Development of a Structural Model for Tourism Destination Competitiveness from Stakeholders' Perspectives

by

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(ABSTRACT)

This study was conducted to theoretically develop and empirically test a structural equation model of tourism destination competitiveness from the tourism stakeholders' perspective. The proposed hypotheses that attempted to identify the structural relationships among the five constructs in the model were examined through a series of analyses in LISREL: 1) perceived tourism development impacts, 2) environmental attitudes, 3) place attachment, 4) development preferences about destination attractions/resources, and 5) support for destination competitive strategies

The principle guideline of this study was that the support of tourism stakeholders for tourism planning and development is a key element for the successful operation, management, and long-term sustainability of tourism destinations. Tourism stakeholders' solid knowledge and experiences in tourism management and industry, professional involvement and participation in tourism planning and development, and long-term community observation and interactions have played an important role in tourism destination management.

A total of 646 usable questionnaires were collected from randomly selected tourism stakeholders in the state of Virginia. From the results of hypotheses tests, tourism stakeholders' preferences about tourism attractions/ resources development are a function of perceived tourism development impacts as well as place attachment. The more stakeholders' preference for developing tourism attractions/resources, the more likely they were to support destination competitive strategies such as marketing efforts and activities, and destination management organizations' role. An additional finding that was not hypothesized indicated that tourism stakeholders, who have perceived benefits from tourism development, particularly in its economic and cultural aspects, are likely to support enhancement strategies for destination competitiveness. The implications of these findings can be applied to the enhancement of tourism destination competitiveness.

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DEDICATION

This dissertation is dedicated to the memory of my mother. I miss you, Mom.

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INTRODUCTION

This study offers an integrated approach to understanding the competitiveness of tourism destinations, and attempts to extend the theoretical and empirical evidence about the structural relationships among the following constructs: 1) tourism development impacts, 2) environmental attitudes, 3) place attachment, 4) development preferences about destination attractions/resources, and 5) support for enhancement strategies for destination competitiveness. This study was approached from the perspective of tourism stakeholders about tourism destination competitiveness. Their perceptions, attitudes and behaviors in terms of tourism were assessed as critical sources of testing the proposed structural model in this study.

The scope of this study was tourism destinations and communities in Virginia, where nature-cultural based and man-made tourism attractions and products are found. The guiding principle of this study is that destination competitiveness can be improved by the appropriate matches between tourism attractions/resources and the enhancement strategies of destination competitiveness supported by tourism stakeholders.

The basic premise of the study is that the support of tourism stakeholders is essential for the development, successful operation, and long-term sustainability of tourism. If tourism stakeholders receive benefits from tourism impacts, express positive environmental attitudes, and perceive a high attachment to their community, they will prefer tourism development and will support destination competitive strategies. The support of destination attraction development and destination competitive strategies by tourism stakeholders can enhance the possibility of successful tourism in a region and could help to improve destination competitiveness. As a result, tourism destination communities will receive social and economic benefits from enhanced tourism destination competitiveness. Tourists and visitors will also receive more benefits from travel experiences if the tourism destination and attractions are appropriately developed and promoted.

BACKGROUND OF THE STUDY

In the tourism literature, researchers have identified and evaluated tourism attractions/resources. The most common objective of tourism studies has been to provide more useful knowledge about an attraction inventory for tourism planning, development, and marketing in a given region, or site. Many different methods and perspectives have been utilized to describe the components of tourism attractions/resources. Subsequently, theories, models, and frameworks of tourism attraction systems have been developed and discussed (Fondeness, 1990; Leiper, 1990; Lew, 1987, 1994). Such research efforts have resulted in critical information and sources for tourism planners and marketers to increase destination market values and competitiveness.

Generally, tourism researchers have evaluated tourism attractions/resources from three different perspectives: 1) the ideographic perspective, 2) the organizational perspective, and 3) the cognitive perspective (Lew, 1987, 1994). The ideographic perspective is related to the supply component and often assesses tourism attractions/ resources by asking public and private tourism professionals such as tourism stakeholders to ascertain which tourism resources or elements are the most important to tourists and to destination attractiveness. The organizational perspective is associated with the linkages component that focuses on the spatial and temporal nature of tourism attractions/ resources. Lastly, the cognitive perspective is associated with the demand component. Most research from this perspective deals with the degree to which tourists are able to take risks in their travel experiences, depending on the different types of tourism attractions available. Any single approach may not cover and evaluate the entire tourism attraction system. Also, there are some limitations to each approach in terms of inappropriate classification methods (Leiper, 1990). Thus, cross perspectives or a combination of these perspectives are suggested.

Basically, tourism destination is the essential component of a tourism system, and constitutes multifaceted elements and attractions such as social/natural resources, culture, transportation, facilities, services, and other infrastructures. These destination attributes have been considered as key components in both the tourism origin-destination system and the tourism functional system.

In the tourism origin-destination system (Uysal, 1998), the tourism literature usually considers origin as the tourism "demand" side, while the destination area refers to the tourism "supply" side. Origin is the tourist-generating zone that comprises potential and actual visitors. Destination is the tourist-receiving zone that is visited by tourists. Tourism destinations vary in size, scale, and target markets so that some coherent structures for their planning, development and management are suggested. Gunn (1994) said that in order to satisfy the tourism demand market, destinations should provide variety in types of products in order to achieve the ultimate goal of tourism development. Additionally it has been suggested that the success of tourism development can be achieved according to how well the supply component matches the demand side.

Another approach to tourism systems is the linkage of attractions, services, transportation, and promotion. This is referred to as the functioning tourism system. This view of the tourism system describes how each component critically influences the destination selection process and visitors' travel experiences and activities (Fesenmaier & Uysal, 1990). The environment of tourism destinations contains dynamic and static components, and supply development must balance demand (Gunn, 1994). In this system, the components are not only interdependent, but also dependent upon the characteristics of the market. Thus, in order to meet the needs of the demand market, tourism planning and development should be approached by improving the supply-demand match.

These systematic tourism views provide a solid foundation for understanding the roles and values of tourism attractions/resources in the tourism market. Subsequently, it has been suggested that tourism destinations should be developed in order to effectively deliver tourism services and products to the tourism markets. The overall destination attractiveness, and integrity of tourism experiences and activities should be equal to or surpass those of other destination competitors in order to be sustained. However, because of unevenly distributed tourism attractions/resources, as well as limited availability for tourism development, each destination should be assessed in terms of its own strengths and weaknesses, and differing values and competitiveness in the tourism markets. Thus, the inventory and evaluation of tourism attractions/resources often becomes an important subject.

Tourism attractions/resources have been assessed to evaluate their contributions to destination attractiveness (Ferrario, 1979; Formica, 2000; Gearing, Sward, & Var, 1979; Hu & Ritchie, 1993; Kozak & Rimmington, 1998; Leiper, 1990; Var, Beck, & Loftus, 1977; Witt & Moutino, 1994; Mitchell, 1979). Often, these analyses have been done from the tourism demand perspectives. It is believed that the attributes and elements of tourism destinations are the basic criteria of tourist preferences and are the major motivators or determinants of travel decision choices (Driscoll, Lawson, & Niven, 1994; Fodness, 1990; Murphy, Pritchard, & Smith, 2000; Ross, 1994).

Additionally, attractions/resources have been considered as major determinants or factors in tourism destination competitiveness (Ritchie & Crouch, 1993, 2000; Mihalič 2000). An understanding of the key determinants of market competitiveness is critical to sustain destination market growth and vitality (Hassan, 2000). The most common examples of destination attractions/resources are natural/cultural components, heritage/historical resources, supporting facilities/services, infrastructure, sports/ recreation activities, transportation/accessibility, and cost. It has been suggested that knowledge of these components of destination attractions/resources is not only basic to understanding tourism planning, but also is essential for successful tourism development (Gunn, 1994; Pearce, 1997). Furthermore, maintaining the quality of tourism resources is important to the competitiveness of most types of tourism destinations (Inkeep, 1991; Go & Govers, 2000).

An abundance of natural resources, or other attractions possessed by a destination could give competitive advantage to the destination. The ability of a given region or country to deploy its resources so as to add value to those resources, is also a comparative advantage (Crouch & Ritchie, 1999; Go & Govers, 2000; Hassan, 2000; Ritchie & Crouch, 2001). It should be noted that competitive advantages relate to a destination's ability to use tourism resources effectively over the long term, while comparative advantages constitute the tourism resources available to a destination (Crouch & Ritchie, 1999, p. 143). Specifically, the advantages of tourism destinations are qualifying determinants of visitation, as well as the fundamental reasons why potential tourists choose one destination over another.

Thus, creating and integrating value-added products to sustain tourism resources is necessary to maintain or enhance destination competitiveness, given the multiplicity of tourism destination planning and development efforts. Accordingly, efficient and effective delivery strategies are required to sustain and enhance destinations' market value over time and over other competitors (Hassan, 2000). Depending upon what and how tourism attractions develop value for tourists, and also how well destination marketing and promotional programs are managed, tourism destinations will take on a successful position in the tourism market. And further, successful tourism will provide destination communities with more social and economic welfare.

STATEMENT OF THE PROBLEM

In recent tourism literature, researchers have introduced concepts and relevant models about tourism destination competitiveness (Crouch & Ritchie, 1999; Evan & Johnson, 1995; Hassan, 2000; Kozak, 2001; Ritchie & Crouch, 1993; Thomas & Long, 2000). Most of these studies have focused on how effectively and efficiently destination competitiveness can be improved to respond to escalating market competition. It has been also discussed that creating or integrating value-added destination products and services is a basic step in enhancing tourism attractiveness. Accordingly, understanding the driving forces of success as well as developing suitable competitive strategies is of fundamental importance to improve regional or national destination competitiveness.

Particularly, Heath, and Wall (1992) noted that the distinctive quality or conditions of tourism attractions and resources in a given region provide an understanding of the strengths and weaknesses of regional tourism resources. Subsequently, evaluation or identification of a distinctive competence in a specific region provides a clear foundation and direction for the tourism planning process.

In the tourism-planning context, tourism attractions and resources have been considered as a function of successful supply factors in achieving destination or organizations' objectives. Additionally, tourism attractions such as competitive forces or resources have been evaluated and categorized in various ways so that supply

components can effectively match the diverse tourism market demands (Gunn, 1988; Inkeeps, 1991; Lew, 1987).

The most common evaluation method of tourism attractiveness is from visitors' or tourists' perspectives. It has been argued that this approach is somewhat limited due to the short period of visiting time, and a limited knowledge of or familiarity with attractions existing in a given region (Formica, 2000; Milman & Pizam, 1995). Thus, Liu (1988) and Formica (2000) suggested that rather than using visitors' perspectives, the use of tourism experts such as tourism stakeholders have potential benefits and advantages. Their solid knowledge and experiences of the entire portfolio of existing tourism resources and attractions is useful in evaluating destination attractiveness and competitive resources. The professional planning involvement and experiences, long-term community observations, and interactions with tourists are also reliable sources of assessing tourism attractiveness and resources. Particularly, tourism stakeholders' evaluations can help to discover community tourism products more appropriately. Thus, the amalgam of tourism attractions and resources that a community wishes to present to the tourism market can be identified (Getz, 1987).

However, even though studies on destination communities' perceptions, attitudes, and behavior in tourism planning and involvement have been conducted from various perspectives, the dynamic and complex natures of the factors of destination communities, especially, tourism stakeholders' opinions about tourism development preferences and competitive strategies have not been clearly addressed yet.

Furthermore, although a number of studies have addressed concepts and relevant models concerning destination competitiveness, no empirical study has developed an integrative model capable of investigating the destination competitiveness of an area by examining the structural relationships among tourism stakeholders' beliefs and attitudes toward tourism, their development preferences for tourism attractions/resources, and their support of enhancement strategies for destination competitiveness.

In general, most of the existing tourism studies have been conducted by asking local indigenous residents about their favorable or unfavorable attitudes toward tourism planning and development (Doxey, 1975; Dogan, 1989; Perdue, Long, & Allen, 1990; Yoon, 1998). It can be argued that there are various levels of tourism support within a

community. Particularly, tourism stakeholders' opinions and attitudes about the influencing factors of the tourism planning decision-making process, including the perceived tourism development impacts, environmental attitudes, and place attachment, have not been thoroughly explored, and have become a challenging research issue.

Thus, in successful tourism development and management, it is necessary to understand tourism stakeholders' opinions and attitudes toward tourism. Particularly, in a highly competitive tourism destination market, tourism stakeholders' preferences and support for tourism development of destination attractions/resources and enhancement strategies of destination competitiveness should be understood so that the appropriate match or combination of tourism attraction/resources and development strategies can be obtained.

Consequently, given the fact that there is limited empirical research on destination competitiveness, this study developed and empirically tested a destination competitiveness model and its relevant components from the perspectives of tourism stakeholders, so that the information from this study will help tourism planners and policy-makers to build more competitive tourism destinations.

RESEARCH QUESTIONS

If tourism is to contribute to economic, social, and environmental development that is sustainable, tourism attractiveness and resources must be nationally or internationally competitive. Also, if any given tourism destination is more competitive than other destinations, a better quality of tourism products should be produced and distributed to the various or given target markets. Accordingly, more benefits and advantages in terms of travel experiences should be provided to tourists and visitors. Tourism providers and developers should also receive economic and social benefits from enhanced tourism destination competitiveness.

This study explores the interplay of specific factors that affect tourism stakeholders' development preferences in tourism attractions/resources, as well as their support of enhancement strategies for destination competitiveness. Particularly, the following research questions will be addressed in this study.

Research Question 1:

Are tourism stakeholders' development preferences about tourism attractions/resources affected by:

1) Perceived tourism impacts
2) Environmental attitudes, and/or
3) Perceived place attachment

Research Question 2:

Is there a relationship between tourism stakeholders' development preferences about tourism attractions/resources and their support of enhancement strategies for destination competitiveness?

RESEARCH HYPOTHESES

Based on the research questions, four hypotheses were proposed and a structural model was tested to determine how tourism stakeholders' development preferences about tourism attractions/resources affect their support for destination competitive strategies, and also how these tourism stakeholders' development preferences are affected by three constructs, including perceived tourism impacts, attitude toward environmental concerns, and perceived place attachment. Thus, the four hypotheses follow:

H1: There is a positive relationship between tourism stakeholders' perceptions of the benefits of tourism impacts and preferences about tourism attractions/resources development.

H2: There is a positive relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development.

H3: There is a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development.

H4: There is a positive relationship between tourism stakeholders' preferences about tourism attractions/resources development and support for the enhancement strategies of destination competitiveness.

OBJECTIVES OF THE STUDY

The objectives of this study were to develop a theoretical structural model of tourism destination competitiveness and to empirically test the interplay of relationships among the following constructs: 1) perceived tourism impacts, 2) attitudes toward environmental concerns, 3) place attachment, 4) development preferences about destination attractions/resources, and 5) support of enhancement strategies for destination competitiveness. From the tourism stakeholders' perspectives, the study was conducted to address this objective of the study.

THEORETICAL BACKGROUND

Until now, many tourism researchers have utilized social exchange theory to explain why and how people react to and support tourism development. (Ap, 1992; Jurowski, Uysal, & Williams, 1997; Lindberg & Johnson, 1997; Perdue, Long, & Allen, 1990; Yoon, 1999; Yoon, Gursory, & Chen, 2000). Additionally, the empirical findings from these studies have demonstrated that people will act to maximize the benefits and minimize the costs in given situations and environments and also, people who perceive the benefits from tourism to be greater than the costs will be willing to participate in the exchange, and support tourism development.

Subsequently, the logic and propositions of social exchange theory are generally acceptable as a theoretical framework for research on people's reactions to tourism and its development. Particularly, according to Jurowski et al. (1997), people will become involved in exchanges if: 1) the resulting rewards are valued, 2) the continued exchange is likely to produce valued rewards, and 3) perceived costs do not exceed the perceived rewards (Skidmore, 1975). Thus, the basic principles and assumptions of social exchange theory will be applied as the conceptual background in this study.

Social exchange theory has its origin in several disciplines, including anthropology (Levi-Strauss, 1969), economics (Blau, 1968, 1991; Ekeh, 1974), behavioral psychology (Homans, 1991), and social psychology (Chadwick-Jones, 1976).

Accordingly, this theory often has been adapted from one or mixed areas of utilitarian economics, functional anthropology, and behavioral psychology (Turner, 1974, 1986).

In the utilitarian economics of social exchange theory, people are described as "rational, and seeking to maximize their material benefits, or utility, from transactions or exchanges with others in a free and competitive market" (Turner, 1998, p. 249). People will choose a maximum payoff or benefits (less costs) after reviewing all the available alternatives and necessary information in a given unit or market. Additionally, people pursue an exchange of nonmaterial resources such as sentiments, services, and symbols.

From the anthropology perspective, it is recognized that social interaction is achieved through not only an economic or material exchange, but also a symbolic exchange in social relationships. Thus, the social dynamics of culture are reflected in this view of the theory (Turner, 1998). The general assumption of this theory is that people are rationally seeking to maximize benefits and minimize the costs of social relationships, and they will choose the most profitable option among alternative actions.

In the psychological behaviorism perspective, exchange theory is based on the principle that people are reward-seeking organisms pursuing alternatives that will yield the highest reward and the least punishment (Chadwick-Jones, 1976). Psychological reward and punishment are reconciled with economic benefits and costs (Ekeh, 1974). Specifically, psychological rewards (benefits) are defined as exchanged resources that are pleasurable and gratifying, and punishment in terms of costs has been considered as negative feelings of deprivation, or forgone opportunities. Accordingly, two social rewards result from the exchange process, including intrinsic attraction and expression of social approval or agreement, which are fundamental elements of this theory. Consequently, among the above three perspectives of exchange theory, the utilitarian heritage in economic theory as well as psychological behaviorism typically emerge. Then, this theory becomes a modern exchange theory (Turner, 1998).

The implications of social exchange theory provides guiding assumptions for this study, in that it is assumed that people (tourism stakeholders) may receive more benefits (rewards) than costs from tourism. An examination of the interplay of factors given in this study should yield that tourism stakeholders are likely to participate in an exchange with tourism and its development if they believe that they are likely to gain benefits

without incurring unacceptable costs, and subsequently, such inclinations endorse the support of tourism development. Thus, they will pursue actions to maximize their assets (tourism attractions/resources) as well as rationally choose a course of action to obtain their goals.

STRUCTURAL MODEL OF THE STUDY

This study attempted to develop and empirically test a theoretical model of tourism destination competitiveness. Drawn from empirical studies and research as well as concepts and theories, a conceptual structural model is proposed, as shown in Figure 1.1. The structural model in this study describes a logical flow among the constructs by indicating the directions of the causes and effects of the interplay of factors relating to the development preferences about tourism attractions/resources and support of destination competitive strategies.

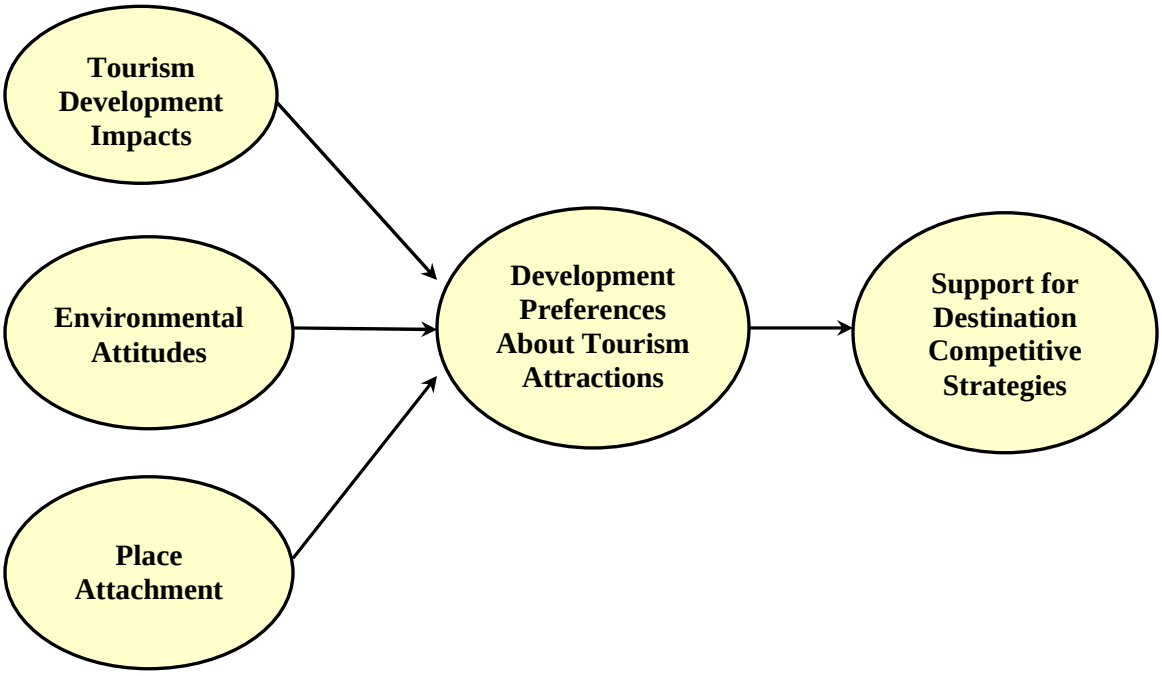


Figure 1.1 Proposed Structural Model of Tourism Destination Competitiveness

The factors or constructs in this structural model include: 1) tourism development impacts, 2) environmental attitudes, and 3) place attachment. Particularly, the support of destination competitive strategy is affected both directly and indirectly by the interplay of these three factors. Additionally, the indirect effect of these factors on destination competitive strategies will be contingent upon the nature of respondents' development preferences about tourism attractions/resources.

