismus negativ beeinflusst. | () () () () () () () () |
| 3. Der Tourismus schafft Arbeitsplätze für Einwohner unserer Stadt. | () () () () () () () () |
| 4. Das Freizeitangebot unserer Stadt wurde durch den Tourismus erweitert. | () () () () () () () () |
| 5. Die Qualität unserer historischen Gebäuden und Denkmäler wird durch den Tourismus negativ beeinflusst. | () () () () () () () () |
| 6. Einwohner haben die Gelegenheit sich in die Tourismus Entscheidungen der Stadt einzubringen. | () () () () () () () () |
| 7. Tourismus steigert die lokalen Steuereinnahmen. | () () () () () () () () |
| 8. Der Charakter unserer Gemeinde wird durch den Tourismus negativ beeinflusst. | () () () () () () () () |
| 9. Der Tourismus mindert die Qualität der lokalen Dienstleistungen (zB. Polizei, Rettungsdienste, Stromversorgung). | () () () () () () () () |
| 10. Tourismus steigert das Verkehrs- und Parkaufkommen in Köln. | () () () () () () () () |
| 11. Der Tourismus bietet einen Anreiz für die Erhaltung unserer natürlichen Umgebung. | () () () () () () () () |
| 12. Tourismus ist gut für unsere lokale Wirtschaft. | () () () () () () () () |
| 13. Tourismus verstärkt den kulturellen Austausch und fördert kulturelle Verständigung. | () () () () () () () () |
| 14. Die Freundlichkeit vor Ort hat durch den Tourismus abgenommen. | () () () () () () () () |
| 15. Die Qualität der Stellenangebote wird durch den Tourismus vermindert. | () () () () () () () () |
| 16. Lokale Traditionen und Bräuche wurden bewahrt oder wiederbelebt durch den Tourismus. | () () () () () () () () |

	1	2	3	4	5	6	7
17. Der Tourismus bietet einen Anreiz für die Erhaltung unserer historischen Gebäuden und Denkmäler.	()	()	()	()	()	()	()
18. Das kulturelle Angebot unserer Stadt wird durch den Tourismus erweitert.	()	()	()	()	()	()	()
19. Durch den Tourismus steigt die Kriminalitätsrate.	()	()	()	()	()	()	()
20. Durch den Tourismus steigt die Nachfrage nach lokale Waren.	()	()	()	()	()	()	()
21. Der Tourismus hat die Infrastruktur der Stadt verbessert (Strassen, öffentl. Verkehr, Stromversorgung)	()	()	()	()	()	()	()
22. Die Entwicklung der Stadt entspricht dem Leitbild Köln 2020.	()	()	()	()	()	()	()
23. Tourismus verstärkt die Umweltverschmutzung (z.B. Lärm, Verschmutzung).	()	()	()	()	()	()	()
24. Durch den Tourismus sind wir noch stolzer von Köln geworden.	()	()	()	()	()	()	()
25. In den letzten Jahren ist unsere Stadt überfüllt durch die vielen Touristen.	()	()	()	()	()	()	()
26. Der Tourismus hat unsere Lebenshaltungskosten erhöht.	()	()	()	()	()	()	()
27. Die Kölner Einwohner genießen ein grösseres Freizeit Angebot durch den Tourismus.	()	()	()	()	()	()	()
28. Die Erschöpfung von Wasser und Energie Ressourcen wird durch den Tourismus verstärkt.	()	()	()	()	()	()	()

Einstellungen zu Aspekten öffentlicher Einrichtungen in Köln:

1. Ich vertraue unserem politischen System.	()	()	()	()	()	()	()
2. Ich vertraue unserem Rechtssystem.	()	()	()	()	()	()	()
3. Es gibt viele gute Ideengeber und engagierte Menschen in unserer Stadt.	()	()	()	()	()	()	()
4. Der Zugang zu der Stadtverwaltung oder Stadtleitung ist für mich möglich.	()	()	()	()	()	()	()
5. Einwohner haben die Gelegenheit die Entscheidungen der Stadt zu beeinflussen.	()	()	()	()	()	()	()
6. Die Meinungen der Einwohner werden von Entscheidungsträgern der Stadt respektiert.	()	()	()	()	()	()	()
7. Der Entscheidungsprozess in unserer Stadt ist transparent für alle.	()	()	()	()	()	()	()
8. Es herrscht eine gute Kommunikation zwischen den Einwohnern und den Entscheidungsträgern der Stadt.	()	()	()	()	()	()	()

Teil 4: Anbindung / Angehörigkeitsgefühle der Stadt Köln

In diesem Teil werden Sie gebeten Ihre Gefühle der Zugehörigkeit oder Ihrer Anbindung zu Köln auf einer Skala von 1 bis 7 zu bewerten. Auf dieser Skala ist 1 = stimme ganz und gar nicht zu, 2 = stimme nicht zu, 3 = stimme eher nicht zu, 4 = neutral, 5 = stimme eher zu, 6 = stimme zu, 7 = stimme voll und ganz zu.

	1	2	3	4	5	6	7
1. Ich fühle mich als ein Teil von dieser Stadt.	()	()	()	()	()	()	()
2. Die Menschen hier kümmern sich um ihre Stadt und deren Entwicklung.	()	()	()	()	()	()	()
3. Dies ist eine Stadt in der die Menschen sich gegenseitig unterstützen.	()	()	()	()	()	()	()
4. Wenn ich von hier wegziehen müsste, würde es mir sehr leid tun.	()	()	()	()	()	()	()
5. Die Menschen hier kommen gut miteinander aus.	()	()	()	()	()	()	()
6. Hier herrscht ein starker Gemeinschaftsinn.	()	()	()	()	()	()	()
7. Die Freundschaften und Verbindungen die ich hier habe sind mir wichtig.	()	()	()	()	()	()	()

Teil 5: Demographie

- Sind Sie? () Männlich () Weiblich 2a. Würde Sie uns bitte Ihr Alter nennen? _____ Jahre.
- Falls Sie kein genaues Alter geben möchten: () 18-25 () 26-35 () 36-45 () 46-55 () 56-65 () 66-75 () 76-85 () 86+
- Welches ist Ihr höchster Bildungsabschluss?
 Volks-, Hauptschule Realschule / Mittlere Reife (Fach-) Abitur
 (Fach-) Hochschule Studium Sonstiges: _____
- Würden Sie uns bitte sagen, in welche Einkommensgruppe ihr Haushalt gehört? (€ Brutto)
 Bis 1.000 1.001 – 1.500 1.501 – 2.000 2.001 – 2.500 2.501 – 3.000
 3.001 – 3.500 3.501 – 4.000 4.001 – 4.500 4.501 – 5.000 Mehr als 5.001
- Welchen Beruf üben Sie zurzeit aus?
 Schüler(in) / in Ausbildung / Studierende(r) Beamte(r) im einfachen oder mittleren Dienst
 Arbeiter(in) Beamte(r) im gehobenen oder höheren Dienst
 Angestellte(r) Selbstständige(r) / Freiberufler(in)
 Leitende(r) Angestellte(r) Hausfrau / -mann
 Rentner(in) / Pensionär(in) Nicht berufstätig / arbeitslos
 Sonstiges: _____
- Profitieren Sie vom Tourismus? () Direkt () Indirekt () Teilweise () Gar nicht () Ungewiss
- Wie oft haben Sie direkten Kontakt mit Touristen? () Nie () Selten () Regelmässig () Ungewiss
- Wie weit entfernt (in km) wohnen Sie von dem Touristenzentrum? (Altstadt) _____ km
- Wie lange leben Sie bereits in Köln? _____ Jahre

Vielen Dank für Ihre Beteiligung!