As a result, the total effects of preferences about destination competitive strategy can be the result of both direct and indirect effects. Thus, the structural relationships among the proposed constructs were investigated as a major focus of this study.

CONTRIBUTIONS OF THE STUDY

The potential contributions of this study can be discussed from both theoretical and practical standpoints.

Basically, the study contributed to a theoretical enhancement of the current level of knowledge in the existing literature on tourism destination competitiveness. This was achieved by empirically testing the structural relationships among tourism stakeholders' perceptions of the selected factors, preferences about tourism attractions, and destination competitive strategies.

One expected advantage of an improved understanding of these structural relationships is that the reactions of tourism stakeholders to tourism development could be demonstrated. Especially, since little research has focused on tourism destination competitiveness from the viewpoint of tourism stakeholders, this study could provide new insights about how tourism destination competitiveness could be improved by examining the affecting factors such as tourism development impacts, environmental attitudes, and place attachment.

In terms of its practical contribution, the findings of the study could aid in the planning and development of destination competitiveness strategies. Since it has been emphasized that tourism stakeholders' support and participation are among the most important factors in the tourism business, this study could provide information about

tourism stakeholders' perceptions and attitudes about tourism development and destination competitive strategies. Their professional involvement, knowledge, and practical experiences regarding tourism attraction planning and development must be reliable sources of developing tourism planning programs and strategies in order to enhance destination competitiveness.

Finally, this systematic examination of structural relationships among the constructs could facilitate a clearer understanding of the nature of tourism stakeholders' reactions to tourism, so that the results could help tourism planners and policy-makers to develop more appropriate destination products as well as to enhance competitiveness in tourism markets.

ORGANIZATION OF THE STUDY

This chapter introduces the background of the study, and the research problems and questions upon which the study is based. The research objectives are defined and relevant concepts and studies of destination competitiveness are delineated. A description of the structural model to be tested in this study is presented. Contributions of the study are discussed. Operational terminologies and concepts for this study are defined.

Chapter II reviews the literature relevant to tourism destination competitiveness, and each of the proposed constructs. The theoretical background and previous conceptual and empirical research findings are discussed. Chapter III presents the research framework, the research hypotheses to be tested, a detailed discussion of the research design, the development of the survey instrument, sampling, and procedures of data analysis. Chapter IV reports the results of the empirical analyses of the proposed theoretical model that was tested for the hypotheses. Chapter V discusses the findings of the study; the implications and conclusions of the research are delineated, and future research suggestions and directions based on this study are presented.

FUNCTIONAL DEFINITIONS OF TERMS

Competitiveness: It refers to combining both assets and processes where assets are inherited (e.g. natural resources) or created (e.g. infrastructures) and processes transform assets into economic results (Crouch & Ritchie, 1999).

Environmental Attitude: The degree to which people hold beliefs and attitudes about the relationship between humans and the environment.

Place Attachment: The extent to which individuals value a given place; the strength of association between individuals and their residential environments, and the individual's emotional/symbolic as well as functional feelings about and relationships with a given place (McAndrew, 1998; Williams & Roggenbuck, 1989; Warzecha & Lime, 2001).

Tourism Attractions: The various types of tourism products and services that tourism destinations provide to tourists.

Tourism Destination Competitiveness: The destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors (Hassan, 2000).

Tourism Development Impacts: Results from a complex process of interchanges between tourists, host communities, and destinations (Methieson & Wall, 1982).

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

CHAPTER II
LITERATURE REVIEW

INTRODUCTION

This chapter reviews the literature relevant to the study of tourism destination competitiveness. First, a review of relevant concepts, including tourism systems, tourism planning and development, and tourism destination competitiveness are provided, while discussing the need for this research. The discussion of these concepts serves as the research background for the research questions and the study's objective. Then, the next section provides a review of the theory to be employed in this study -- social exchange theory. A discussion of the linkage between the theoretical background and the components of the proposed model in the study is presented. Subsequently, the relevant fields' research that pertains to the conceptual model will be discussed. Particularly, this section is devoted to the development of a theoretical and conceptual model for tourism destination competitiveness, and addresses the basis for the relationships among the constructs to be tested in the study.

REVIEW OF RELEVANT CONCEPTS

Tourism and its Systematic Approach

In the tourism literature, a number of systematic approaches have been proposed to understand tourism components, and their functioning or interactive roles (Gunn, 1988, 1994; Lea, 1988; Leiper, 1979, 1990; McIntosh & Goeldner, 1986; Pearce, 1995; Mill & Morrison, 1995; Witt & Moutinho, 1994). Generally, the approaches of the origin-destination tourism system and the functioning tourism system have been applied in explaining tourism as a system. These can be considered to be a fundamental framework for understanding tourism. Furthermore, starting from a geographical analysis of tourist movement and flows, as well as the interactions of components (Leiper, 1979), the applications of tourism systems have been widely utilized in several fields, including

tourism marketing (Formica, 2000; Zaher, 1999), planning and development (Carlsen, 1999; Gunn, 1994), and economics (Uysal, 1998). One of the goals of the systematic approach used in tourism studies is to develop the best match or combination of supply and demand components for successful tourism destination development.

In the origin-destination tourism system, tourism consists of two types of region or components: an origin, which is related to the region or country generating the tourists, and a destination, which is related to locations visited by tourists, including all those programs and places that are designed and managed to provide for receiving visitors (Gunn, 1988, 1994; Witt & Montinho, 1994). Usually, the origin refers to the source of tourism demand, while the destination represents the tourism supply side that contributes certain attraction powers to tourists (Uysal, 1998). Most of the marketing functions in tourism are conducted in the tourists' generating region, and tourism planning and development are performed in the destination region.

Pearce (1995) demonstrated the nature of the interaction between the demand and supply components by proposing three different models of tourism: 1) origin-destination, 2) structural, and 3) the evolution model. Spatial interactions and reciprocity are important features that support all these models; the notion of spatial hierarchy is also central to these models. The origin-destination model, for example, assumes that "places are in varying degrees both origin and destination" (p. 5). The places that generate tourists could also serve as the destinations. In a structural model, however, the tourist markets are centered through a local, regional, and national hierarchy, with the international transfer occurring between the national urban centers in the generating and receiving countries. The interaction of supply and demand in this structural model is based on the economic superiority and technological development of the generating areas. Lastly, the evolution model explains tourists' movements by focusing on the perspective of the evolution of tourists' movements and the development of tourist structures. The interaction of the demand markets and supply components will change over time, depending upon tourists' characteristics and behavior.

Additionally, Formica (2000), who studied assessing destination attractiveness as a function of demand and supply interaction, proposed that a tourism system emerges from the tourism resources at destinations. The various combinations and blends of

tourism resources that include physical distribution, importance, and value, are important in determining a destination's attractiveness power and uniqueness. He also argued that the components on the supply side should collaborate with marketing travel links such as travel agencies and tour operators to meet the needs and wants of the demand markets.

On the other hand, Leiper (1979) considered "paths linking generating regions with the tourist destination region, along with tourists' travel" as "transit routes" (p.391). The efficiency and characteristics that influence the quality of access to particular destinations were emphasized, and accordingly, the influence of the size and direction of tourist flows were described.

Gunn, (1988) using the functioning tourism system, presents linkages between or among components, including population (the demand side), information/promotion, transportation, attractions, and facilities/services (the supply side). Additionally, Gunn further specifies the influencing factors on the tourism system, such as natural resources, cultural resources, entrepreneurship, finance, labor, competition, community, government policies and organization/leadership. Mill and Morrison (1985, 1995) also identify four major parts of the tourism system, including the market (tourists), travel (transportation), destination (attractions, facilities, and services), and marketing (information and promotion), with each component closely connected in sequence with the other.

This functional approach to the tourism system has focused on studying the nature of tourist systems and travel flows. Particularly, in Gunn's approach (1988), the components of information/promotion and transportation could be seen as "linkages" that enable potential tourists to access their destinations. These linkages also enable tourism destination businesses to promote tourism products as well as to develop marketing strategies such as pricing and image that can affect directly the decisions of potential tourists (Uysal, 1998). The linkages of this system represent the symbolic meaning of the connection between the needs of tourists and the ability of the destination to fulfill these needs. Tourist flows and the linkages among the components conceptually explain the match between the supply side and the demand market. An appropriate match is essential in developing successful tourism (Gunn, 1994).

In the model, which was called "the elements of demand-supply interactions," proposed by Fesenmaier and Uysal (1990, p. 31), the linkages and interactions between

the demand and supply sides were also centered in understanding the tourism system. Along with the disequilibrium concept as the primary motivation for travel, tourists' expectations about destinations are formed on the basis of advertising and promotional programs that can influence demand for tourism destinations. Additionally, the quality of tourists' experiences is directly affected by the quality of service and facilities provided by the supply side. The level of tourist satisfaction that tourists express based on their destination experiences and activities is also dependent upon the ability of the destination to deliver the type of experiences and activities to the demand markets (Ryan, 1995).

In sum, a systematic approach to tourism research provides a broad insight into tourism and its phenomena. A better understanding of the interactions and linkages among tourism demand and tourism supply is essential if tourism destinations and businesses want to develop competitive products and effectively deliver them to the tourism market. Furthermore, since this systematic approach has emphasized that tourism exists according to the availability of tourism attractions/resources, their effective operations and management, including marketing programs, promotion, and product development, are of vital importance in the more fiercely competitive market environments. In the proposed study, based on the systematic approaches to tourism, it is acknowledged that the interactions and linkages among the components of tourism are essential for tourism destinations to create and enhance competitiveness.

Tourism Planning and Development

In the tourism planning and development context, tourism is defined as an interdisciplinary, multi-faceted phenomenon that involves the interrelated components of tourism products, activities, and services provided by the public and private sectors (Gunn, 1994; Pearce, 1989, 1995). These tourism components are considered as fundamental factors in tourism planning and development, and a basic knowledge of these components is required for successful tourism planning and management (Inkeep, 1991). Consequently, a discussion of comprehensive tourism planning is needed to provide a basic structure and guidelines for developing more competitive tourism products and services.

Tourism Planning and its Concepts

Planning, in general, is the process of decision-making that relates to the future of destination regions, attractions, and services (Gunn, 1988; Inkeep, 1991; Mill & Morrison, 1985). It is a dynamic and vital process of identifying objectives as well as defining alternative methods and actions to achieve the objectives that are already in place. Additionally, it includes an evaluation of selected methods and actions (Hudman & Hawkin, 1989).

Similarly, tourism planning is a process of comprehensive evaluation and analysis of related issues, including not only the determination of goals, but also the development of alternative methods and actions to further decision-making. Particularly, Gunn (1988, p. 22) said that "tourism planning as a concept of viewing the future and dealing with anticipated consequences is the only way that tourism's advantages can be obtained. Tourism planning must be strategic and integrative." Murphy (1985) also pointed out that tourism planning should fit within existing systems and should be used in urban and regional development strategies. In particular, there should be community involvement in the planning process. Additionally, Mathieson and Wall (1982) suggest that tourism planning is related to not only the components of tourism, but also the interrelationships among these components. Planning is a complex process involving a consideration of diverse economic, social, and environmental structures.

Thus, due to the sophisticated and varied nature of tourism planning and its processes, it is required of tourism planning to incorporate numerous concepts and disciplines drawn from different fields. It also needs to conduct a variety of planning activities such as feasibility studies, product development, promotion, forecasting, marketing planning, and strategic marketing programs.

In order to have comprehensive tourism planning, all of the existing components and resources that include tourism attractions, destination management organizations (DMO), markets, and local related businesses and services within a given region or destination, should be considered. Since the goals and objectives that tourism addresses through development depend upon how important and sensitive tourism development is to the community, such goals should correspond with community or regional planning in a given destination.

Goals of Tourism Planning

In general, the goals of tourism planning and development are based on the fact that tourism increases economic benefits, improves community infra/superstructure systems, and enhances the community's quality of life (Mathieson & Wall, 1982). Getz (1987) also stated that "tourism planning is a process, based on research and evaluation, which seeks to optimize the potential contribution of tourism to human welfare and environmental quality" (Wilkinson, 1997, p. 24). Additionally, the objective of tourism planning is focused on providing better quality and services of tourism products and activities for tourists so that it increases the average of length of stay. Thus, through the development of tourism, the destinations or regions can achieve enhancements in economic activities, community prosperity, and cultural identity. It is also possible for the destination to provide a better quality of tourism experiences and activities to tourists so that the tourism region and community take advantageous positions over competitors.

Consequently, tourism planning in the proposed study can be thought of as a way of achieving goals, as well as a proactive means of creating competitive and comparative advantage to destinations by adding value to tourism attractions/resources through tourism development. Thus, tourism planning and development can contribute to the competitiveness of tourism destinations.

Components of Tourism Planning

The identification and evaluation of tourism attractions/resources is a foremost requirement in tourism planning (Gunn, 1994; Inkeep, 1991; Pearce, 1995). Furthermore, understanding the interrelationships and interactions of the different elements and components of the tourism supply side is an inevitable step in creating more valuable destination products (Pearce, 1997). Thus, a thorough consideration and inventory of knowledge of how the components of tourism planning are integrated is essential to enhancing tourism destination competitiveness.

According to Inkeep (1991), the components of tourism planning and development can be classified as tourist attractions and activities, accommodations, other tourist facilities and services, transportation facilities and services, other infrastructures, and institutional elements. These components can also be described as "the framework of

explaining the total natural and socio-environment from which they derive, the markets of international and domestic tourists that they serve, and the area residents' use of the attractions, facilities and infrastructures" (p. 40).

Additionally, Pearce (1995) emphasized that an analysis and evaluation of two major components, including destinations' resources (attractions, accommodations, transportation, infrastructures, etc), and the existing and potential markets (visitor statistics, tourist satisfaction, resources mapping and evaluation) are common procedures in tourism planning. Correlating these components can be referred to as the matching of tourism supply and demand, and establishes the basic approach to tourism planning. This matching of tourism supply and demand elements attempts to meet specified goals such as increasing foreign exchange earnings, generating employment, and minimizing environmental impacts.

Mill (1990) also explained that tourism planning tends to have certain components, even though the processes and outcomes of tourism planning vary. Those components are definitions of needs, assessment of potential, community support, the legal environment, scheduling, measurement, experiences, and flexibility. Particularly, Mill stressed that the community's potential to attract, keep and satisfy tourists should be identified and assessed. Such an assessment should begin with a determination of the extent of existing tourism, while including an identification of the areas' tourism resources and their quality. Such resources could include man-made resources, natural resources, infrastructure, transportation, and general resources.

Levels and Types of Tourism Planning

In tourism planning, three different levels – national, regional, and local, have been commonly identified and explained (WTO, 1980; Pearce, 1989). Inkeep (1991) also classified four different levels – international, national, regional, and sub-regional. In these levels, tourism planning can be done separately for a specific unit or area, but should be executed in such a manner that tourism planning is incorporated as a sector into the overall development plan and policies (Inkeep, 1991). Additionally, depending upon the levels or scales of tourism planning, each level could focus on a different degree of

specificity. Through understanding these scales, more effective planning for tourism development can be possible.

Most general types of tourism planning include urban, rural, and coastal (Gunn, 1994; Pearce, 1981, 1989). In urban areas, tourism planning is more complex, compared to development in other areas. Tourism development should be planned with consideration for already existing and developed sites. Community residents' interests and support are also necessary considerations. In the case of rural areas having tourism attractions and sites, there are more possibilities for expansion. Local agricultural tourism products and activities, the natural landscape and environments, and traditional/cultural heritages are important sources of tourism planning and development. The coastal area as another general tourism planning site is located in any area of beach, which is mostly connected with beach resort development. Sun, sand, and sea are the most important characteristics of this type of site, along with tourist activities being generally informal and unstructured (Pearce, 1989). However, due to the fragile ecology of coastal areas, more consideration of environmental protection is required in the planning process. Planning efforts can also be developed to overcome the seasonality of coastal areas.

Approach to Tourism Planning

Tourism planning requires certain systematic processes and approaches. Depending upon the types of planning and the specific forms of application, certain approaches could be taken, but conceptually, all of the approaches could be applied to any level and type of tourism planning. Inkeep (1991, p. 29) described several different approaches to tourism planning. Each approach emphases the concepts of planning as continuous and incremental, systems-oriented, comprehensive, integrated, involving environmental and sustainable development, and considering the community approach.

Particularly, systems, comprehensive, and integrated approaches are similar or related to each other in terms of a view of tourism. Tourism can be seen as an interrelated system and all aspects of tourism development, including natural, institutional elements, and environmental and socioeconomic aspects should be considered. The overall plan and development patterns of an area are integrated in tourism planning and development.

In a community approach, which is also frequently applied in tourism planning and development, the maximum involvement and participation of the local community in the tourism planning process is sought (Inkeep, 1991). Specifically, two different perspectives of community participation have been discussed, including the decision-making process and the benefits of tourism development to the community (McIntosh & Goeldner, 1986; Timothy, 1999).

In conclusion, tourism planning can be seen as a systematic process to promote the tourism resources that the local community presents to the tourism markets. Accordingly, it deals with what resources are to be developed, how well they meet market needs, how tourism resources are utilized, and how tourism resources can be expanded or newly developed (Gunn, 1994). Therefore, in order to create or enhance tourism destination competitiveness, an appropriate tourism planning procedure and approach should be selected.

REVIEW OF THE THEORETICAL FRAMEWORK

Social Exchange Theory

Social exchange theory has its origin in several disciplines, including anthropology (Levi-Strauss, 1969), economics (Blau, 1968, 1991: Ekeh, 1974), behavior psychology (Homans, 1991), and social psychology (Chadwick-Jones, 1976). The common assumption that can be found in those theoretical thoughts or disciplines is "utilitarianism" (Turner, 1986).

For example, it has been thought from the utilitarian economists' perspectives that people can be viewed as rationally seeking to maximize their material benefits, or utility, from transactions or exchanges with others in a free and competitive market (Tuner, 1986). Further, the utilitarian principle proposes that people rationally weigh costs against benefits to maximize material benefits. Additionally, social exchange theorists reformulate this principle by asserting alternative assumptions. For example, Homans (1967) said that "humans do not pursue to maximize profits, but they always attempt to make some profit in their social transaction with others. Additionally, humans are not

perfectly rational, but they do engage in calculations of costs and benefits in social transactions. Humans do not have perfect information on all available alternatives, but they are usually aware of at least some alternatives, which form the basis of assessments of costs and benefits. Further, humans do pursue material goals in exchanges, but they also mobilize and exchange nonmaterial resources, such as sentiments, service, and symbols" (cited in Turner, 1991, p. 286).

Anthropologists have recognized that social interaction is done in not only economic or material exchanges but also in symbolic exchanges or social relationships. Exchange relations are more than the result of psychological relationships and a reflection of patterns of social organization. Under social/structural patterns, exchanging commodities among peoples serves to satisfy their basic economic needs, which is a reflection of economic motives. Thus, social culture and dynamics are reflected in this view of the theory (Turner, 1998). Particularly, anthropologists view that exchange theory involves sustaining exchange relations due to the forces of psychological needs rather than economic needs. Symbolic exchange is emphasized for both individual psychological processes and patterns of social integration. This view is critical in explaining human social behavior.

As another point of view about social exchange theory, Levi-Strauss (1967), who developed a structural exchange perspective, said that exchange must be viewed according to its function in integrating the larger social structure. The exchange is more than the result of psychological needs, and should be interpreted as a reflection of a pattern of social organization that exists as an entity. Thus, the exchange behavior can be explained by viewing the consequences or functions of norms and values. As a result, this structural view of exchange contributes that various forms of social structure are critical factors in explaining exchange relations. These exchange processes are affected by patterns of social integration and organization (Turner, 1998).

In the behavioral psychology perspective, exchange theory is based on the principle that people are reward-seeking organisms pursuing alternatives that will yield the most reward and the least punishment (Chadwick-Jones, 1976). Psychological rewards and punishment are reconciled with economic benefits (utility) and costs (Ekeh, 1974). Thus, the notion of reward and punishment is used to reinterpret the utilitarian

exchange heritage so that the reward is used to reinforce or meet the needs of the organism, and punishment is used to deny reward or bring about the expenditure of energy to avoid pain. Thus, people will behave so as to yield the most reward and the least punishment and also will repeat those behaviors that have proved rewarding in the past.

Accordingly, exchange theorists believe that exchange transactions occur based on several assumptions (Ekeh, 1974). People are motivated by the hope of success, and their past experiences will reduce their uncertainty in making decisions for future possible success. Further, people will maintain an exchange relationship that is rewarding to them. Additionally, Homans (1991), who introduced the "rationality proposition" of people's psychological exchange behavior, said that the more often the actions of people are rewarded, the more likely they are to perform the action. If people receive rewards based on their past experiences and similar situations occur, they are likely to perform the same or similar actions in the present. Subsequently, the more valuable the result of action, the more likely people are to perform the action.

In the tourism literature, a number of researchers have attempted to apply the theoretical concepts and principles of social exchange theory to explain residents' reactions to tourism development (Ap, 1990, 1992; Jurowski et al., 1997; Lindberg & Johnson, 1997; Madrigal, 1993; Mihalik, 1992; Perdue, Long, & Allen, 1987, 1990; Yoon, 1998; Yoon et al., 2000). Those studies have focused on how residents assess the benefits and costs of tourism development, and some studies have explained residents' support for future tourism development based on their evaluations of the benefits and costs of tourism (e.g. Jurowski et al., 1997; Yoon et al., 2000).

For example, Perdue et al. (1990) briefly mentioned that social exchange theory is a basis for investigating residents' attitudes about tourism. They concluded that support for additional development was positively related in the case of people who perceived positive impacts from tourism, and negatively correlated in the case of people who perceived negative impacts from tourism. Madrigal (1993) also said that this theory is likened to an economic analysis of interaction that focuses on the exchange and mutual dispensation of rewards and costs between tourism actors. He also pointed out that the underlying assumption of this exchange is a disposition to maximize the rewards and

minimize the costs of residents' experiences. Residents will be willing to exchange with tourists if they can acquire some benefits without incurring unacceptable costs.

According to Ap (1992), in developing and attracting tourism to a community, the goal is to achieve outcomes that obtain the best balance of benefits and costs for both residents and tourism actors. The preceding discussion suggests that residents evaluate tourism in terms of social exchange, that is, they evaluate it in terms of expected benefits or costs obtained in return for the service they supply. Thus, it is assumed that host resident actors seek tourism development for their community in order to satisfy their economic, social, and psychological needs and to improve the community's well being.

Jurowski et al. (1997) attempted to explain how residents weigh and balance seven components, and why residents of the same community have different views by using the principles of social exchange theory and a path model. This path model was designed to investigate how the potential economic gain, use of the tourism resources, ecocentric attitude, and community attachment as the exchange factors affect residents' perceptions of tourism impacts, and affect both directly and indirectly the support of tourism development.

The principle they suggested is that residents are willing to be involved in exchanges with tourists if they can receive benefits, rather than incurring unacceptable costs. The principle was developed based on the social exchange doctrine. For example, residents will engage in exchange if the received results or rewards are valued, if the exchange is likely to produce valued rewards, and if the perceived costs do not exceed the perceived rewards (Skidmore, 1975).

Based on the empirical findings, they discussed that the above exchange factors were found to influence the perception of tourism impacts, and the same factors both directly and indirectly affect the support of tourism development. Thus, support tourism development was considered as the residents' willingness to enter into a tourism exchange based on their perceptions of the benefits and costs of exchange factors. Additionally, the authors concluded that theoretically, if residents perceive the distribution of benefits over costs as positive, they will seek to maintain the exchange relationship.

According to Yoon et al. (2000), who studied residents' attitudes and support for tourism development by using a structural model, local residents are likely to participate in exchange (support tourism development) as long as the perceived benefits of tourism exceed the perceived costs of tourism. Their empirical findings support this statement in that the economic and cultural impacts were positively associated with the "total impact of tourism," while the social and environmental impacts negatively affected the "total impact of tourism." Further, the "total impact of tourism" was positively associated with "the support for tourism development." Additionally, environmental impact was negatively associated with "the support of tourism development." As a result, if residents received benefits and rewards from tourism, they were likely to support tourism development.

Among the number of theories that have been proposed to investigate peoples' attitudes about tourism, social exchange theory has provided theoretical advantages in that it facilitates a logical explanation of both the positive and negative aspects of tourism and can accommodate the examination of relationships between and among the exchange factors and their consequences. The assumptions and principles of the theory can enable an explanation of the process involved in the exchanges between tourism resources and people.

Since tourism stakeholders have been considered as important key players or components that influence the success or failure of tourism in a region, their participation and involvement should be considered in tourism planning and development. Thus, social exchange theory provides a theoretical foundation for identifying tourism stakeholders' perceptions of the benefits and costs of tourism. Additionally, it can logically explain how the exchange factors affect the results or outcomes of the exchange process.

Therefore, this proposed study will utilize social exchange theory as the fundamental underpinning theory for examining the structural relationships among the constructs (tourism impacts, place attachment, and environmental attitudes), and their results, including preferences about tourism development and support of destination competitive strategies.

TOURISM DESTINATION COMPETITIVENESS

One of the goals of tourism planning and development is to create more valuable tourism products and services for potential or current tourists so that destinations and their communities receive social and economic benefits. However, it has been suggested that there is a need for a clearer understanding of the ability of the tourism destination to compete effectively in an increasingly saturated market (Evans, Fox, & Johnson, 1995; Ritchie, Crouch, & Hudson, 2000). The planning and promotion of tourism destinations should be guided by a thorough analysis of the destinations' competitive factors and development strategies (Hassan, 2000).

A number of studies have introduced and applied the concept of competitiveness in the area of tourism destinations (Ahmed & Krohn, 1990; Bordas, 1994; Buhalis, 2000; Crouch & Ritchie, 1999; d'Hauteserre, 2000; Go & Govers, 2000; Hassan, 2000; Kozak, 2001; Kozak & Rimmington, 1999; Mihalič, 2000; Pearce, 1997; Ritchie & Crouch, 1993; Thomas & Long, 2000; Woodside & Carr, 1988). The major interest of the existing studies has been to investigate how destination competitiveness can be sustained as well as enhanced while maintaining a market position among other destination competitors.

Additionally, studies have investigated the key environmental factors, determinants, or strategies that affect the enhancement of destination competitiveness. Especially, it has been discussed that since tourism destinations involve multi-faceted components of natural/cultural resources and a multiplicity of businesses, a systematic framework or analytical model for destination planning and development is necessary (Hassan, 2000). Such an analytical framework for destination development and promotion can contribute to creating and integrating value-added tourism resources for enhancing destination competitiveness.

A number of conceptual models and approaches to developing destination competitiveness have been explored, but empirical studies and results related to testing and validating the proposed models have been limited. Particularly, the development of destination competitive strategies has not been thoroughly addressed. Moreover, it has not been found which competitive strategies are more supported by tourism stakeholders in association with destination attractions and resources. The support of tourism

stakeholders could aid in the design and selection of competitive strategies for tourism destinations that could enhance competitiveness as well as provide social/economic benefits and welfare to the destination communities.

Concepts and Definitions of Destination Competitiveness

Traditionally, the concept of competitiveness has been adapted from economic theory and applied to the general firm or company (Bordas, 1994; Poter, 1990; World Economic Forum, 1995). The model proposed by Porter (1980, 1990) has been widely discussed in terms of a variety of industries. The major theme of this model is that a company should find better ways to compete by continually upgrading the firm's products and processes in order to create competitive advantage.

Accordingly, competitiveness has been viewed as "producing more and better quality goods and services that are marketed successfully to consumers" (Newall, 1992, p. 94). It is also defined as "the ability of a country or company to, proportionally, generate more wealth than its competitors in world markets" (World Competitiveness Report, 1994, p.18). This definition implies that competitiveness refers to the combination of both assets and processes where assets are inherited (e.g. natural resources) or created (e.g. infrastructures) and transformed into economic results (Crouch & Ritchie, 1999, p. 140). Competitiveness can also defined as "the ability to retain the competitive position of an organization by satisfying the expectations of customers and shareholders while constantly eliminating the threats and exploiting the opportunities which arise in the competitive environment" (Feurer & Chaharbaghi, 1994, p. 51). Thus, competitiveness can only be sustained by continuing improvement of the offerings and capabilities of an organization.

In the tourism context, the concept of competitiveness has been applied to different destination settings and types as well as expanded into the sustainability of destinations. Thus, certain marketing plans and promotional strategies such as price, quality, image, and sustainable tourism have been discussed. The success of integrated quality management of tourism destinations and price-based promotions as a value-increasing strategy have been considered for destination competitiveness (Go & Govers,

2000; Peattie & Peattie, 1996). This discussion is focused on how to determine and develop the future directions of destination competitiveness. As of yet, detailed future directions and instructions for destination competitiveness have not been fully investigated.

Competitiveness in the tourism literature has been considered as a "destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors" (Hassan, 2000). It is also defined as "the ability of a country to create added value and thus increases national wealth by managing assets and processes, attractiveness, and aggressiveness, and proximity, and by integrating these relationship into an economic and social model" (Ritchie & Crouch, 2000, p. 306).

Competitiveness has often incorporated the concept of marketing planning and competitive development strategies (Bordas, 1994; Buhalis, 2000; Kozak, 2001; Heath & Wall, 1992; Poon, 1994). Particularly, Bordas (1994) said that in a conceptual scheme of competitive marketing, once the strongest of the tourism resources (clusters) are identified, the most attractive markets/segments for each resource (cluster) are determined as to their functions in the mix of specific competitive forces. Then, the competitive opportunities in each of the resources are decided.

Similarly, Pearce (1997) described destination competitiveness as destination evaluation techniques and methods that can systematically analyze and compare the diverse attributes of competing destinations within a planning context. Such a systematic evaluation and comparison of major tourism components among competitors can provide a better appreciation of competitive advantage so that it contributes to the formulation of more effective development polices. Mihalič (2000) also described destination competitiveness from environmental perspectives that can be related to natural and man-made tourism components, as well as social and cultural environments. Destination environmental competitiveness can be enhanced by appropriate managerial efforts and increased through certain environmental marketing activities or strategies.

Therefore, this study utilizes the concept of competitiveness as a destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors.

Nature and Framework of Destination Competitiveness

Of major interest in tourism planning and development is destination sustainability and market longevity. Accordingly, as competition in the tourism market increases, an understanding of the driving forces contributing to destination competitiveness is essential, and has become a fundamental step in maintaining tourism destinations, their growth, and vitality (Ritchie & Crouch, 1993; Hassan, 2000).

In the tourism literature, a systematic approach to destination competitiveness research has been taken. Additionally, the conceptual and analytical frameworks that can help to better understand and respond to the rapidly changing environment, have been developed and explained. Starting with Ritchie and Crouch's research (1993), a number of studies have discussed the important determinants or sources of competitiveness.

The model and its four determinants proposed by Porter (1990) were utilized as a fundamental source of explaining the determinants of destination competitiveness (Ritchie & Crouch, 1993). These determinants are factor condition (e.g. skilled labor, infrastructures), demand condition (e.g. basic tourism services), related and supporting industries, and firm strategy, structure, and competition. It has been said that these determinants do not operate independently, but are mutually dependent upon each other (Porter, 1990).

Particularly, the systemic model of destination competitiveness proposed by Crouch and Ritchie (1999) point out that it is necessary to investigate and understand the relationships and interplay among the forces of competitiveness. Furthermore, it also has been suggested that a systematic analysis of the comparative and competitive advantages or forces contributing to destination competitiveness is required.

According to Crouch and Ritchie (1999, p. 143), comparative advantages constitute the tourism resources available to a destination, while competitive advantages relate to a destination's ability to use these tourism resources effectively over the long term. The primary elements of destination appeal are essential for destination comparative advantage and can be key motivational factors for tourists' visits. These primary elements are the fundamental resources that motivate tourists' destination choices, as well as being elements that planners and developers should consider for

increasing destination competitiveness. Physiography, culture and history, market ties, activities, events, and tourism superstructures are examples of these resources. Additionally, this model explains the supporting factors and resources as secondary effective sources of destination competitiveness (Crouch & Ritchie, 1999). The extent and condition of these factors, such as infrastructure, accessibility, facilitating resources, and enterprise are critical for destination business success.

Particularly, Ritchie and Crouch (1993) have discussed the dimensions of competitiveness that can be a framework for measuring overall competitiveness. The factors should be identified and developed so that those that have influence on the competitiveness and the prosperity of tourism destinations can be determined. Then, the most appropriate indicators of success regarding the performance of tourism destinations should be determined. Additionally, the relative strength and the positioning of a particular destination in relation to other competitors in the market place should be established.

Development of Destination Competitive Strategies

In the tourism literature, a number of studies point out that tourism destination competitiveness can be enhanced through certain development strategies, including marketing efforts (image, quality, positioning, branding, and services), destination management efforts, and sustainable tourism. These development strategies can be considered as the processes or actions that can enable tourism destinations to achieve a maximum correlation with tourism demand. Competitiveness is the essential goal of management and marketing strategies (Kozak, 2001). The development of the competitive strategies of a tourism destination can be guided by previous studies in the tourism literature (Buhalis, 2000; Crouch & Ritchie, 1999; Evans, Fox, & Johnson, 1995; Flagestad & Hope, 2001; Mihalič, 2000; Poon, 1993; Ritchie & Crouch, 1993).

According to Poon (1993), destination competitiveness could be enhanced by "permanent innovation" and "ceaseless change." Flexible, segmented, customized products for the tourists' needs are necessary to create competitive tourism destinations. Organization, management, marketing, distribution, and other forms of interaction and

interrelationships among tourism suppliers are fundamental sources of developing flexibility for tourism destination competitiveness. In order to compete successfully in tourism market places, tourism destinations and their players should follow such principles as “put the consumer first, be a leader in quality, develop radical innovations, and strengthen the firms’ strategic position within the industry’s value chain (p240).”

Particularly, Poon (1993) explained that linking marketing with product development, satisfying the consumer, and developing holistic approaches to travel experiences (ex. destination image, collaboration with the public sector, and controlling the service delivery system, are important strategies for destination competitiveness.

Ritchie and Crouch (1993) also discussed how tourism destinations could develop competitive strategies (p.22). For example, a carefully selected and well-executed program of destination management can serve to improve the tourism competitiveness of an area, and also, through certain key activities of destination management organization, destination competitiveness could be enhanced. The collected information from research can enable destinations to better manage the performance of the destination’s products, as well as to adapt to changing market conditions through marketing strategies. Lastly, the effective and efficient delivery of the tourism experience to tourists can contribute to destination competitiveness. High or different levels of quality at a given cost as well as the quality of human services, facilities and equipment are also important factors for destination competitive strategy.

Furthermore, Crouch and Ritchie (1999) expanded these destination competitive strategies, with more focus on destination management approaches and activities, including marketing, service, information, organization, and resource stewardships (Crouch & Ritchie, 1999). It was suggested that “those activities can enhance the appeal of the core tourism resources and attractions, strengthen the quality and effectiveness of the supporting resources, and best adapt to the constraints imposed by the qualifying determinants (location, dependences, safety, and cost) (p.149).”

The marketing of destinations is related to promotional efforts that can be achieved by product development, appropriate pricing policies, effective distribution channels, and product packaging. It can also include selection of appropriate target markets. Quality of services and experiences are also important components for

management activities. Enhancing the quality of service should be considered to increase tourist satisfaction. As a result, these marketing efforts can have the potential to enhance the tourism attractions' appeal, as well as strengthen the competitive position of destinations (Mihalič, 2000).

Destination management is related to the regular monitoring of visitor satisfaction and the tracking of industry performance. Such information is critical to help the destination managers understand visitors' needs and develop more effective destination products. It is also important to ensure destination productivity and effectiveness. Additionally, the organization's function within the tourism destination should be considered in terms of its responsibility to the well-being of all aspects of the destination. Through a broad range of opportunities and management efforts, destination competitiveness can be enhanced.

Destination competitiveness also can be increased by resources stewardship, which involves effectively maintaining and sustaining tourism resources, including ecological, social, and cultural resources. Stewardship is a fundamental strategy for long-term destination competitiveness. According to Ritchie and Crouch (2000), destination sustainability should be emphasized in its role in enhancing competitiveness. Sustainability has a larger function than natural environmental sustainability (Hassan, 2000). Subsequently, a destination's development for tourism must be sustainable, not just economically and ecologically, but socially, culturally and politically as well.

According to Mihalič (2000), who studied tourism competitiveness from the environmental perspective, destination competitiveness can be enhanced by appropriate managerial efforts and environmental quality management. Additionally, certain environmental marketing activities can also enhance destination competitiveness. The concept of environment refers to the physical environment that includes natural and man-made components, as well as social and cultural components (Inskeep, 1991, Mathieson & Wall, 1996).

Since environmental quality is an integral part of the quality of natural attractions, maintaining a high level of overall environmental quality is critical for destination competitiveness. Consequently, this study considers management elements as a tool to link competitiveness and environmental management.

Go and Govers (2000) studied integrated quality management for tourist destinations for achieving competitiveness. This study discussed that in order to meet the challenge of competitors and to increase market share, maintaining and improving a high-quality supply is required to sustain market position. Thus, integrated quality management as a means to increase competitiveness was applied to different destinations for seven European countries. As a result, an integrated approach to problem-solving through relevant fields of knowledge such as urban and regional planning, cultural and heritage preservation, and economic development is needed for the effective development and implementation of integrated quality management for tourist destinations.

In conclusion, the above management activities and actions can be considered as destination competitive strategies that can allow destinations to enhance their competitiveness. Particularly, as Mihalič (2000) concluded, destination environmental competitiveness (attractions and resources) can be increased by appropriate managerial efforts and can also be enhanced through certain environmental marketing activities; the concepts and scope of those management activities can be utilized as the framework for developing and measuring destination competitiveness strategy. More appropriate management efforts, marketing activities, quality of services, and environmental management can help to create and integrate value in tourism products and resources so that tourism destinations can achieve better competitive market positions.

Thus, as suggested by the literature review, destination competitiveness can be improved by the appropriate matches between tourism attractions/resources and the enhancement strategies of destination competitiveness. Consequently, identification of the relationship between development preferences about tourism attractions/resources and support of destination competitive strategies is important in enhancing destination competitiveness.

TOURISM ATTRACTIONS/RESOURCES

The various types of tourism destinations provide an amalgam of tourism products and services. The components of tourism products and services are essential for tourism development and marketing, and are commonly referred to as tourism attractions and resources. Leiper (1995) said that destinations are places where people travel to and where they stay for awhile in order to have certain travel experiences, depending on the destinations' attractions. Hu and Ritchie (1993) also stated that a "tourism destination reflects the feelings, beliefs, and opinions that an individual has about a destinations' perceived ability to provide satisfaction in relation to his or her special vacation needs (p.25)."

Thus, in general, these destination attractions/resources have been considered as tourism supply factors that represent the driving forces generating tourist demand (Uysal, 1998) and also primary sources or determinants of measuring destination attractiveness (Hu & Ritchie, 1993; Formaica, 2000). A recent study by Buhalis (2000) lists six major components of tourism attractions and resources (p.98) that most of the tourism literature commonly includes in assessing and evaluating the elements of tourism destinations. These components are as follows:

1. Attractions -natural, man-made, artificial, purpose-built, heritage, special events
2. Accessibility – entire transportation system comprised of routes, terminals and vehicles
3. Amenities – accommodations, catering facilities, retailing, other tourist services
4. Available packages – prearranged packages by intermediaries and principals
5. Activities – all activities available at the destination and what consumers will do during their visit
6. Ancillary services – services used by tourists such as banks, telecommunications, newsagents, hospitals.

Many researchers have attempted to evaluate and classify destination attractions/resources as tourism products (Ferrario, 1976; Gunn, 1988; Hu & Ritchie, 1993; MacCannell, 1976; Murphy, 1985; Murphy, Pritchard, & Smith, 2000; Smith, 1994; Yoon, Formica, & Uysal, 2001). Particularly, Ritchie and Crouch (1993, 2000) and Mihalič (2000) suggested that destination attractions/resources should be acknowledged

as important sources of comparative and competitive advantage factors in destination competitiveness. These are the essential components of the competitiveness of a tourism destination and are critical attributes for sustaining tourism destinations (Crouch & Ritchie, 1999; Hassan, 2000).

The destination attractions/resources such as natural/cultural components, heritage/ historical resources, supporting facilities/services, infrastructure, hospitalities, sports/recreation activities, transportation/accessibility, and cost, should be considered as not only basic to understanding tourism planning, but also essential for successful tourism development (Gunn, 1994; Pearce, 1997). Furthermore, maintaining and developing the quality of these tourism resources is important to the competitiveness of most types of tourism destinations (Inkeep, 1991; Go & Govers, 2000).

Especially, according to the model developed by Ritchie and Crouch (1993), destination attractions/resources are considered as the destination's appeals or determinants of competitiveness. These include natural features, climate, culture & social characteristics, general infrastructure, basic services in infrastructure, superstructures, access and transportation facilities, attitudes towards tourists, cost/price levels, economic and social ties, and uniqueness. It is suggested that these can be considered as important sources of destination comparative advantages in destination competitiveness.

Additionally, Hassan (2000) proposed a conceptual model of determinants of market competitiveness in an environmentally sustainable tourism industry and suggested four critical determinants of market competitiveness: 1) comparative advantage, 2) demand orientation, 3) industry structure, and 4) environmental commitment (p.242). Among them, the comparative advantage that is associated with factors of both the macro and micro-environments constitutes climate/location, cultural/heritage, history/artifacts, tourist-oriented services, safety and health, access to information, and environmental quality. And also, along with these examples of market comparative advantages, the other attractions and resources are hospitality, transportation, and entertainments that can contribute through their value-added activities to the overall competitive position in the tourism market place.

According to Mihalič (2000), who studied the environmental quality of destination competitive factors, destination attractions refer to destination appeal as

destination attractiveness and deterrents. Attractiveness includes eleven attractions and resources: natural features, climate, cultural and social characteristics, general infrastructures, basic services, tourism superstructures, access and transportation facilities, attitudes towards tourists, cost/price levels, economic, social, and uniqueness. These destination attractions are considered as environmental quality, which is an integral part of the quality of the natural attractions. Thus, it was argued that "maintaining a high level of overall environmental quality is important for the competitiveness of most types of tourist destinations" (Inkeep, 1991, p.347; Mihalič, 2000, p. 66).

Many tourism destinations contain natural or man-made advantages to attract visitors. In the long-term sustainability and success of tourism destinations, such tourism attractions should be identified and evaluated. Especially, each destination and tourist region could have a different advantage in its destination attractions. The assessment of destination attractions is needed to create a more competitive and quality environment in tourism planning and development.