Sollten Sie Fragen zu dieser Studie haben, so wenden Sie sich bitte an Frau Meyer:
per Telefon: (0163) 279 5894 oder per email: Imeyer@hhp.ufl.edu

APPENDIX D
INSTITUTIONAL REVIEW BOARD APPROVAL



PO Box 112250
Gainesville, FL 32611-2250
352-392-0433 (Phone)
352-392-9234 (Fax)
irb2@ufl.edu

DATE: October 27, 2009

TO: Louisa Meyer
12832 SW 14th Avenue
Newberry, FL 32669

FROM: Ira S. Fischler, PhD, Chair 
University of Florida
Institutional Review Board 02

SUBJECT: Approval of Protocol #2009-U-1093

TITLE: Sustainable Tourism Development and Quality of Life: An Exploratory Investigation of Tourism Impacts on Resident Quality of Life in Cologne, Germany

SPONSOR: None

I am pleased to advise you that the University of Florida Institutional Review Board has recommended approval of this protocol. Based on its review, the UFIRB determined that this research presents no more than minimal risk to participants, and based on 45 CFR 46.117(c), An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) *That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern;* or (2) *That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.*

The IRB authorizes you to administer the informed consent process as specified in the protocol. If you wish to make any changes to this protocol, **including the need to increase the number of participants authorized**, you must disclose your plans before you implement them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

This approval is valid through **October 22, 2010**. If you have not completed the study by this date, please telephone our office (392-0433), and we will discuss the renewal process with you. It is important that you keep your Department Chair informed about the status of this research protocol.

ISF:dl

APPENDIX E
SATORRA-BENTLER CHI-SQUARE DIFFERENCE TEST

Tourism impact measurement model	Modified tourism impact measurement model
Chi-square: 223.620 Degrees of freedom: 48 Scaling Correction factor: 1.14	Chi-square: 165.613 Degrees of freedom: 47 Scaling Correction factor: 1.147
<p>Chi-square difference test scaling correction factor:</p> $\frac{(48 \times 1.14) - (47 \times 1.147)}{48 - 47} = .811$ <p>Satorra-Bentler scaled chi-square difference test:</p> $\frac{(223.620 \times 1.14) - (165.613 \times 1.147)}{0.811} = 80.12$ <p>$\chi^2_{(.05,1)} = 3.84$ $80.12 > 3.84$ Therefore reject the simpler (or nested) structural model in favor of the modified (more complex) model.</p>	

APPENDIX F
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Principles and objectives of sustainable development table on p.8

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BIOGRAPHICAL SKETCH

Louisa Meyer was born in 1974 in Germany. She grew up and attended schools in Germany, England, Spain, and the United States. In 1997, she graduated with a bachelor's degree in sociology with a concentration in business and a minor in international studies from Wake Forest University, North Carolina. After working as a project manager for the Y2K project in London, she worked in hotel management in Germany for two years. During this time, she took a sabbatical in Spain to improve her language skills and worked in the tourism industry as an assistant dive master. Having completed the Y2K project in London, Louisa returned to her hometown in Gainesville, Florida to attend the University of Florida in pursuit of a master's degree in recreational studies with a specialization in tourism.

While obtaining her master's degree, Louisa worked as a graduate assistant in the Department of Recreation, Parks, and Tourism. This position gave her the opportunity to participate in various research projects, present at a variety of conferences and instruct an undergraduate course. Louisa completed her master's degree in December 2002 and returned to Germany where she was the Managing Director for a small family owned and operated hotel chain. In 2006, Louisa married Mario and returned to the University of Florida to pursue her Doctoral degree. During her studies, she was the Fellow to the Center for Tourism Research and Development for two years, where her responsibilities include managing interdisciplinary research projects, coordinating work for members of the Center and the Advisory Board, and assisting in general administration of the Center. Concurrently, Louisa and her husband Mario established and managed a successful European Bistro in Gainesville. During this time, Louisa also had the opportunity to teach an undergraduate course in tourism development. In 2007,

Louisa and Mario were blessed with the birth of their son Liam. The young family moved back to Germany in late 2009 and Louisa received her PhD in the spring of 2011.

Louisa's research interests include sustainable tourism development, environmental, social and cultural issues, marketing of tourism operations and destinations, and hospitality operations.