TOURISM DEVELOPMENT IMPACTS

In the tourism literature, a number of studies have investigated residents' reactions to tourism development (Akis, Peristianis, & Warner, 1996; Ap, 1992; Belisle & Hoy, 1980; Chen, 1999; Getz, 1994; Hernandez, Cohen, & Garcia, 1996; Jurowski, Uysal, & Williams, 1997; King, Pizam, & Milman, 1993; Lankford, 1994; Lankford & Howard, 1994; Lindberg & Johnson, 1996; Liu & Var, 1986; Long, Perdue, & Allen, 1990; McCool & Martin, 1994, Yoon, 1998; Yoon, Gursoy, Chen, 2000).

The results of these studies have suggested that community support for tourism development is essential for the successful operation and sustainability of tourism (Juroski, 1994; Yoon, 1998). This is because tourism relies heavily upon the goodwill of the local community and residents, and understanding local communities' reactions toward tourism development is essential in achieving the goal of favorable host community support for tourism development (Yoon, Gursoy, & Chen, 2000).

Additionally, the previous tourism impact studies found that local communities' perceptions in terms of economic, environmental, social and cultural impacts have affected communities' support for community tourism development and business (Davis, Allen, & Consenza, 1988; Gee, Mackens, & Choy, 1989; Getz, 1986; Gunn, 1988; Fesenmaire, O'Leary, & Uysal, 1996; McIntosh & Goldner, 1986; Murphy, 1985; Perdue, Long, & Allen, 1990).

Most of these studies have been conducted based on social exchange theory, and have claimed that local communities are likely to participate in an exchange with tourists if they believe that they are likely to gain benefits without incurring unacceptable costs (Jurowski et al., 1997). If residents perceive the positive impacts of tourism development to be greater than the negative impacts, they are inclined to become involved in the exchange and, therefore, endorse and prefer future tourism development in their community (Allen et al.,1994; Getz, 1994).

In fact, a source of the common benefits and costs of tourism development is economic impacts. Local communities are greatly influenced by their economies (Husband, 1989; Liu, Sheldon, & Var, 1987; Milman & Pizam, 1987; Nelson, 1995; Prentice, Terrace, & Road, 1993; Ritchie, 1988; Belisle & Hoy, 1980; Tyrrell & Spaulding, 1984; Jurowski, Uysal, & Williams, 1997; Murphy, 1983). Job creation or reduced unemployment has been discussed as the most prominent benefit of tourism development. Changing investment and spending (Akis, Peristianis, & Warner. 1996, 1996), economic gain (Getz, 1994), an increasing standard of living (Milman & Pizam, 1988), income distributions for hosts and government (Perdue, Long, & Allen, 1987), prices of goods and services (Johnson, Snepenger, & Akis, 1994); costs of land and housing (Perdue, Long, & Allen 1987), costs of living, development and maintenance of infrastructure, and resources are given as other examples of the economic impacts of tourism development.

Additionally, the social/cultural impacts of tourism have been discussed. For example, tourism provides cultural exchange opportunities and more recreational facilities, and disrupts various quality of life factors. However, it was also found that unlike the economic impacts of tourism, the social and cultural impacts of tourism development could negatively affect residents' perceptions (Jurowski et al., 1997; Liu &

Var, 1986; Milman & Pizam, 1988; Perdue et al., 1987; Pizam, 1978; Prentice, 1993). Creating congestion, traffic jams, noise and increasing crime are examples of the social/cultural impacts of tourism (Gunn, 1988; Johnson et al., 1994; Milman & Pizam, 1988). Researchers found that tourism improved local public services (Keogh, 1990), cultural activity (McCool & Martin, 1994), changing traditional culture (Akis et al., 1996) and preserved the identity of local culture (Liu & Var, 1986).

The previous literature has discussed the physical and environmental impacts of tourism development. It has been identified that physical and environmental impacts are associated with the development of natural, cultural or historical resources, tourist service facilities, preservation of historic and cultural resources, recreation opportunities for visitors and residents, and better roads and public facilities (Davis, Allen, & Cosenza, 1988; Gartner, 1996; Getz, 1994; Liu et al., 1987; Milman & Pizam, 1988; Murphy, 1983; Rothman, 1978; Lankford & Howard, 1994). Likewise, it has been concluded that if residents have a positive perception of tourism impacts in terms of physical and environmental consequences, they will render support for additional tourism development.

Therefore, an investigation of the perceived impacts of tourism development is critical for examining a community's preferences and support of tourism development or opposition to tourism development. Particularly, as key player in local communities, tourism stakeholders' perceptions on tourism impacts are critical to implementing further tourism planning and development.

Consequently, as the success and sustainability of any tourism development projects and development relies on the extent to which the development is planned and constructed with the knowledge and support of the tourism stakeholders, tourism destination competitiveness can be enhanced through the local community, particularly, the support of tourism stakeholders who have received the benefits of tourism development impacts.

ENVIRONMENTAL ATTITUDES

In the tourism literature, it has been discussed that people's support for tourism development could be varied, depending upon their attitudes toward environmental concerns (Yoon, Gursoy, Chen, 2000; Jurowski, Uysal, & Williams, 1997). More specifically, their values and preferences for preservation and utilization of tourism resources may vary based upon their attitudes about human relationships to the natural environment. (Gursoy, Jurowski, & Uysal, 2002).

Jurowski et al. (1995) examined the relationships among environmental attitudes, support for conservational policies, and preferences for recreational facilities in a national park. Two distinctive attitude groups --- ecocentric and anthropocentric were identified. The former attitude favored protection and regulation, and the latter supported recreation development that would transform the environment. In other words, an ecocentric value proposes that mankind must live in harmony with nature, while an anthropocentric value reflects the view that nature exists primarily to serve the needs of humans. Subsequently, they suggested that diverging preferences related to recreational facilities or management actions consistent with particular attitude groups.

Jackson (1987) points out that "one of the most urgent issues in resource management is the problem of finding an acceptable compromise between the development of land for recreation and its preservation for ecological, scientific, cultural, historical, and aesthetical reasons (p. 236)." The previous studies explain that those whose environmental attitudes include exocentric values are likely to prefer that resources be allocated to protect and preserve the environment, while those with anthropocentric inclinations favor transforming the environment to fulfill human needs and desires (Crick-Furman & Prentice, 2000; Jurowski, Uysal, Williams, & Noe, 1995; Uysal, Jurowski, Mcdonald, & Noe, 1994).

Additionally, Jurowski, Uysal, and Williams (1997) and Gursoy et al. (2002), studied residents' attitudes in terms of their environmental concerns about ecocentric values and their impacts and support for tourism development. They concluded that residents' ecocentric attitudes have a direct impact on the support of tourism development, showing a significant positive relationship with support for its

development. However, the results showed that there is an inverse relationship between ecocentric attitudes and the perceived costs and benefits of tourism. Thus, it is interesting to note that residents' ecocentrism can positively influence their support for tourism development. Furthermore, this result supports the previous findings that those with higher ecocentric values are more likely to support cultural and event tourism rather than attraction-based or natural based tourism Jurowski (1994).

Environmental values and attitudes have been evaluated by the New Environmental Paradigm (NEP), which was originally developed by Dunlap and Van Liere (1978). This view refers to the inevitability of imposing limits to human growth, the importance of conserving a balance in nature, the need for developing a sustainable economy, or the need to review the idea that nature exists solely to satisfy human needs (Dunlap & Van Liere, 1978). In other words, the New Environmental Paradigm focuses on beliefs about humanity's ability to upset the balance of nature, the existence of limits to growth for human society, and humanity's right to rule over the rest of nature (Dunlap, Van Liere, Mertig, & Jones, 2000). Thus, belief domains about the environment are assessed by this environmental value paradigm (Crick-Furman & Prentice, 2000; Kaiser, Wolfing, & Fuhere, 1999).

In a study done by Uysal, Jurowski, Noe, and MacDonald (1995), who investigated the correlations between preferences for management action and the NEP subscales, people who have more anthropocentric attitudes are likely to have more preferences for improvements in the beaches and resort amenities group, while people who have ecocentric attitudes are more likely to have preferences for less visible structures, and more wildlife and vegetation projects. These results imply that for targeting naturalists and conservationists, protection of and preserving the environment may be desirable products for destinations. The marketing efforts recommend promoting flora and fauna, natural as opposed to human-built attractions, and un-crowded facilities.

From the literature review of this New Environmental Paradigm, concerning other areas such as recreation, several studies found relationships between demographics (socioeconomic variables), and environmental attitudes (Arcury, 1990; Geisler, Martinson, & Wilening, 1977; Jone & Dunlap, 1992; Langanau, 1987; Van Liere & Dunlap, 1980). Generally, the studies suggest that age, education levels, gender, and

living area may affect environmental concerns and attitudes. For example, the young visitor places a higher value on preservation than do others. Rural residents are likely to be more knowledgeable about wildlife than urban residents, and have a more utilitarian attitude about wildlife, while residents who are from cities more likely to have protective values (Langanau, 1987). Jones and Dunlap (1992) also suggested that among young adults, those raised in urban areas express more environmental concern than older adults, the less educated, and rural residents.

Additionally, Dunlap and Hefferman (1975) studied the reactions of participants in "appreciative" activities such as cross-country skiing and hiking, and found that they showed stronger pro-environmental attitudes than participants in "consumptive" activities such as hunting and fishing. However, since the findings about socio or demographic characteristics have produced different aspects or inconsistent explanations of environmental concerns and attitudes, those socio and political ideology variables may not be recommended for use in explaining environmental concerns and attitudes (Jurowski, Uysal, Williams, & Noe, 1995; Samdahl & Robertson, 1989).

The beliefs about the nature of the earth and humanity's relationship with the environment have been measured by the NEP (Dunlap, Van Liere, Mertig, & Jones, 2000). This environmental paradigm views humans as an integral part of nature (Schultz & Zelezny, 1999) and explains a vision of the world consisting of a series of ideas that oppose the dominant anti-ecological social paradigm (Hernandez, Suarez, Martinez-torvisco, & Hess, 2000). The NEP scale also has been treated as a measure of endorsement of a fundamental paradigm or worldview, as well as of environmental attitudes, beliefs, and values.

Therefore, people's beliefs about their environments may influence their support for tourism development. Inevitably, different values and interests among tourism stakeholders are likely to exist so that more clear information about and understanding of their environmental attitudes are required for the long-term success and sustainability of tourism destinations. Thus, this study utilized the New Environmental Paradigm as a measurement tool to evaluate tourism stakeholders' environmental attitudes, and furthermore to investigate how their environmental attitudes affect their preferences about and support of tourism development.

PLACE ATTACHMENT

In the field of natural resource management, the concept of place attachment has been widely applied in the study of how people evaluate natural environments and their surrounding places (Mitchell, Force, Carroll, & McLanughlin, 1993; Warzecha, & Lime, 2001; Williams & Stewart, 1998). This is because the theoretical strength of the linkage between peoples' perceptions and places has been accepted as a management tool for assessing the value of their surroundings and natural places, understanding resource conflicts, and identifying individuals or groups who should be included in the public involvement process (Moore & Graefe, 1994; Warzecha, & Lime, 2001).

It also has been acknowledged that people's attachment to the community in terms of feelings of community, length of residency, and birth place may affect their perceptions about tourism development, as well as perhaps being a critical determinant of successful coexistence between residents and tourism development (McCool & Martin, 1994; Sheldon & Var, 1994; Um & Crompton, 1987; Williams, Mcdonal, Riden, & Uysal, 1995; Yoon, 1998; Yoon, Chen, & Gursoy, 1999).

These studies have emphasized residents' general feelings about their community and its influences on their support of and cooperation with tourism development. It has been argued that residents are an integral component of destination environments, and their values and perceptions of natural and environmental settings should be evaluated and incorporated into the management process. Additionally, building a better understanding of the values people attach to their community can be an essential step toward a more effective approach to destination management.

Theories and concepts about place attachment have been found in various disciplines, including geography, architecture, and environmental psychology (Kaltenborn, 1997). Peoples' perceptions, attitudes, and behaviors toward their surrounding places are commonly discussed in terms of research issues and topics in studies of place attachment. Additionally, several models and conceptual frameworks of people-place relationships (e.g. place identity and place dependence) have been developed. Such models may help to conceptualize the extent to which an individual

values or identifies with a particular environmental setting (Moore & Graefe, 1994 ; Twigger-Ross & Ussell, 1994).

Specifically, place attachment has been considered as "an affective bond or link between people and specific places" (Hidalgo & Hernandez, 2001, p. 274), "emotional involvement with places" (Hummon, 1992, p. 256), and "an individual's cognitive or emotional connection to a particular setting or milieu" (Low, 1992, p. 165). Tuan (1976) said that this concept may be referred to as "geopiety," which implies people's attachment to nature in general and certain places in particular. There is a broad range of emotional and social bonds between humans and their territorial area. Subsequently, people's attachment to place can be considered as enduring psychological attitudes and behavioral tendencies that can enable an understanding of the identity of a person based upon a geographical place (Feldman, 1990).

Since the meaning of place can be complex and diverse in terms of its size, shapes, and levels, place attachment can also be multifaceted, and the natural physical landscape, social life, culture, community, and history of places can be involved in building attachment to places (Kaltenborn, 1997). According to Low and Altman (1992), there are four basic processes that lead to the development of place attachment: 1) biological, 2) environmental, 3) psychological, and 4) socio-cultural.

In general, it has been believed that peoples' attachment to place may be built by expressing the sense of belonging and certain purpose that gives meaning to their lives (Bricker & Kerstetter, 2000; Buttimer, 1980; Tuan, 1980). This implies that people have not only a deep and complex attachment that is expressed through emotional and behavioral actions, but also have functional attachment to places (Bricker & Kerstetter, 2000). Thus, place attachment has been assessed by at least two conceptual domains, including place identity and place dependence (Bricker & Kerstetter, 2000; Lee & Allen, 1999; Proshansky, Fabian, & Kaminoff, 1983).

Place identity is associated with "those dimensions of self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals and behavioral tendencies and skills relevant to this environment" (Proshansky, 1978, p. 155). It involves "place belongingness," which is characterized by

strong desires and emotional attachment, and is theorized to be a "complex cognitive structure" that consists of the "norms, behaviors, rules, and regulations that are inherent in the use of these places and spaces" (Proshansky et al., 1983, p.61).

According to Moore and Graefe (1994), place identity is developed over a longer period of time and builds emotional and symbolic meanings of a place. Place identity is formed through individual awareness and perception of the world as represented by a collection of memories, conceptions, interpretations, ideas, and related feelings about specific physical settings and types of settings. It is implied that people recognize a place as an important part of themselves, and as an integral component of self-identify from their experiences of the surroundings and environment. Consequently, place identity represents people's symbolic/emotional relationship with their natural surroundings and environments and places (Proshansky, Fabian, & Kaminof, 1983)

As another domain component of place attachment, place dependence can be considered as an "occupant's perceived strength of association between him or herself and specific places" (Stokols & Shumaker, 1981, p. 457). It involves the quality of a specific place, depending upon the degree to which it satisfies the needs or goals of an individual, and also it is related to the quality of a particular place as it compares to alternative sites or settings that may satisfy the individuals' needs or goals (Bricker & Kerstetter, 2000; MaCool & Martin, 1994; Shumaker & Talyor, 1983; Warzecha & Lime, 2001).

Thus, it can be said that place dependence is the level to which individuals perceive themselves as functionally associated with places or groups. Depending upon a person's previous experiences with other places and also their perception or awareness of alternative existing places, people's attachment to place is formed. Thus, place attachment is theorized to be peoples' functional relationship with their environmental settings and its facilities.

Additionally, place attachment is the extent to which people perceive the value of natural and environmental settings and places. This valuation can be evaluated by two general domains of place attachment, including place identity (emotional/symbolic meanings and attachment) and place dependence (functional meanings and attachment). In other words, place can be valued by people because it particularly appeals to peoples'

emotional or symbolic mind, or both, and it can be valued because it has a good quality of facilities and activities (Moore & Graefe, 1994)

Traditionally, research on this concept of attachment to a place has been performed in various geographical settings, such as residential communities (Cooper, 1976; Hummon, 1992; Korpela, 1989), childhood neighborhoods (Altman & Low, 1992), and recreational settings and facilities (Schreyer, Jacob, & White, 1981). In the tourism literature, a number of studies have applied the concept of place attachment to tourism (McCool & Martin, 1994; Sheldon & Var, 1984; Um & Crompton, 1987; Williams, McDonald, Riden, & Uysal, 1995, Yoon, 1998).

For example, Um and Crompton (1987) studied residents' attachment to the community, which was measured by length of residence, birth place, and heritage. They found that the more attached residents were to the community, the less positively they perceived the impacts of tourism development in their community.

Macool and Martin (1994) examined how the adverse effects of tourism development influence feelings of community attachment. They measured community attachment by length of residence and two Likert scale items measuring residential preference, and concluded that people living in communities with higher levels of tourism development have the strongest sense of attachment, but those living in these communities also have the shortest tenure in that locale. Highly attached residents viewed the costs and impacts of tourism as well as the sharing of costs with more concern than those who were unattached. Additionally, highly attached individuals viewed the benefits of tourism more positively than those who were unattached.

In a study done by Williams et al. (1995), it was found that length of residency was correlated with community sentiment, community identity, and regional identity. Particularly, regional identity had a strong correlation with attitude toward tourism's economic and social impacts. As a result, they concluded that more attached residents perceived tourism impacts more favorably and also may express ties to the regional character of the landscape more than ties to the community. People may have different attitudes toward tourism development, depending upon their source or degree of community or place attachment.

In conclusion, peoples' attachment to place is apparently an important concept in identifying their relationship with natural and environmental surroundings and settings. Depending upon the degree or value of peoples' attachment, they may have different attitudes and behaviors toward their environments. Since the success of tourism development is highly affected by tourism stakeholders' support and interests, information about their relationships and attachment to community are a critical source of determining tourism development and its sustainability.

Therefore, this study applied the concept of place attachment in investigating tourism stakeholders' supporting of tourism development. It is interesting to note that if tourism stakeholders have a high attachment to their community, they may have strong preferences about tourism development.

CHAPTER III
RESEARCH METHODOLOGY

INTRODUCTION

Chapter I introduces the research problem, the purpose of the study, and the knowledge foundation of the study. Chapter II presents a review of relevant literature that lays the groundwork for this study. This chapter (Chapter III)) details the research methodology used in the study to empirically test the research hypotheses. The first section begins with a discussion of the research questions and research framework. Then, the four hypotheses empirically tested in this study follow. The second section will provide a discussion of the statistical method (structural equation modeling) that will be employed in this study.

In the third section, the research design and survey instrument will be described. Specifically, the research population, sampling, and data collection method will be defined. There is a discussion of how the constructs, as well as the variables of each construct, were selected and operationalized in this study. The variables and scaling used to measure the constructs will be provided in this section. The next section explains how the measurement scale and the survey instrument were refined through the pretest procedures, which include a discussion of the pretest sample, data collection, and the results. Finally, the issues of the reliability and validity of the measurement scales will be addressed.

RESEARCH FRAMEWORK

This study tested a proposed structural model (Figure 3.1) of tourism stakeholders' support of destinations' competitive strategies as they relate to tourism stakeholders' preferences about tourism development, and the interplay of factors that affects both the preferences about tourism development and the support of destination competitive strategies. Accordingly, two research questions were addressed. The first question is to see if tourism stakeholders' preferences about tourism development are affected by their perceptions of the impacts of tourism development, their attitudes toward environmental concerns, and perceived place attachment. The second question asks if tourism stakeholders' preferences about tourism development affect their support for destinations' competitive strategies.

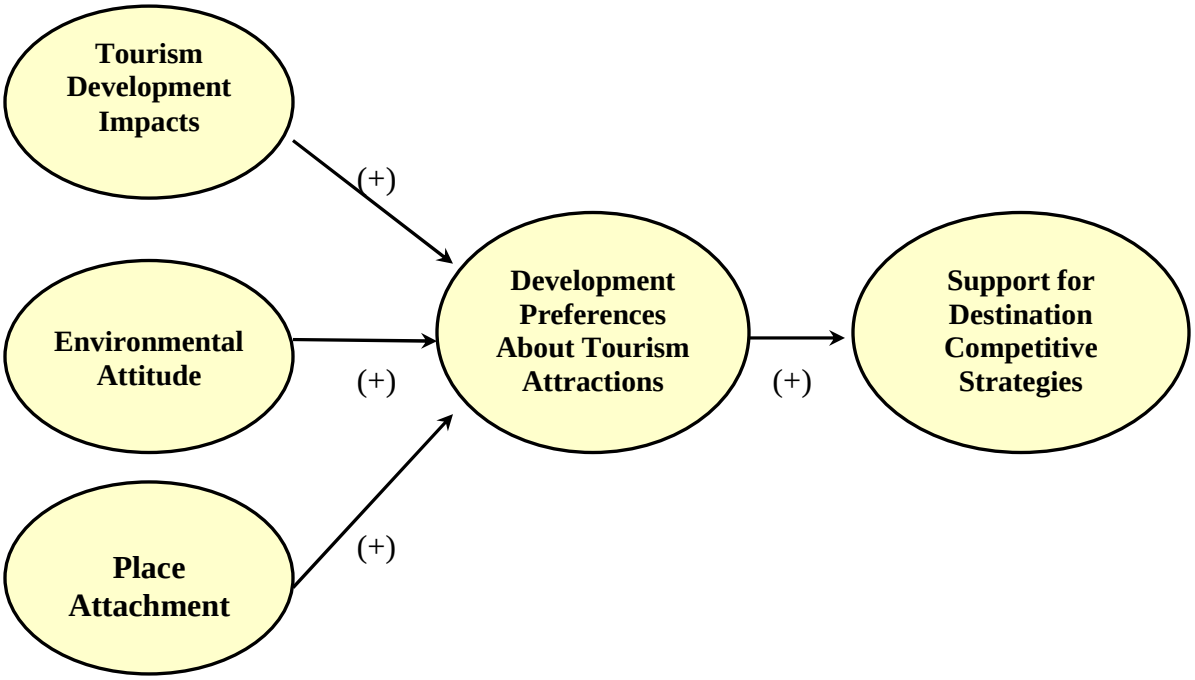


Figure 3.1 Structural Model of Tourism Destination Competitiveness

In order to achieve the objectives of the study, a thorough review of the existing relevant literature has been performed, and subsequently, a theoretical structural model was developed that incorporates concepts from the fields of tourism, planning, and development. As presented in Figure 3.1, the constructs in this study include tourism development impacts, environmental attitudes, place attachment, development preferences about tourism attractions, and support for destination competitive strategies.

Since tourism stakeholders' participation and involvement are essential in tourism planning and its decision-making process, their perceptions and attitudes about tourism are a critical source of success in tourism development. The tourism literature has suggested that people's preferences about tourism development are likely to be affected by several factors. For example, if tourism stakeholders have a positive perception of tourism development impacts, they are likely to support tourism development. If they have high ecocentric attitudes toward environmental concerns, they are likely to support tourism development. Additionally, if tourism stakeholders have a high attachment to their community, they are likely to support tourism development.

A study of the existing literature provided the justification for the proposed model that depicts the interplay of factors that are likely to directly and indirectly affect preferences about tourism development and the support of destination competitive strategies. Accordingly, based on the literature review, the theoretical structural relationships among the constructs were developed, as presented in Figure 3.1. The logical flow of the interplay of factors that affect tourism stakeholders' preferences and support of tourism development is described in this structural model. Each arrow at the end of a line depicts a progressive linkage between constructs. The direction of the arrows specifies the relationship between the constructs. Additionally, each linkage implicitly represents a hypothesis that was empirically tested by estimating the degree of the relationship in this study. It is also assumed that the three exogenous constructs are not correlated with each other: tourism development impacts, environmental attitudes, and place attachment.

In this structural model, the support of destination competitive strategies is considered as the ultimate dependent or endogenous construct. It is thought to be affected indirectly by the three constructs: 1) perceived tourism impacts, 2) attitudes toward

environmental concerns, and 3) perceived place attachment. The indirect effect of these three constructs on the support for destination competitive strategies will be contingent upon the manner in which they affect development preferences about tourism attractions/resources. The total effect on support for destination competitive strategies is comprised of both direct and indirect effects.

Another construct, the preference for tourism development, is regarded as the mediating endogenous construct, and also plays the role of dependent variable in these relationships. This construct also intervenes between the three exogenous constructs and the ultimate endogenous construct. Lastly, the exogenous constructs include perceived tourism impacts, attitudes toward environmental concerns, and perceived place attachment. These constructs are considered to explain the development preferences about tourism attractions/resources and support for destination competitive strategies. The arrows lead from the exogenous constructs to the mediating construct, which is thought to be partially explained by the preceding constructs.

As a result, the structural model in this study was empirically tested in identifying the structural relationships among the exogenous and endogenous constructs. Specifically, the structural model empirically examined the impacts of the exogenous constructs of perceived tourism impacts, environmental attitudes, and perceived place attachment on tourism stakeholders' preferences about tourism development. Additionally, the structural model empirically examined the impacts of tourism stakeholders' preferences about tourism development on tourism stakeholders' support of tourism destination competitive strategies. The next section will specify the research hypotheses for this study.

RESEARCH HYPOTHESES

Four hypotheses were proposed and a structural model was tested to determine how tourism stakeholders' development preferences about tourism attractions/resources affect their support for destination competitive strategies, and also how these tourism stakeholders' development preferences are affected by three constructs, including

perceived tourism impacts, attitude toward environmental concerns, and perceived place attachment. Thus, the four hypotheses follow:

H1: There is a positive relationship between tourism stakeholders' perceptions of the benefits of tourism impacts and preferences about tourism attractions/resources development.

H2: There is a positive relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development.

H3: There is a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development.

H4: There is a positive relationship between tourism stakeholders' preferences about tourism attractions/resources development and support for the enhancement strategies of destination competitiveness.

STATISTICAL METHOD FOR THE HYPOTHESES TEST

The properties of the five research constructs (three exogenous and two endogenous) in the proposed structural model (Figure 3.1) and the four hypotheses were tested using a LISREL 8.30 and PRELIS 2.30 package for structural equation analysis and procedures (Jöreskog & Sörbom, 1999). As an estimation method for model evaluation and procedures, the maximum likelihood (ML) method (see in detail, Anderson & Gerbing, 1988; Bentler, 1983; Byrne, 1998; Mueller, 1996) and the two stage testing processes (recommended by Anderson & Gerbing, 1988; Hair, Anderson, Tatham & Black, 1998; Sethi & King, 1994) were utilized.

Structural Equation Modeling (SEM) is designed to evaluate how well a proposed conceptual model that contains observed indicators and hypothetical constructs explains or fits the collected data (Bollen, 1989a & 1989b; Hoyle, 1995). It also provides the ability to measure or specify the structural relationships among sets of unobserved

(latent) variables, while describing the amount of unexplained variance (Byrne, 1998; Davies, Goode, Mazanec, & Moutinho, 1999; Hoyle, 1995; Tuner & Reisinger, 2001). Clearly, the hypothetical model in this study was designed to measure structural relationships among the unobserved constructs that are set up on the basis of relevant theories and prior empirical research and results. Therefore, the SEM procedure is an appropriate solution for testing the proposed structural model and hypotheses for this study.

According to Byrne (1998), the SEM is "a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the multivariate analysis of a structural theory bearing on some phenomenon" (p. 3). A structural theory is used to explain relationships among multiple variables or constructs. The processes in structural equation modeling are represented by a series of structural equations and relations that can be modeled pictorially to enable a clearer conceptualization of the theory under study. Thus, through the SEM procedure, the simultaneous examination and explanation of the pattern of a series of inter-related dependence relationships among a set of latent (unobserved) constructs is possible (Reisinger & Turner, 1999).

Measurement Model

Specifically, there are two distinct components in structural equation modeling: 1) the measurement model and 2) the structural equation model. First, the measurement model is the component of the general model in which latent constructs are prescribed. The latent constructs are unobserved variables implied by the covariances among two or more observed indicators (Hoyle, 1995b). By using confirmatory factor analysis for the measurement model, a priori hypotheses regarding relationships among and between observed indicators and their underlying latent constructs are evaluated. Thus, the measurement model specifies the posited relationships of the observed indicators to the latent constructs, while describing the freedom of random error and uniqueness associated with their indicators.

According to Anderson and Gerbing (1988), confirmatory measurement models should be evaluated and re-specified before measurement, and structural equation models

are examined simultaneously. Thus, before testing the measurement models overall, each construct in the model should be analyzed separately. Further, when each construct has an acceptable fit based on the fit indices, a pair of constructs should be evaluated in order to confirm that the pre-specified variables or indicators driven by the theory measure what is theoretically believed to be its underlying structure. The model is modified so that the final model becomes a theoretically meaningful as well as a statistically acceptable model. Furthermore, the final model represents the theoretical model of interest under the study. After assessing the overall model, the psychometric properties of each latent construct are evaluated separately through examining the completely standardized loading, the error variance, the construct reliability, and the variance extracted.

Structural Model

The structural model is the hypothetical model that prescribes relationships among latent constructs and observed variables that are not indicators of latent constructs (Hoyle, 1995b). Generally, this model is known as the component of a general model that relates the constructs to other constructs by providing path coefficients (parameter values) for each of the research hypotheses. Specifically, each estimated path coefficient can be tested for its respective statistical significance for the hypotheses' relationships, while including standard errors and calculated t-values (Bollen, 1989a; Byrne, 1998; Hair et al., 1998; Loehlin, 1992).

In the structural model, a specific structure between latent endogenous and exogenous constructs must be hypothesized, and the measurement model for latent endogenous and exogenous constructs must be determined (Hair et al., 1998; Mueller, 1996). Commonly, maximum likelihood (ML) or generalized least squares (GLS) are utilized for the model estimation because these methods allow for the analysis of models involving latent constructs and non-zero error covariances across structural equations (Kline, 1998; Mueller, 1996). If a relationship can be specified in terms of directions, a one-tailed significance test can be employed. Otherwise, a two-tailed significance test must be used for an unknown direction for a pre-specified relationship. If a reported t-value is greater than a certain critical value, the null hypothesis that the associated

parameter is equal to zero is rejected. This t-value is determined by dividing the appropriate coefficient by its standard error. In general, if an estimated t-value is greater than 1.96, the parameter indicates a statistical significance for a two-tailed test at the .05 level of significance (Mueller, 1996). The coefficient is significant at the .01 level if the t-value exceeds 2.58. Particularly, these critical values are utilized and evaluated for testing relationships between the constructs (Beta and Gamma Coefficients).

As another evaluation for the structural model, the standardized solution, where the estimated coefficients all have equal variances and a maximum value of 1.0, must be examined (Bollen, 1989b; Hair et al., 1998). For the measure of the entire structural equation, an overall coefficient of determination (R^2) must be calculated for the overall explanation of the variance. As a result, the structural model provides a meaningful and parsimonious explanation for observed relationships within a set of measured variables (MacCallum, 1995). The model also enables explanations of direct, indirect, and total structural effects of the exogenous latent constructs on the endogenous constructs.

Evaluation of Structural Equation Modeling

When measurement and structural models are evaluated, three types of overall model fit measures are usually utilized: Absolute Fit Measures (AFM), Incremental Fit Measures (IFM), and Parsimonious Fit Measures (PFM) (Byrne, 1998; Hair et al., 1998; Hu & Bentler, 1995; Maruyama, 1998). An absolute fit index is used to directly evaluate how well an priori theoretical model fits the sample data, and an incremental fit index assesses the proportionate fit by comparing a target model with a more restricted, nested baseline model. A parsimonious fit measure is used to diagnose whether model fit has been achieved by over-fitting the data with too many coefficients.

Among the absolute fit index commonly used to evaluate the model are the Chi-square test (χ^2), the noncentrality parameter (NCP), the root mean square residual (RMSR), and the root mean square error of approximation (RMSEA). Because the Chi-square is heavily influenced by the sample size (Bollen & Long, 1993), other goodness-of-fit indices are suggested to help the model evaluation (Bentler, 1990; Jöreskog & Sörbom, 1996a).

Regarding the Chi-square statistic (χ^2), since a large value of χ^2 relative to the degrees of freedom indicates that there is a difference between the observed and estimated covariance matrices with a statistically significant value ($p < .05$), a low Chi-square value (χ^2) should be desired. Thus, little difference between the actual and predicted input matrices is obtained. However, it should be noted that this Chi-square statistic is too sensitive to sample size.

As another absolute fit index, the noncentrality parameter (NCP) shows the results of another measure of the likelihood-ratio Chi-square statistic that is less affected by or independent of the sample size. This fit measure shows the average squared Euculidean distances between the estimated model and the unrestricted model. Since this fit index cannot be statistically tested, it is recommended to use this measure in making comparisons between the alternative models. The Goodness-of-fit index (GFI) represents the overall degree of fit, indicating a nonstatistical measure ranging in value from zero (poor fit) to 1.0 (perfect fit). Thus, a higher score indicates a better fit. The above .95 should be desired to indicate a better fitting model.

The standardized root mean square residual, standardized RMR (SRMR) represents the average difference between the predicted and observed variances and covariances in the model (Hu & Bentler, 1999). The smaller the standardized RMR, the better the model fit. Thus, when model fit is perfect, SRMR is 0.

The root mean square residual (RMSR) explains an average of the residuals between observed and estimated input matrices and is calculated by the square root of the mean of the squared residuals. The root mean square error of approximation (RMSEA) represents a close approximation of fit relative to the degrees of freedom that could be expected if the model is estimated in the population, not just from the sample drawn for the estimation (Steiger, 1990). If a) the RMSEA point estimate is less than .05; b) the lower and upper boundaries of confidence interval is less than the recommended values of .05 and .08 respectively (Browne & Cudeck, 1993); and c) the probability value associated with this test of close fit is greater than .50 (Jöreskog & Sörbom, 1996), it can be said that the degree of approximation in the population is very small and the model fits the data well. Thus the model is acceptable.

As the second class of measures provided by LISREL, the incremental fit measures can be evaluated in order to compare the proposed model to some baseline model. The common examples of group of this fit indexes are the adjusted goodness-of-fit index (AGFI), the Tucker-Lewis index (TLI), the normed fit index (NFI), the relative fit index (RFI), and the comparative fit index (CFI).

The AGFI as an extension of the GFI is adjusted by the ratio of degrees of freedom for the proposed model to the degrees of freedom for the null model. It is recommended that a value greater than or equal to .95 is an acceptable level for a good fit. The TLI, known as the Non-normed fit index (NNFI), is used for evaluating factor analysis and can also be used for comparisons between alternative models by substituting the alternative model for the null model. It is also recommended that a value greater than or equal to .95 is an acceptable level for a good fitting model. The NFI, RFI, and CFI are also used for a relative comparison of the proposed model to the null model or independent model, which ranges from zero (poor fit or no fit at all) to 1.0 (perfect fit). It is suggested that a good fitting model will obtain a value greater to or equal to .95. Thus, larger values indicate higher levels of goodness-of-fit.

As the third class of measure, the parsimonious fit measures include the parsimonious normed fit index (PNFI) and parsimonious goodness-of-fit index (PGFI). These measures were used to evaluate whether model fit has been obtained by "over fitting" the data with too many coefficients. The PNFI explains the number of degrees of freedom used to achieve a level of fit. Higher values of the PNFI are better. The PGFI takes into account the complexity of the hypothesized model in the assessment of the overall fit. Typically, a PGFI value larger than .50 is an accepted value of a good model fit (Byrne, 1998).

Lastly, as another general model evaluation fit index, the Hoelter's Critical N (CN) can be used for evaluating the adequacy of model fit. In particular, the purpose of the CN is to estimate a sample size that would be sufficient to yield an adequate model fit for an χ^2 test (Hu & Bentler, 1995). Hoelter (1983) proposed that a CN value in excess of 200 is indicative of a model that adequately represents the sample data.

RESEARCH DESIGN

Study Population

Population can be defined as the entire group under study as specified by the objective of the research (Burns & Bush, 1998; Pedhazur & Schmelkin, 1991). Since the objective of this study was to investigate tourism stakeholders' perceptions, attitudes, and behavior toward tourism and its development, the population of this study was tourism stakeholders. Specifically, the target population includes members or groups that are related to chambers of commerce, state and local government officials, tourism authorities, local tourism agencies, non-government organizations, tourism related associations and councils, convention and visitors bureaus, tourism planning and development companies, tourism related faculty and professionals, local and state parks, local tourism attractions, and visiting and information centers in the state of Virginia.

Sampling

Sampling is a procedure that uses a small number of units of a given population as a basis for drawing conclusions about the whole population (Pedhazur & Schmelkin, 1991; Zikmund, 1997). Sampling is an important method for increasing the validity of the collected data and ensuring that the sample is representative of a population. The sample (tourism stakeholders) for this study was collected by a simple random sampling method from the identified sampling frame.

The major source of the sampling frame was identified from "Associations Unlimited, the Encyclopedia of Associations (EA) series," which has, for over 40 years, been the premier source for information on associations and professional societies. The EA series contains more than 158,000 detailed listings for organizations all over the world and especially, it includes 115,00 listings for U.S. regional, state, and local associations, and 300,000 for non-profit organizations. However, it should be noted that since this study covered only the state of Virginia, lists relating only to Virginia were extracted from the above database.

In order to get lists of respondents' mailing addresses, the detailed subject category, "chambers of commerce, trade and tourism organizations" was chosen from the above database at the Virginia Tech library. This database provides full lists of chambers of commerce, which cover the entire state of Virginia. Accordingly, possible respondents were identified from homepages of chambers of commerce and their internet-links such as tourism and economic development, local and state parks, outdoor recreation parks and facilities, town and city offices, and advisor boards and councils.

Another source of mailing lists was from the local economic development office located in Blacksburg, Virginia. This mailing information contains over 900 Destination Management Organization (DMO) lists for Virginia tourism stakeholders. These lists were recoded from annual tourism symposia and conferences. As another source, the internet homepage of the Virginia Tourism Corporation (http://www.vatc.org/) provided directories and resources about tourism stakeholders. For example, it provided lists of convention & visitors bureaus, local/regional visitor centers, Virginia destination marketing organizations, and local & state tourism attractions and places. Once tourism stakeholders were identified, their qualifications were examined according to their representation of the target population, and it was determined whether or not they would be included in the sampling frame for this study.

Sample Size

This study employed Structural Equation Modeling (SEM) to test the proposed structural model and hypotheses. Since the number of observations is a critical issue for any statistical analysis and its assumption tests, and also is a crucial factor in determining the extent to which the procedures of the currently existing model evaluation can be reliable, the sample size should be addressed.

In general, there is no correct sample size in the absolute sense, and larger samples are always preferable. However, it is suggested in SEM that it is acceptable if a minimum ratio of at least 5 respondents for each estimated parameter can be achieved (Hatcher 1994) and also, it is more appropriate if a ratio of 10 respondents per parameter is obtained (Hair, Andesrson, Tatham, & Black, 1998). However, there are a number of

factors that impact the sample size requirements, including model misspecification, model size, departures from normality, and estimation procedure (Hair et al. 1998). For example, the ratio of respondents to parameters should increase with a ratio of 15 respondents for each parameter if the data have some violation of multivariate normality. As a result, it is recommended that for a maximum likelihood estimation (MLE) as the most common estimation procedure, a sample size of 200 is appropriate.

More specifically, since the acceptable level of the final model in SEM is evaluated based on the fit indices, determination of sample size follows previous study results and suggestions. Several studies have reported that there is an association between sample size and the model fit indices, including the incremental fit indices and the absolute fit indices (Anderson & Gerbing, 1984; Bollen, 1989a, 1989b; Hu & Bentler, 1995). As a result, the model and number of fit indices such as GFI, AGFI, NNFI, CFI (or BFI), and CN are relatively and consistently stable across the MLE method at a sample size of 250 or greater when the latent constructs are independent.

Therefore, in order to achieve the objectives of the study, using SEM, if a usable sample size of 300 or greater is obtained, the solution for the final structural model will be acceptable. Thus, the target usable sample size for this study was at least 300. However, in a mail survey method, it is often found that the response rate tends to be low thereby leading to the potential problem of generalizing the results. Usually, the response rate varies in a range between 10% and 50%, depending upon the study design, sample, and study site. Particularly, according to late studies on residents perceptions of tourism development in Virginia (e.g., Yoon, 1998; Yoon, Chen, & Dogan, 2000), the response rate has been less than 15%.

Therefore, in order to meet the sample size for this study, a total of 3,100 survey questionnaires were mailed to the target population, which is tourism stakeholders in the state of Virginia. Consequently, the questionnaires were distributed and collected in June and July, 2002.

Data Collection

This study utilized a self-administered survey method. Once the final measurement scales and the survey questionnaire were developed, the survey package that included a cover letter and survey questionnaire was sent to the selected tourism stakeholders in Virginia. However, prior to collecting the main data for the study, a pilot study was conducted to test the measurement scales and survey questionnaire in order to improve clarity and readability.

Pre-test and Procedures for the Survey Instrument

Once an initial measurement scale and survey questionnaire was developed based on an extensive literature review and the objectives of the study, the initial pretest survey questionnaire was circulated to several faculty members and graduate students in the Department of Hospitality and Tourism Management at Virginia Polytechnic Institute and State University. The purpose of this procedure was to determine if there was a necessity for revision of the survey design, layout, wording, and if it was necessary to clarify any ambiguous measurement items. Participants were encouraged to provide their feedback and comments about the initially developed survey questionnaire, and then such suggestions were taken into account in the revision of the questionnaire.

Next, with the first revised measurement scales and questionnaire, a focus group interview was conducted. A total of 10 tourism stakeholders from the sampling frame were selected and asked if they understood the questions and if anything was left out that they felt should have been included. Additionally, they were asked to provide any suggestions regarding survey design, layout, and wording. Their comments and suggestions were incorporated into the design of the questionnaire used in the pilot study. This procedure further clarified the measurement scales and survey questionnaire. Once the final measurement scales and design of the survey questionnaire were confirmed through the above procedures, the main survey questionnaires were delivered to the randomly selected tourism stakeholders according to the sampling procedures.

MEASUREMENT SCALES AND INSTRUMENTS

The theoretical model of this study was designed to empirically test the structural relationships among three exogenous constructs: tourism development impacts, environmental attitudes, and place attachment, one mediate endogenous construct: preferences about tourism attractions/resources development, and one ultimate endogenous construct: support for destination competitiveness strategies. In this model, the exogenous constructs are considered as predictors for the other constructs in the model. The endogenous construct is the dependent or outcome construct in at least one structural relationship (Hair et al., 1998).

A construct, usually called a latent variable, is a hypothesized and unobserved concept that can only be measured by observable or measurable variables (Bollen, 1989a; Hair et al., 1998). The measurement variables or scales are collections of items intended to reveal levels of theoretical variables to measure the construct (Devellis, 1991). Accordingly, the measurement scales are developed to measure phenomena that are believed to exist because of a theoretical underpinning or observations, but cannot be assessed directly. As a result, this measurement enables one to assign numerals to objects, events, or observable phenomena with different degrees of a quality or property (Duncan, 1984).

The measurement scales for this study were developed based on the literature review and relevant theories, previous empirical studies and results, and observations and experiences of the given phenomena. The following section will detail the measurement scales and the items used in measuring all the constructs in this study.

Exogenous Constructs

Measurement of Tourism Development Impacts

An initial measurement scale for assessing tourism development impacts was adapted from Yoon (1998), Yoon, Chen and Gursoy (1999), and Yoon, Gursoy, and Chen (2000), which was developed based on studies by Liu and Var (1986) and Akis, Peristainis, and Waner (1996).

The original scale consisted of tourism impact items representative of tourism's economic, social, cultural, physical, and environmental impacts. The study done by Yoon (1998) reported .79 of internal consistency of reliability on the scale (twenty four items). This study investigated residents' perceptions of tourism development in Williamsburg and Virginia Beach areas. Additionally, the structural relationships with total impacts and support for tourism development were identified in the study (Yoon et al., 2000) and all dimensions of tourism impacts were directly and indirectly associated with the total impacts and support for tourism development.

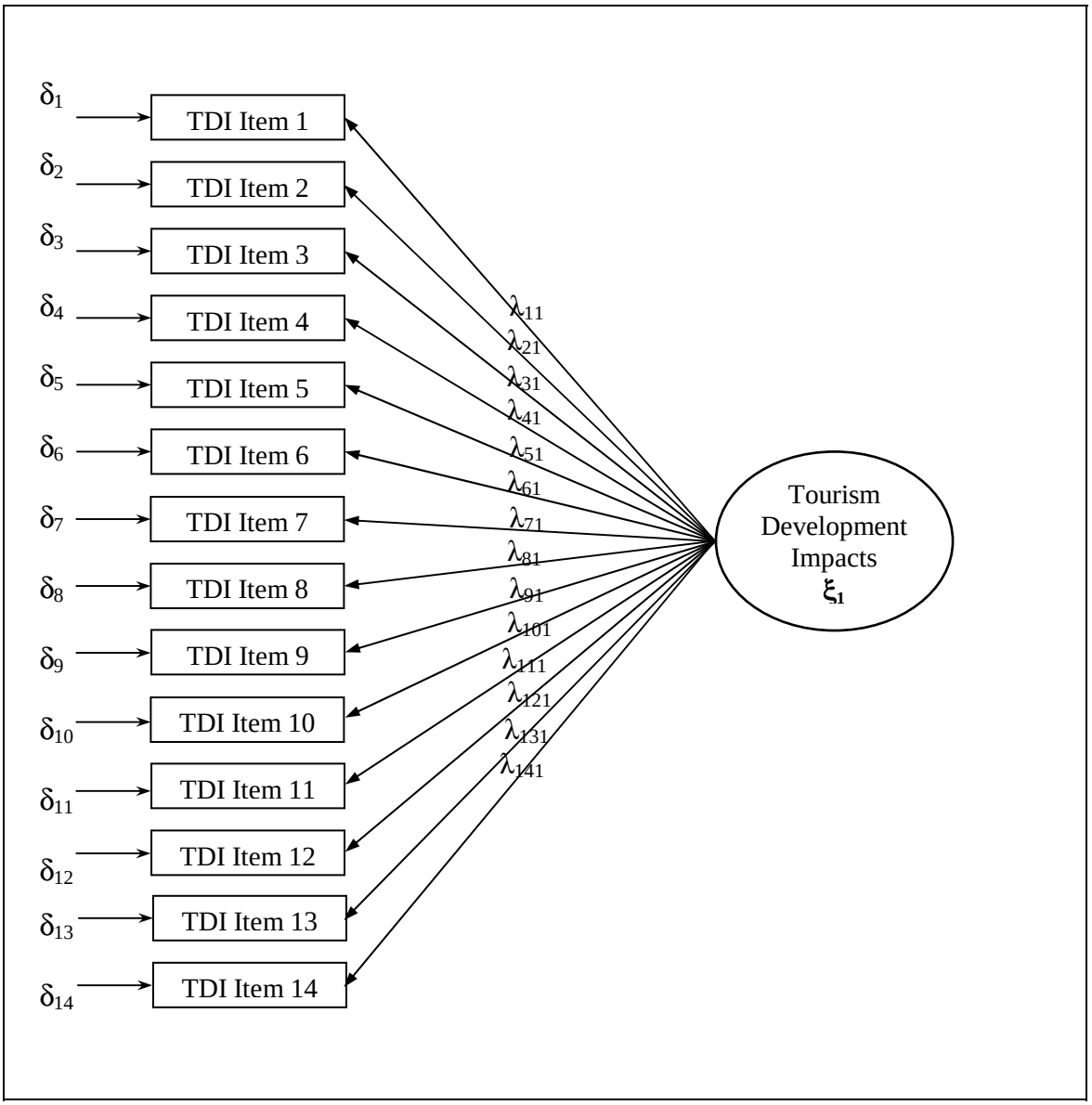
As a result, fourteen statements about tourism development impacts based on the results of the study done by Yoon (1998) and Yoon et al. (1999) were adapted for the measurement scale. The items were chosen if significant relationships with their corresponding variables or constructs were identified. The statements and hypothesized measurement model for tourism development impacts are shown in Table 3.1 and Figure 3.2, respectively. A five-point Likert scale was used as the response format with assigned values ranging from 1 = strongly disagree to 5 = strongly agree. The reliability of this measurement scale is reported in the result section, Chapter 4.

Table 3.1

Measurement of Tourism Development Impacts

1. Tourism has created more jobs for your community.
2. Tourism has attracted more investment to your community.
3. Our standard of living has increased considerably because of tourism.
4. Tourism has given economic benefits to local people and small businesses.
5. High-spending tourists have negatively affected our way of life.
6. Tourism has changed our precious traditional culture.
7. Local residents have suffered from living in a tourism destination area.
8. Tourism has encouraged a variety of cultural activities by the local residents.
9. Tourism has resulted in more cultural exchange between tourists and residents.
10. Tourism has resulted in positive impacts on the cultural identity of our community.
11. Tourism has resulted in traffic congestion, noise, and pollution.
12. Construction of hotels and other tourist facilities have destroyed the natural environment.
13. Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places in our community.
14. Tourism provides more parks and other recreational areas for local residents.

Note: 1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree, 4 = Agree, and 5 = Strongly agree



Note: TDI = Tourism Development Impacts

Figure 3.2 Hypothesized Measurement Model of Tourism Development Impacts

Measurement of Environmental Attitudes

The scale for measuring environmental concerns and attitudes was adapted from Dunlap, Van Liere, Mertig, and Jones (2000). The scale consists of 15 items that were designed to measure the ecological world view called the "new environmental paradigm" (NEP). It is mainly a measure of endorsement of a world-view, environmental attitudes and values founded on ecological principles, and comprises two domain attitudes: ecocentric and anthropocentric (low ecocentric or high ecocentric attitudes). The basic theme of an ecocentric attitude is that humans must live in harmony with nature and that there are limits to the capacity of the natural environment to absorb the growth of human activities. In contrast, the anthropocentric attitude about environments expresses the feeling that nature lacks inherent value and exists primarily to serve the needs of mankind.

This scale has been widely employed in different areas of research, including environmental, natural resources, and rural planning (Dunlap, Van Liere, Mertig, & Jones, 2000; Fransson & Garling, 1999). The studies have provided support for the validity of the scale. For example, Kempton, Boster, and Hartely (1995) in their study discussed content validity of the scale in providing the major facets of the NEP: balance of nature, limits of growth, and human domination over nature (in Dunlap et al., 2000). Predictive and criterion validity were identified based on several studies (e.g. Scott & Willits, 1994; Tarrant & Cordell, 1997; Vining & Ebreo, 1992; Zeller & Carmines, 1980). In terms of construct validity, the study by Stern, Dietz, and Guagnano (1995) empirically confirmed that the NEP scale forms theoretical components, along with fundamental values, about environmental belief systems.

In the tourism context, a number of tourism researchers also have frequently utilized the NEP measurement scale to evaluate their respondents' environmental values and attitudes (Crick-Furman & Prentice, 2000; Jurowski, Uysal, Williams, 1997; Silverberg, Backman, & Backman, 1996; Uysal, Jurowski, Noe, & McDonald, 1994). In a study by Jurowski (1994), the reliability of this scale was explained by a Cronbach's Alpha of .82. Particularly, Uysal et al. (1994) found support for the content and predictive validity of the NEP scale. It was found that there was a correlation between preferences

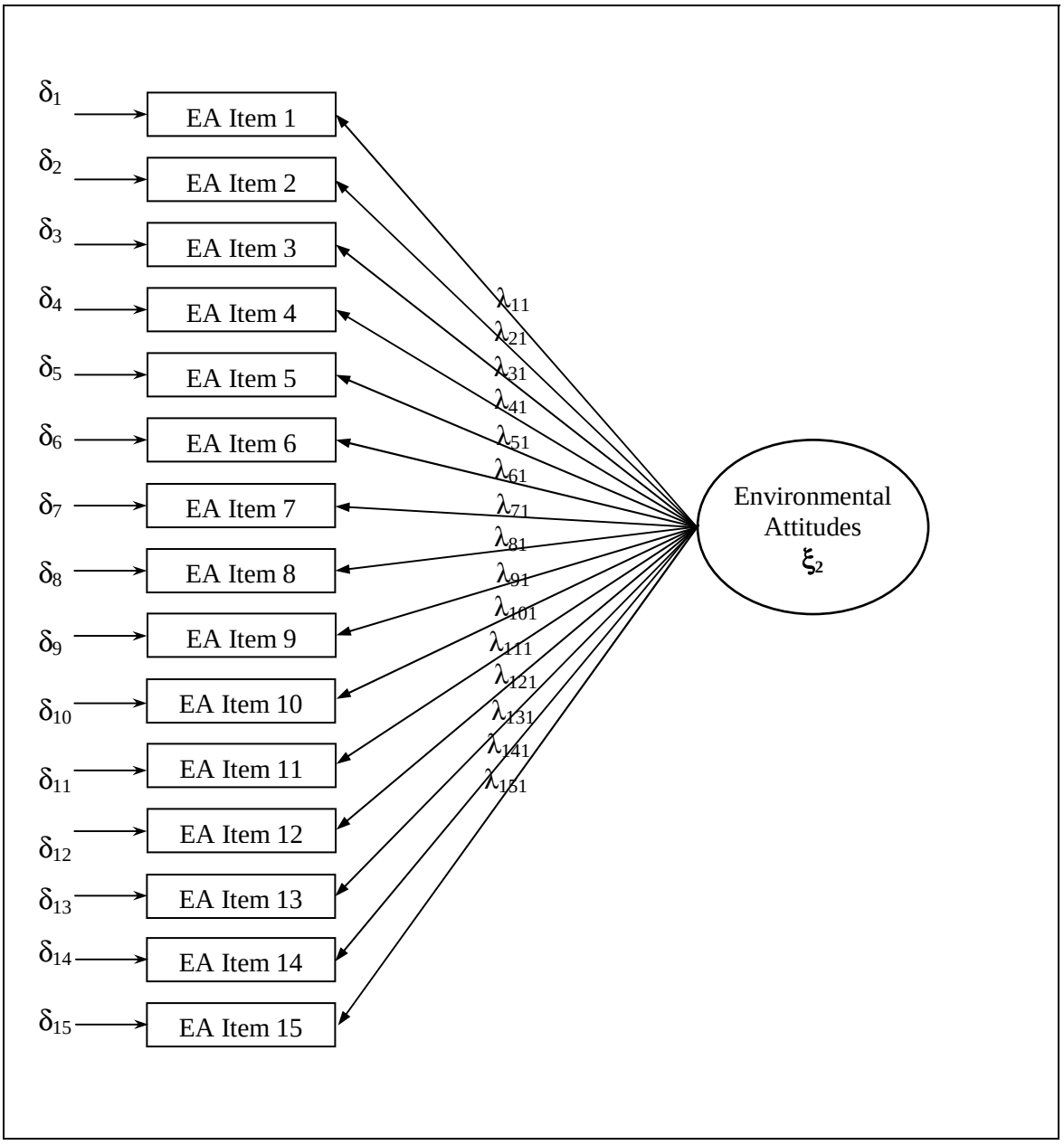
for management actions and the NEP scales. For example, higher anthropocentric attitudes were associated with preferences for improvement of beach and resort amenities. Additionally, Jurowski et al. (1997) found that higher ecocentric attitudes were associated with respondents' support for nature-based tourism. Thus, since this measurement scale has solid content, predictive, and construct validity, this study employed this measurement scale for measuring tourism stakeholders' attitudes about their environment. As presented in Table 3.2 and Figure 3.3, the respondents were asked to indicate the degree of their agreement with 12 statements, using a five-point Likert scale as the response format, with assigned values ranging from 1 = strongly disagree to 5 = strongly agree. A high score on this scale means an indication of a highly ecocentric attitude.

Table 3.2

Measurement of Environmental Attitudes

1. We are approaching the limit of the number of people the earth can support.
2. Humans have the right to modify the natural environment to suit their needs.
3. When humans interfere with nature, it often produces disastrous consequences.
4. Human ingenuity will insure that we do not make the earth unlivable.
5. Mankind is severely abusing the environment.
6. The earth has plenty of natural resources if we just learn how to develop them.
7. Plants and animals have as much of a right to exist as humans.
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations.
9. Despite our special abilities, humans are still subject to the laws of nature.
10. The so-called "ecological crisis" facing humanity has been greatly exaggerated.
11. The earth is like a spaceship with only limited room and resources.
12. Humans were meant to rule over the rest of nature.
13. The balance of nature is very delicate and easily upset.
14. Humankind will eventually learn enough about how nature works to be able to control it.
15. If things continue on their present course, we will soon experience a major ecological catastrophe.

Note: 1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree, 4 = Agree, and 5 = Strongly agree



Note: EA = Environmental Attitudes

Figure 3.3 Hypothesized Measurement Model of Environmental Attitudes

Measurement of Place Attachment

Place attachment has been measured through two domain theoretical concepts: place identity and place dependence (Bricker & Kerstetter, 2000; Proshansky, Fabian, & Kaminof, 1993; Williams, Anderson, McDonald, & Patterson, 1995; Williams & Roggenbuck, 1989). Place identity has been measured according to the extent to which there is an association of emotional and symbolic feelings about a given place, and place dependence can be measured by the level to which individuals perceive themselves as functionally associated with places or groups of places (Moore & Graefe, 1994; Proshansky et al., 1993; Sumaker & Taylor, 1983).

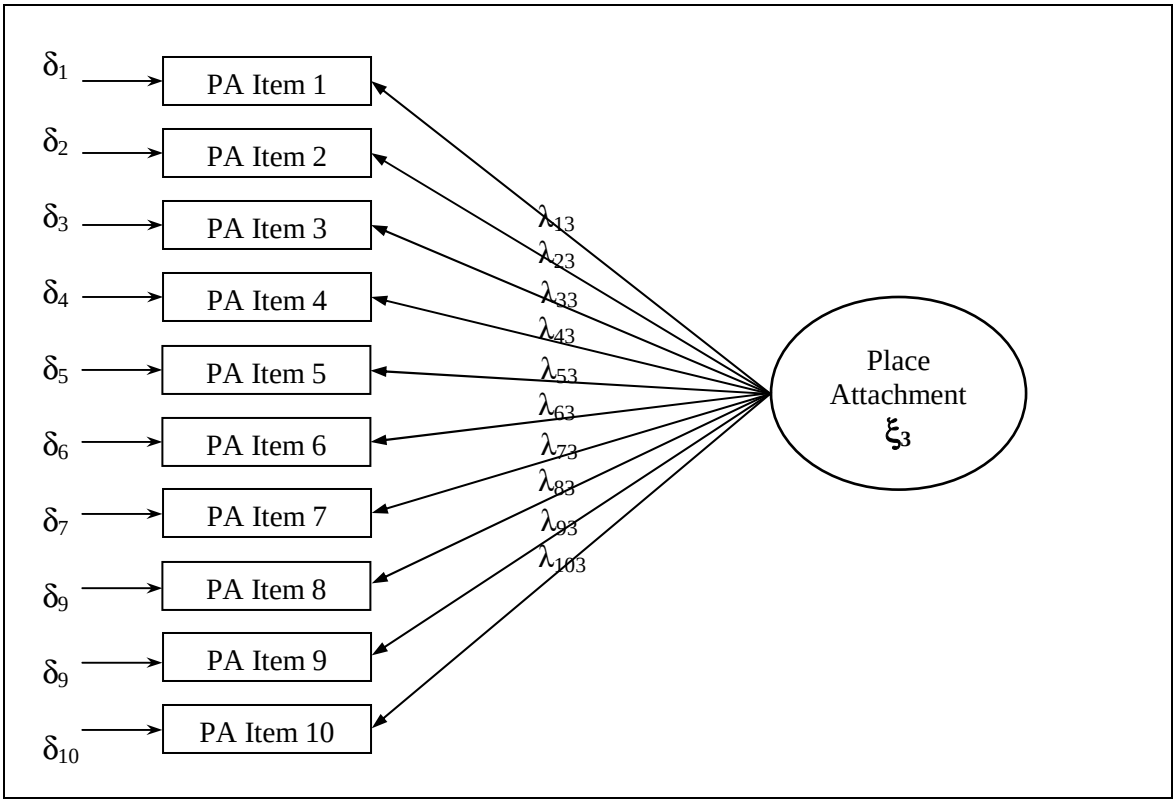
For this study, ten items representative of place identity and place dependence were utilized to measure place attachment. These selected items are primarily based on studies by Moore and Graefe (1994), Warzecha and Lime (2001), and Williams, Patterson, Roggenburck, and Watson, (1992). According to a study by Warzecha and Lime (2001), reliabilities of the scale of .87 and .91 were reported when the measurement scale was applied to two research locations. Williams et al. (1992) also reported a reasonably high overall scale reliability (Cronbach's $\alpha = .93$).

The first five statements measure emotional/symbolic place attachment (place identity), and the last five statements measure functional place attachment (place dependence). Respondents were asked to rate each statement on a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree). Specific place attachment items and the hypothesized model are presented in Table 3.3 and Figure 3.4.

Table 3.3
Measurement of Place Attachment

1. I would prefer to spend more time here if I could.
2. I am very attached to this place.
3. I identify strongly with this place.
4. This place means a lot to me.
5. This place is very special to me.
6. No other place can compare to this place.
7. The time I spent here could have just as easily been spent somewhere else.
8. I get more satisfaction out of visiting this place than from visiting any other place.
9. This place is the best place for what I like to do.
10. This place makes me feel like no other place can.

Note: 1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree 4 = Agree, and 5 = Strongly agree



Note: PA = Place Attachment

Figure 3.4 Hypothesized Measurement Model of Place Attachment

Mediating Endogenous Construct

Measurement of Development Preferences about Destination Attractions

In order to measure tourism stakeholders' preferences about destination attraction development, a total of 12 items were adapted from previous studies that measured host communities' support of tourism development (Jurowski, 1994; Yoon, 1998; Yoon et al., 2000).

This scale includes six different types of tourism attractions, including: 1) nature-based tourism, 2) attractions designed for large numbers of tourists, 3) cultural or historic based tourism, 4) culture and folk events, 5) supporting visitor services, and 6) event/outdoor programs. The six tourism attractions consist of the following items: 1) improved transportation, roads, and access facilities, 2) information for tourists, 3) pre-arranged travel packages, 4) recreation/sports facilities, 5) small and independent businesses, and 6) nature programs.

In a study by Jurowski (1994), who proposed and tested the original tourism attraction development scale, the internal consistent reliability was .88. In a study by Yoon et al. (2000), the construct reliability and variance of this construct were .76 and .52, respectively. The construct contained three attraction items, including large scale attractions, event/outdoor programs, and supporting service development.

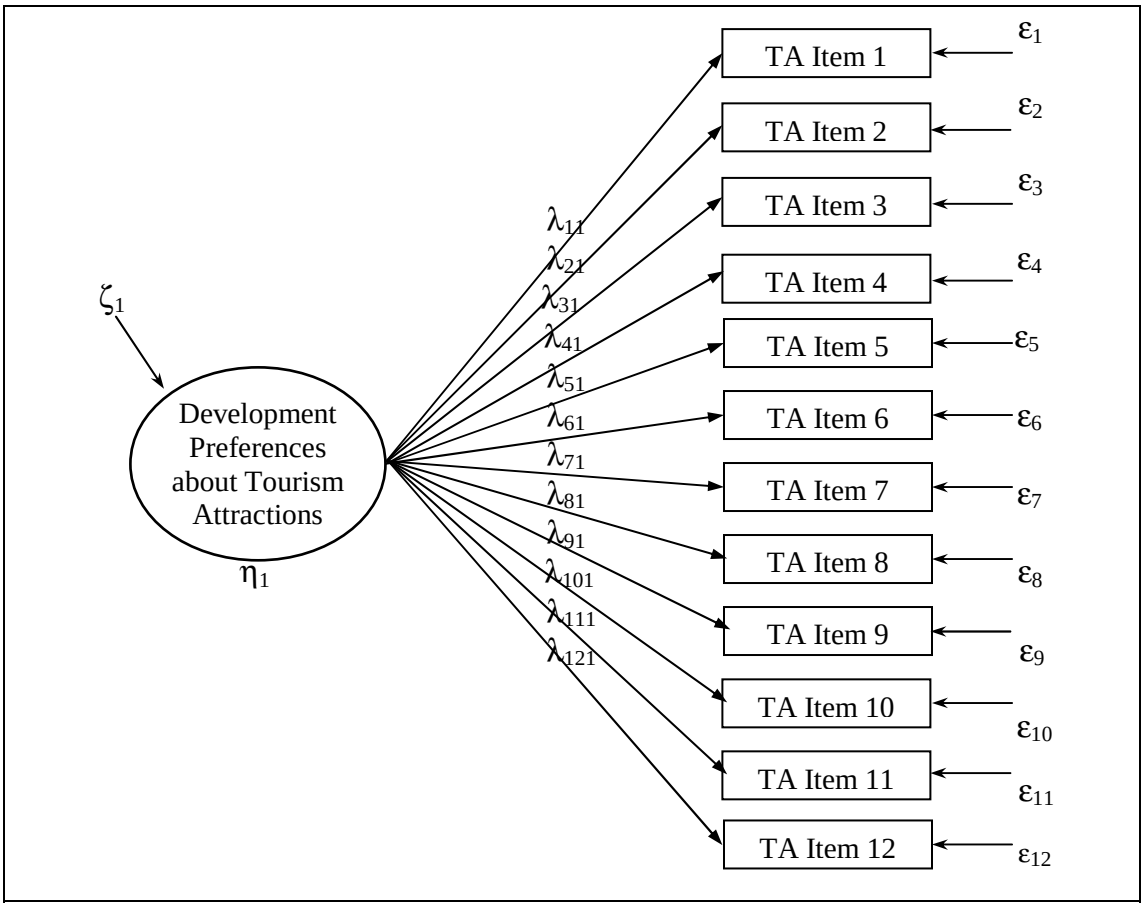
As a result, this measurement scale consists of 12 representative tourism attractions, as shown in Table 3.4 and Figure 3.4. Tourism stakeholders were asked to indicate their degrees of preferences about tourism attraction development. A five point Likert scale as a response format was assigned, with 1 being "Don't at all prefer" and 5 being "Highly prefer."

Table 3.4

Measurement of Development Preferences about Destination Attractions

1. Nature-based tourism development (e.g. skiing, camping, parks, trails)
2. Attractions designed for large numbers of tourists (e.g. theme parks and large resort complexes)
3. Cultural or historic- based attractions (e.g. museums, folk villages, local historic sites)
4. Supporting visitor services (hotels, restaurants, entertainment, etc)
5. Small independent businesses (e.g. gift shops, guide services, campgrounds)
6. Cultural and folk events (e.g. concerts, art and crafts, dances, festivals)
7. Pre-arranged attractive and flexible tour packages
8. Outdoor recreation facilities, programs and events (e.g. hikes, bike rides, climbing, canoe, kayak)
9. Improved roads, transportation, access facilities
10. Information for tourists
11. Sports facilities and activities
12. Business/convention meeting events and facilities

Note: 1 = Don't at all prefer, 2 = Don't prefer, 3 = Neutral, 4 = Somewhat prefer, and 5 = Highly prefer



Note: TA = Tourism Attractions

Figure 3.5 Hypothesized Measurement Model of Development Preferences about Tourism Attractions

Ultimate Endogenous Construct

Measurement of Support for Destination Competitive Strategies

Tourism stakeholders' support for destination competitive strategies was measured by twenty-four items that asked respondents if they support or oppose the proposed destination competitive strategies, as shown in Table 3.5. This scale was developed for the present study based on the literature review and theories on tourism destination competitiveness (Crouch & Ritchie, 1999; Frauman, 1999; Hassan, 2000; Kaae, 2001; Mihalič, 2000; Ritchie & Crouch, 1993; Ritchie, Crouch, & Hudson, 2000).

The twenty-four statements about destination competitive strategies include destination marketing efforts, quality services and experiences, destination management organizations' roles and activities, information and research, and sustainable management and practices. As discussed in the literature review, competitiveness has been considered as a destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors (Hassan, 2000). It has been also suggested that appropriate management efforts, marketing activities (e.g. image, target market, and seasonality), quality of services, and environmental management can help to create and integrate value in tourism products and resources so that tourism destinations can achieve better competitive market positions.

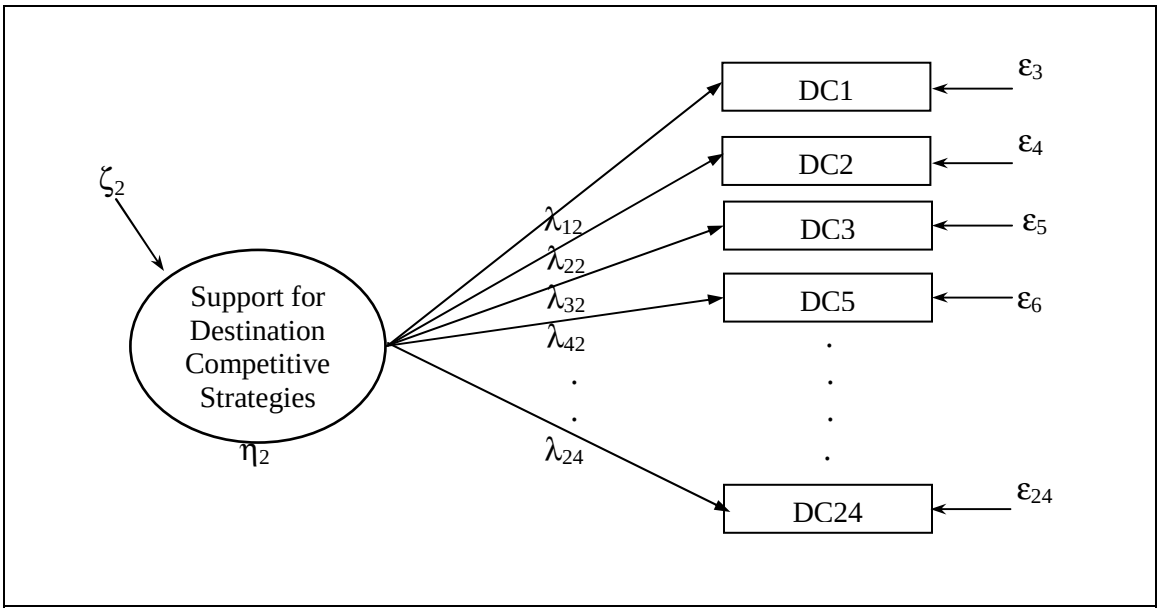
A five point Likert scale as a response format was employed to measure the degree of tourism stakeholders' support for each statement: 1 = Not at all favorable to 5= highly favorable. Since these items are a new measurement scale for this study, the reliability and validity of this scale were evaluated through data analysis.

Table 3.5

Measurement of Destination Competitive Strategies

1. The development of a strong destination image.
2. The selection of appropriate target markets (tourist groups).
3. The development of strong linkages with tourism wholesalers and retailers.
4. Overcoming seasonality (peak and off-season) in tourist' visits.
5. Increasing tourists' length of stay.
6. Use of modern, advanced technology and information systems.
7. Tourism promotion and operation for targeting international tourists and visitors.
8. Increasing tourists' spending.
9. The establishment of standards for tourism facilities.
10. Both education and training programs for present and future industry personnel.
11. Establishing the cost of providing different levels of quality for various types of tourism experiences.
12. Local government and agencies' roles as facilitator for tourism development here.
13. The leadership roles of local government and agencies in marketing this region as a tourism destination.
14. The development of safety and security programs and systems for tourists and the tourism community.
15. Collecting information which inventories a destination's products and services.
16. An inventory of information to monitor the attitudes of the local population towards the tourism industry.
17. Research that aids the development of new tourist services.
18. Protecting and improving more wildlife habitat.
19. Promoting ethical responsibility towards the natural environment.
20. Expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection.
21. Encouraging local citizen participation in decision-making about tourism development.
22. Sensible use of natural resources.
23. Environmental considerations in the marketing of tourism.
24. Environmental training of tourism staff.

Note: 1 = Not at all favorable, 2 = Unfavorable, 3 = Neutral, 4 = Favorable, and 5= Highly favorable



Note: DCAF = Destination Competitive Strategy Factor.

Figure 3.6 Hypothesized Measurement Model of Support for Destination Competitive Strategies

RELIABILITY AND VALIDITY OF THE MEASUREMENT SCALES

Reliability and validity are central issues in the measurement of variables. Reliability is the degree of consistency between multiple measurements of a variable. It is the extent to which the measurement is random error-free and produces the same results on repeated trials (DeVellis, 1991; Gable & Wolf, 1993). Specifically, according to Kerlinger (1973, p.446), reliability is "the proportion of the 'true' variance to the total variance of the data yielded by a measuring instrument, and also the proportion of error variance to the total obtained variance yielded by a measuring instrument subtracted from 1.00." Thus, the coefficient of reliability explains what percentage of variance in the measurement scale can be considered as a 'true' variance.

Among the estimating methods of reliability for measurement scales are test-retest and the internal consistency method (Devellis, 1991; Gable & Worf, 1993; Zikmund, 1997). The test-retest method measures the stability of a scale over different times. The split-half method is a type of internal consistency reliability that estimates an index of

reliability for measures of a concept that are divided into two equal parts. The internal consistency method as the more commonly used measure for reliability, assesses the homogeneity of the single-factoredness of the measurement scale, and analyzes the variance-covariance components of the measures of a construct. This method evaluates the ability of scale items to highly correlate with other items of the same scale that are supposed to measure the same construct.

Additionally, since this study employed structural equation modeling as a statistical method, the composite reliability was calculated for assessing the reliability of a principle measure of each construct in the measurement model. The reliability extracted for a latent construct was assessed separately for each multiple indicator construct in the model through LISREL estimating procedures (Bollen, 1989b; Hair et al., 1998; Muller, 1996).

A commonly used cut-off point for composite construct reliability is .70 (Hair, Anderson, Tatham, & Black, 1998; Gable & Wolf, 1993). However, values below .70 could be acceptable if the study is exploratory in nature. As another evaluation method for construct reliability, the variance extracted measure can be calculated to explain the overall variance in the indicators accounted for by the latent construct. A higher variance extracted value explains that the indicators are truly representative of the latent construct, and is recommended to exceed .50 (Hair et al., 1998).

The formulas for construct reliability and variance extracted are as follows.

Construct Reliability

$$= \frac{(\text{Sum of standardized loadings})^2}{(\text{Sum of standardized loadings})^2 + \text{Sum of indicator measurement error}}$$

Variance Extracted

$$= \frac{\text{Sum of squared standardized loadings}}{\text{Sum of squared standardized loadings} + \text{Sum of indicator measurement error}}$$

Validity refers to the appropriateness, meaningfulness, and usefulness of the specific inferences and actions based on test scores (Gable & Wolf, 1993). It is also considered as the degree of fit between a construct and indicators, and how well the conceptual and operational definition of the measurements and indicators match what they are designed to measure (Newman, 1994; Rosenthal & Rosnow, 1984). Validity deals with the adequacy of a scale and its ability to predict specific events, or its relationship to measures of other constructs (Devellis, 1991).

Among the various kinds of evidence used to support construct validity are face/content validity (item sampling adequacy or the agreement among professionals that the item is measuring what it is supposed to measure), criterion-related validity (the degree of correspondence between a measure and a criterion variable, usually measured by their correlation), and construct validity (the ability of a measure to confirm a network of related hypotheses generated from a theory based on the constructs) (Bollen, 1989b; Devellis, 1991; Zikumund, 1998).

In criterion-related validity, two types of validity are included: predictive validity (if the criterion variable occurs in the future) and concurrent validity (when the criterion exists at the same time as the measurement scale). In construct validity, convergent validity (the degree to which two measures of the same concept are correlated) and discriminant validity (the degree to which two conceptually similar concepts are distinct) are included (Hair et al., 1998; Hatcher, 1994). In other words, convergent validity is associated with the degree of agreement among the measures of a concept, while discriminant validity is related to the degree of uniqueness of a construct from other concepts. Thus, in order to have theoretical and empirical meaning within the overall structure of the theory used, construct validity must be evaluated.

In this study, the face/content validity was addressed by acquiring information about the questionnaires from faculty members and graduate students who are familiar with the concepts and content of tourism. For criterion-related validity, concurrent validity was assessed by examining the Pearson relationship and multiple regression between the measurement scale and criterion-variable (Table 3.6). In order to test the concurrent validity of each measurement scale, the following variables were included and measured in the survey questionnaire with a Likert scale.

Table 3.6

Criterion-Variables and Measurement Scales

Criterion Variables & Measurement Scales
1. Your quality of life (1 = Very dissatisfied and 5 = Very satisfied)
2. Overall impact of tourism development in the community (1 = Very negative and 5 = Very positive)
3. Would you oppose or support tourism development in your community? (1 = Strongly oppose and 5 = Strongly support)
4. How would you evaluate the competitiveness of your community as a tourism destination? (1 = Not at all competitive and 4 = Highly competitive

Finally, the construct validity was assessed through the structural equation modeling process. Specifically, convergent validity was assessed in the measurement model by confirmatory factor analysis by estimating t-tests of factor loadings, as well as the corresponding significance (Anderson & Gerbing, 1988; Bagozzi & Philips, 1982). As a result, if all factor loadings for the indicators in the same construct are statistically significant, this can be evidence of the supporting convergent validity of the constructs. In terms of assessing the discriminant validity, the Chi-square difference statistic between the unconstrained and constrained models of each pair of constructs was estimated (Anderson & Gerbing, 1988; Bagozzi & Philips, 1982). In other words, a test of discriminant validity was to constrain the correlation parameter between the constructs at 1.0 and then employ Chi-square difference values from the unconstrained and constrained models. The value of the Chi-square statistic is significantly lower for the first model; the better model would be the one in which the two constructs are seen as distinct factors. As a result, the discriminant validity would be demonstrated.

More detailed information about the results of reliability and validity tests were reported in Chapter 4.

SUMMARY OF THE CHAPTER

This chapter has been devoted to explaining the research methodology used in the study. First, the research questions and research framework were introduced. The statistical method (structural equation modeling) employed for this study was explained. Next, the research design and survey instrument were specified, including the research population, sampling, and data collection method. Then, the measurement scales and constructs were discussed and the pre-tests and their procedures were explained. Finally, the issues of the reliability and validity of the measurement scales were discussed.

CHAPTER IV
DATA ANALYSIS and RESULTS

INTRODUCTION

In this chapter, the results of data collection are described and the findings of the applied statistical tests are presented. First of all, the preliminary tests of the collected data are presented and the demographic characteristics of the respondents that made up the sample are described. Next, the results of descriptive statistics of the measurement scales for the five constructs: tourism development impacts, environmental attitudes, place attachment, tourism attractions, and destination competitiveness are reported. Then, the reliability and validity of the measurement scales are examined and reported. Further, the results of hypotheses tests applied in LISREL (Structural Equation Modeling) are presented and interpreted.

DATA COLLECTION

Since the major focus of this study was an investigation of tourism stakeholders' roles in tourism development and destination competitiveness, the study samples were tourism stakeholders who are currently involved in chambers of commerce, government and tourism authorities, state and local economic development offices and councils, local tourism agencies, non-government organizations, tourism-related associations, convention and visitors bureaus, tourism planning and development companies, tourism related faculty and professionals, local and state parks, and visiting and information centers. The source of mailing lists was identified from the library database, "Associations Unlimited, the Encyclopedia of Associations (EA) series" and relevant linked websites such as the Virginia Tourism Corporation, and state and local tourism parks and recreation. Additionally this study was limited to tourism stakeholders who reside in the state of Virginia.

The self-administered survey questionnaire, which was finalized from the pilot study was sent to 3,100 tourism stakeholders on June 2002, and the distributed surveys

were collected until July 15, 2002 (Appendix A for cover letter and Appendix B for the final survey instrument). Before sending the survey package, e-mails were sent to respondents to ask them to participate in this research and in the survey process. After sending the survey package, reminding e-mails were sent. When the e-mails were sent to respondents, the survey questionnaire and letter were attached. Since this study is of an exploratory nature, the combination of mail and e-mail surveys can be acceptable as long as the tourism stakeholders were randomly selected from the study population.

As reported in Table 4.1, a total of 713 surveys were returned, but after eliminating the unusable responses, 706 responses were coded and used for the preliminary data analysis. Since there were undelivered survey packages due to insufficient addresses, the initial response rate included in the data analysis resulted in 23%. However, after eliminating respondents who did not provide at least five questions in the measurement scales (38 respondents) and also deleting outliers who were identified based on the results of Casewise Diagnostics (standardized residual) and Outlier Statistics (Stud. Residual, Cook's distance, and Centered Leverage Value) from multiple regression analyses (22 respondents), a total of 646 respondents were used for further statistical data analyses for this study. As a result, a 21.1% response rate was obtained.

Table 4.1

Survey Response Rate

	Number	Percent (%)
Total target population	3,100	100
Undelivered surveys	6	0.2
Total survey population	3,094	100
Total responses	713	23
Unusable samples	7	1
Total coded samples	706	100
Missing value	38	5.4
Outliers	22	3.1
Total usable samples	646	21.1

Note: Total usable sample = 646 / 3094

NON-RESPONSE BIAS TEST

In the data analysis in this study, it is assumed that there are no different distributions or opinions between respondents and non-respondents in terms of their socio-demographic characteristics and the selected measurement items.

In order to assess potential non-response bias, this study examined differences between early and late respondents in term of their opinions on the measurement scales and demographic distributions. In this study, 200 people from the same study population were contacted one month after the final questionnaires were sent. A total of 31 usable questionnaires were returned and considered as the late respondents.

Chi-square tests and T-tests were utilized to examine if there were different distributions between early respondents ($\underline{n} = 611$) and late respondents ($\underline{n} = 31$) in terms of their socio-demographic characteristics, and also to see if there were different mean scores between these two groups (early and late respondents) in terms of the measurement items for this study. Accordingly, these tests were used to determine whether the late respondents were from the same population, or were not statistically different from the respondents,

From the Chi-square tests; the results revealed that there was no different distribution between the early respondents and the late respondents in terms of gender, marital status, education, income, and ethnic group (Appendix C). The results of T-tests also showed that there was no difference between two groups for all of the five measurement scales. The fact that only one item in the destination competitiveness scales was found to be significantly different ($\underline{p} < .05$), suggests that little bias on this item was involved. Thus, further consideration was taken in the main data analysis. The item was "the development of a strong destination image" in the destination competitiveness scale.

However, during the data analysis, since each measurement scale was examined to confirm its relationship with the latent construct, this significant difference did not pose a bias for the hypotheses under investigation for this study. Consequently, it can be concluded from non-response bias tests that there was an absence of response bias in the collected data.

PROFILE OF RESPONDENTS

Demographic Characteristics of Tourism Stakeholders (Virginia)

The demographic characteristics of samples -- tourism stakeholders -- in this study were measured by gender, age, education, marital status, ethnic group, income (before taxes), length of residence in Virginia, length of employment by current company or organization, and primary organization for whom the respondent works. Respondents were asked to provide their answers to questions that were designed by nominal scales and open-ended ratio scales (only for age, length of residence in Virginia, and length of employment by current company or organization). The variables that were designed by ratio scales were recoded into nominal values and then were profiled. The summary of demographic characteristics of respondents is reported in Table 4.2. The following discussion compares the major characteristics of samples collected for this study.

The respondents were comprised of male (46.2%) and female (53.8%), and an average of the respondents' age was 48 years old (SD = 12.37). After recoding respondents' age, the result showed that 30.2% of respondents ranged between 41and 50, followed by 51 and 60 (27.4%), and 31 and 40 (19.2%). Accordingly, the majority of respondents were middle aged or older (57.6%, between 41 and 60 years old), and the respondents were fairly normally distributed in entire age groups (See Appendix E).

Education levels of tourism stakeholders revealed that 50.6% of respondents had four-year college degrees and 42.5% had a graduate school degree. This result implies that most of the respondents were quite highly educated. In terms of marital status and ethnic group, the majority of respondents were married (70.7%) and are Caucasian (92.9%). Income level showed that 40.9% of respondents had incomes between $30,001 and $60,000, and 25.1% had incomes between $60,001 and $90,000. Additionally, 10.6% of respondents had incomes of $120,001 or more.

The respondents' average length of residence in Virginia was 30 years (SD = 17.95). After recoding into a nominal value, the results revealed that 29.9% of respondents were residents for between 21 and 35 years, followed by 24.8% between 6 and 20 years and 22.4% between 36 and 50 years. (See distribution, Appendix D)

Table 4.2

Demographic Characteristics of Tourism Stakeholders (Virginia)

Variables	Frequency (N = 646)	Valid Percent (%)
Gender (n = 639)		
Male	295	46.2
Female	344	53.8
Age (n = 616, M = 48 years, SD = 12.37)		
≤ 31	58	9.4
31-40	118	19.2
41-50	186	30.2
51-60	169	27.4
≥ 61	85	13.8
Education (n = 633)		
High school	44	7.0
Four year college	320	50.6
Graduate school	269	42.5
Marital status (n = 635)		
Single	88	13.9
Married	449	70.7
Widowed/Divorced/Separated	98	15.4
Ethnic group (n = 623)		
Caucasian	579	92.9
African-American	18	2.9
Hispanic	8	1.3
Asian	8	1.3
Native American	8	1.3
Others	2	0.3
Income (before taxes) (n =597)		
≤ $30,000	70	11.7
$30,001-$60,000	244	40.9
$60,001-$90,000	150	25.1
$90,001-$120,000	70	11.7
≥ $12,001	63	10.6

M = Mean, SD = Standard Deviation

Table 4.2

Demographic Characteristics of Tourism Stakeholders (Virginia) (Cont.)

Variables	Frequency (N = 646)	Percent (%)
Length of residence in Virginia (n = 629, M = 30, SD = 17.95)		
≤ 5 (years)	51	8.1
6-20	156	24.8
21-35	188	29.9
36-50	141	22.4
51-65	74	11.8
≥ 66	19	3.0
Length of employment by current company or organization (n= 603, M= 10, SD = 9.36)		
≤ 6 (years)	255	42.3
6-10	122	18.9
11-15	95	14.7
16-20	43	6.7
21-25	32	5.0
26-30	36	5.6
≥ 31	20	3.1
Primary organization for whom you work (n = 628)		
Chamber of commerce	52	8.3
Travel information center	21	3.3
State or local public parks	41	6.5
Hotel or resort	35	5.6
Government official & council	126	20.1
Non-profit organization or association	95	15.1
Convention & Visitors Bureau	41	6.5
Outdoor recreation company, facility or outfitter	12	1.9
Private or commerce theme park & facility	3	0.5
Local travel attraction (e.g. historic site, theater, museum)	64	10.2
Travel agency	14	2.2
Planning and development company related to tourism	11	1.8
Business related to tourism	14	2.2
Business not directly related to tourism	51	8.1
Others	20	2.2

M = Mean, SD = Standard Deviation

In terms of respondents' length of employment by current company or organization, the average was approximately 10 years (SD = 9.36, while showing that 42.3 % of respondents have been working for less than 5 years, and 18.9% of respondents have been working for 6 to 10 years in their current company or organization. The results of the primary company or organization for whom the respondents worked revealed that 20.1% of respondents have been working for government, city or town council, followed by non-profit organization or association (15.1%), and local travel attraction (10.2%).

This result implies that the survey questionnaires were collected from various tourism stakeholders who are currently involved in tourism-related organizations, associations, attractions, and businesses. Particularly, during the survey process, the examples of the identified positions for the respondents were mayors, directors, presidents, owners, chairpersons, and professors.

Geographical Distributions of Respondents

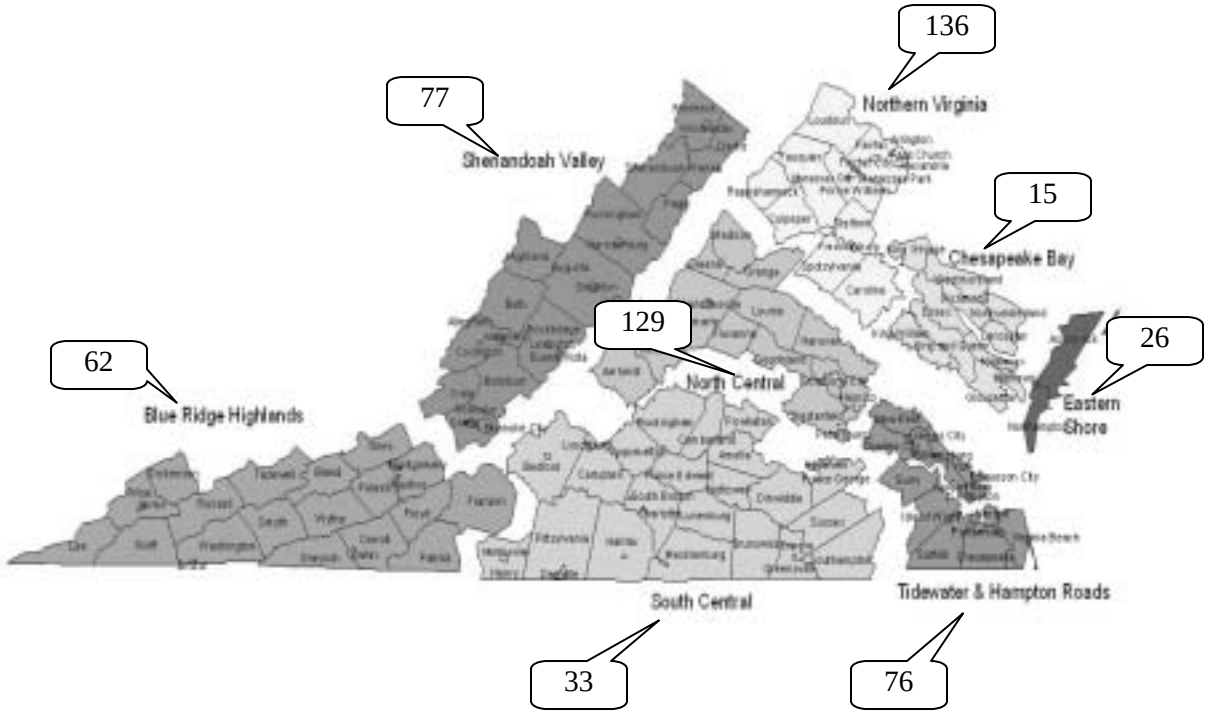
The geographic distributions of respondents was examined and reported in Table 4.3 and Figure 4.1. The state of Virginia was divided into eight different destination regions according to the Virginia Tourism Corporation. They are: Northern Virginia, North Central Virginia, Shenandoah Valley, Blue Ridge Highlands, South Central Virginia, Tidewater & Hampton Roads, Eastern Shore, and Chesapeake Bay.

Once the questionnaire was received, the zip code was checked and sorted based on the above eight different regions. A total of 24.5% of respondents lived in Northern Virginia, followed by North Central Virginia (23.3%), Shenandoah Valley (13.9), Tidewater & Hampton Roads (13.7%), and Blue Ridge Highlands (11.2%). During the recoding process, it was identified that the survey questionnaires were collected from a wide range of different counties and cities.

Table 4.3

Geographical Distributions of Respondents

Geographical Distributions	Frequency	Valid Percent (%)
Northern Virginia	136	24.5
North Central Virginia	129	23.3
Shenandoah Valley	77	13.9
Blue Ridge Highlands	62	11.2
South Central Virginia	33	6.0
Tidewater & Hampton Roads	76	13.7
Eastern Shore	26	4.7
Chesapeake Bay	15	2.7
	554	100



Note: Number = Frequency of respondents

Figure 4.1 Geographical Distributions of Respondents (Virginia)

PRELIMINARY DATA ANALYSIS

Nomality, Skewness, and Kurtosis

Since Structural Equation Modeling (SEM) was utilized for testing the hypotheses in this study, violation of the univariate or multivariate normality could invalidate statistical hypothesis testing (Byrne, 1995; Hair, Anderson, Tatham, & Black, 1998; Kline, 1998). This is because a lack of normality can inflate the Chi-square statistic and produce upward bias in critical values for determining coefficient significance. It is also suggested that depending upon the degree of violation of normality, different estimation methods may be applied to test the hypotheses in structural equation modeling.

For example, if the data have a nonnormal distribution, the weighted least square (WLS) estimation should be used with a large sample size. Otherwise, the maximum likelihood (ML) or generalized least squares (GLS) estimation process is suggested (Bollen, 1989; Byrne, 1995; Jöreskog & Sörbom, 1999). Subsequently, if the data achieve normal distribution and the sample size is large enough, the maximum likelihood (ML) or generalized least squares (GLS) are recommended because these estimation methods produce computational simplicity, accuracy, and correctness of statistical results (Chou & Bentler, 1995, p. 54)

Generally, the normality of variables can be tested by skewness and kurtosis (Byrne, 1998; Kline, 1998). Zero assumes perfect normality in the data distribution of the variable. Skewness can be categorized into two directions; positive skewness indicates a distribution with an asymmetric tail extending toward more a positive value, and negative skewness shows a distribution with an asymmetic tail extending toward more negative values. Kurtosis refers to the proportions of scores in the middle of a distribution or in its tails relative to those in a normal curve, and it usually explains the relative peakedness or flatness of a distribution compared to the normal distribution. Positive kurtosis indicates a relative peak, and negative kurtosis indicates a relative flat. In this study, the normality of data in terms of skewness and kurtosis was examined by PRELIS 2.30 (Jöreskog, & Sörbom, 1999). As a rule of thumb, Byrne (1998) suggested that the variables can be considered as moderately non-normal if they indicate skewness values ranging from 2.00

to 3.00 and kurtosis values from 7.00 to 21.00; extreme normality is defined by Skewness values greater than 3.00, and kurtosis values greater than 21 (p. 197 – 198).

The results of skewness and kurtosis on each measurement scale for five constructs were examined and reported in Appendix E1 (tourism development impacts), E2 (environmental attitude), E3 (place attachment), E4 (development preferences about tourism attractions), and E5 (support for destination competitive strategies). With the above categories as guidelines, and with skewness and kurtosis values of less than 2 in all of the measurement items for the five constructs, it can be considered that generally the measurement items were normally distributed and any further treatments of data such as log-transformation were not required.

DESCRIPTIVE ANALYSIS OF MEASUREMENT SCALES

Results of Tourism Development Impacts

The results of descriptive statistic analysis for the tourism development impact scale are presented in Table 4.4. This measurement scale consisted of 14 items reflecting the perceived economic, socio-cultural, environmental, and physical impacts. Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree.

Based on the mean score of each item, respondents tended to strongly agree that tourism has created jobs for the community ($\underline{M}$ = 4.33, $\underline{SD}$ = .92) and has attracted investment to the community ($\underline{M}$ = 4.33, $\underline{SD}$ = .92). Additionally, they also agreed that high-spending tourists have negatively affected the way of life ($\underline{M}$ = 4.17, $\underline{SD}$ = .86), but the standard of living has increased considerably because of tourism.

Further, respondents were likely to agree that tourism has resulted in more cultural exchange between tourists and residents ($\underline{M}$ = 3.65, $\underline{SD}$ = .94); tourism has resulted in traffic congestion, noise, and pollution ($\underline{M}$ = 3.61, $\underline{SD}$ = .99); and tourism has given economic benefits to local people and businesses ($\underline{M}$ = 3.52, $\underline{SD}$ = .1.04). Tourism has resulted in positive impacts on the cultural identity of the community ($\underline{M}$ = 3.42, $\underline{SD}$ = .93)

Table 4.4

Descriptive Analysis of Tourism Development Impact Items

Tourism Development Impact Items	Mean (M)	Standard Deviation
1. Tourism has created jobs for our community.	4.33	.92
2. Tourism has attracted investment to our community.	4.33	.92
3. Our standard of living has increased considerably because of tourism.	4.11	.95
4. Tourism has given economic benefits to local people and businesses.	3.52	1.04
5. High-spending tourists have negatively affected our way of life.	4.17	.86
6. Tourism has changed our traditional culture.	1.81	1.00
7. Local residents have suffered from living in a tourism destination area.	2.53	1.11
8.Tourism has encouraged a variety of cultural activities by the local residents.	1.94	.94
9. Tourism has resulted in more cultural exchange between tourists and residents.	3.65	.94
10. Tourism has resulted in positive impacts on the cultural identity of our community.	3.42	.93
11. Tourism has resulted in traffic congestion, noise, & pollution.	3.61	.99
12. Construction of hotels & tourist facilities have destroyed the natural environment.	2.73	1.18
13. Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places in our community.	2.35	1.13
14. Tourism provides more parks and other recreational areas for local residents.	2.21	1.05

Note: Measurement scale, 1= Strongly Disagree and 5 = Strongly Agree

These results indicate that tourism development has not only provided economic benefits in terms of job creation and increase of investments, but also has resulted in the socio-cultural benefits of an increase in standard living and cultural exchange. However, it should be considered that tourism has also provided some negative socio-cultural impacts such as traffic congestion, noise and pollution. Additionally, respondents were likely to disagree that tourism has changed the traditional culture (M = 1.81, SD = 1.00), and also has encouraged a variety of cultural activities by the local residents (M = 1.94, SD =. 94). Respondents did not tend to believe that tourism provides more parks and other recreation areas for local residents (M = 2.21, SD = 1.05).

Results of Environmental Attitudes

Table 4.5 shows the results of the descriptive statistics of the tourism stakeholders' environmental attitudes. This measurement scale, called the "New Environmental Paradigm" scale, contains 15 items explaining the ecological worldview; the reality of limits to growth, anti-anthropocentrism, the fragility of nature's balance, and the possibility of ecological catastrophe. Respondents were asked to indicate their agreement on each item measured by five point Likert-type scales ranging from 1 being Strongly Disagree to 5 being Strongly Agree. After obtaining the respondents' answers to each item from the survey, seven items out fifteen on this measurement scale were reverse-coded. They included items 2, 4, 6, 8, 10, 12, and 14. Accordingly, the higher mean scores can be interpreted as respondents' higher ecocentric attitudes on each environmental attitude statement. In other words, the higher mean scores can be viewed as agreement with an anti-anthropocentric worldview. However, this study used consistent terminologies such as low ecocentric attitudes (low mean) or high ecocentric attitudes (higher mean) in further explanations.

From the results, respondents were likely to agree with most of the environmental attitude items. With only one item, "human ingenuity will insure that we do not make the earth unlivable," respondents tended to disagree, with 2.92 of the mean score. Consequently, respondents surveyed for this study have somewhat high ecocentric environmental attitudes.

Table 4.5

Descriptive Analysis of Environmental Attitude Items

Environmental Attitudes	Mean (M)	Standard Deviation
1. We are approaching the limit of the number of people the earth can support.	3.04	1.16
2. Humans have the right to modify the natural environment to suit their needs.	3.37*	1.06
3. When humans interfere with nature, it often produces disastrous consequences.	3.40	1.14
4. Human ingenuity will insure that we do not make the earth unlivable.	2.92*	1.06
5. Mankind is severely abusing the environment.	3.36	1.13
6. The earth has plenty of natural resources if we just learn how to develop them.	2.65*	1.11
7. Plants and animals have as much of a right to exist as humans.	3.72	1.09
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations.	3.44*	1.08
9. Despite our special abilities, humans are still subject to the laws of nature.	4.08	.86
10. The so-called "ecological crisis" facing humanity has been greatly exaggerated.	3.31*	1.12
11. The earth is like a spaceship with only limited room and resources.	3.41	1.10
12. Mankind was meant to rule over the rest of nature.	3.19*	1.16
13. The balance of nature is very delicate and easily upset.	3.62	1.01
14. Humankind will eventually learn enough about how nature works to be able to control it.	3.43*	.96
15. If things continue on their present course, we will soon experience a major ecological catastrophe.	3.00	1.09

Note: Measurement scale, 1= Strongly Disagree and 5 = Strongly Agree
* = Items 2, 4, 6, 8, 10, 12, and 14 were reverse-coded

Results of Place Attachment

The results of descriptive statistics on tourism stakeholders' place attachment are presented in Table 4.6. A total of 10 items was measured by a five-point Likert scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. The higher mean scores indicate higher respondents' place attachment. This measurement scale basically contains an explanation of peoples' emotional and affective linkages with places or communities and also of the functional value and meanings of places or communities.

Based on the mean scores of each item, the tourism stakeholders in this study expressed slightly high place attachment to their community. Particularly, the emotional and affective place attachment items (1, 2, 3, 4, and 5) obtained somewhat higher mean scores ranging between 3.64 and 4.14.

Table 4.6

Descriptive Analysis of Place Attachment Items

Place Attachment	Mean (M)	Standard Deviation
1. I would prefer to spend more time in my community if I could.	3.64	.92
2. I am very attached to my community.	3.99	.93
3. I identify strongly with my community.	3.96	.95
4. This community means a lot to me.	4.13	.89
5. I feel like this community is a part of me.	3.88	1.00
6. No other place can compare to this community.	3.07	1.14
7. The time I spend in my community could just as easily be spent somewhere else.	2.71	1.05
8. I get more satisfaction being in my community than from visiting any other place.	2.80	.99
9. This community is the best place for what I like to do.	3.32	1.02
10. This community makes me feel like no other place can.	3.15	1.07

Note: Measurement scale, 1= Strongly Disagree and 5 = Strongly Agree

However, respondents did not have high place attachment on two items which are related to functional value and attachment; "The time I spend in my community could just as easily be spent somewhere else (M = 2.71, SD = 1.05)," and "I get more satisfaction being in my community than from visiting any other place (M = 2.80, SD = .99)." Thus, it can be generally interpreted that the tourism stakeholders in this study showed somewhat higher emotional and affective place attachment.

Results of Preferences about Tourism Attraction Development

Tourism stakeholders' preferences about tourism attraction development were measured by 12 tourism attraction items that consisted of nature-based tourism, attractions designed for large numbers of tourists, cultural or historic based attractions, supporting visitor services, small independent businesses, cultural and folk events, pre-arranged attractive and flexible tour packages, outdoor recreation facilities, programs and events, improved roads and transportation, information for tourists, sport facilities and activities, and business/convention meeting events and facilities. The respondents were asked to indicate their degree of preferences on each item that used a five-point Likert type scale ranging from 1 being Don't at all Prefer to 5 being Highly Prefer.

As presented in Table 4.7, tourism stakeholders surveyed for this study somewhat highly preferred to develop cultural and folk events (M = 4.29, SD = .73), cultural and historic-based tourism attractions (M = 4.29, SD = .77), and information for tourists (M = 4.25, SD = .73). They also preferred to improve roads and transportation (M = 4.19, SD = .88), develop small independent businesses such as gift shops and guide services (M = 4.12, SD = .79), nature-based tourism attractions (M = 4.09, SD = .95), and outdoor recreation facilities, programs, and events (M = 4.05, SD = .90). However, the respondents were not likely to prefer to develop tourism attractions designed for large numbers of tourists such as theme parks and resorts (M = 2.62, SD = 1.19). From the results, it can be implied that tourism stakeholders are likely to develop cultural and historic-based tourism attractions as tourism supply elements while supporting the development of services for tourists such as information, roads, transportation, and gift-shops.

Table 4.7

Descriptive Analysis of Preferences about Tourism Attraction Development Items

Tourism Attraction Development	Mean (M)	Standard Deviation
1. Nature-based tourism development. (e.g. skiing, camping, parks, trails)	4.09	.95
2. Attractions designed for large numbers of tourists. (e.g. theme parks, resorts)	2.62	1.19
3. Cultural and historic-based attractions. (e.g. museums, folk villages, historic sites)	4.28	.77
4. Supporting visitor services. (e.g. hotels, restaurants, entertainment, etc)	3.90	.84
5. Small independent businesses. (e.g. gift shops, guide services, campgrounds)	4.12	.79
6. Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)	4.29	.73
7. Pre-arranged attractive and flexible tour packages.	3.66	.98
8. Outdoor recreation facilities, programs & events. (e.g. hiking, bike rides, climbing)	4.05	.90
9. Improved roads and transportation.	4.19	.88
10. Information for tourists.	4.25	.73
11. Sports facilities and activities.	3.61	1.05
12. Business/convention meeting events and facilities.	3.74	1.01

Note: 1 = Don't at all Prefer 2 = Don't Prefer 3 = Neutral 4= Somewhat Prefer and 5 = Highly Prefer

Results of Support for Destination Competitive Strategy

Descriptive statistics for support for destination competitive strategies are presented in Table 4.8. The measurement scale consisted of 24 destination competitive strategies reflecting marketing strategies and activities, enhancement of quality service and experiences for tourists, destination management organization's roles and efforts, collecting information and research, training and education, and sustainable management and practices. Respondents were asked to indicate how favorable or unfavorable for Virginia they consider each item to be in order to enhance destination competitiveness. Items were measured by a five point Likert scale ranging from 1 being 'Not at all Favorable' to 5 being 'Highly Favorable.'

As shown in Table 4.8, the mean scores of the measurement items were between 3.58 and 4.38. The highest mean score was "the development of a strong destination image (M = 4.38, SD = .74)," followed by "use of modern, advanced technology and information systems (M = 4.37, SD = .72)," "increasing tourists' spending (M = 4.30, SD = .77)," and "sensible use of natural resources (M = 4.27, SD = .83)." Respondents also expressed a somewhat highly favorable response to destination competitive strategy items such as "the promoting ethical responsibility towards the natural environment (M = 4.15, SD = .91)," "increasing tourists length of stay (M = 4.11, SD = .87)," and "protecting and improving more wildlife habitat (M = 4.09, SD = .94)." Additionally, the items related to "both education and training programs for present/future industry personnel (M = 4.05, SD = .90)," "overcoming seasonality (M = 4.03, SD = .88)," and "expanding opportunities for the visiting public in terms of natural/environmental quality and protection (M = 4.03, SD = .92)." These top 12 favorable destination competitive strategies are summarized in Table 4.9. The lowest mean score was "establishing the cost of providing different levels of quality for various types of tourism experiences (M = 3.58, SD = .89)," followed by "an inventory of information to monitor the attitudes of the local population towards the tourism industry (M = 3.64, SD = .97)."

From the results, it can be noted that destination competitive strategies related to destination marketing and efforts, sustainable management practices, and education and training are considerably important strategies supported by tourism stakeholders.

Table 4.8

Descriptive Analysis of Destination Competitive Strategy Items

Destination Competitive Strategy	Mean (M)	Standard Deviation
1. The development of a strong destination image.	4.38	.74
2. The selection of appropriate target markets (tourist groups).	4.23	.76
3. The development of strong linkages with tourism wholesalers and retailers.	3.97	.86
4. Overcoming seasonality (peak and off-season) in tourists' visits.	4.03	.88
5. Increasing tourists' length of stay.	4.11	.87
6. Use of modern, advanced technology and information systems (e.g. Internet).	4.37	.72
7. Tourism promotion and operation for targeting international tourists and visitors.	3.94	.94
8. Increasing tourists' spending.	4.30	.77
9. The establishment of standards for tourism facilities.	3.91	.97
10. Both education and training programs for present/future industry personnel.	4.05	.90
11. Establishing the cost of providing different levels of quality for various types of tourism experiences.	3.58	.89
12. Local government and agencies' roles as facilitators for tourism development.	3.84	.96
13.The leadership roles of local government and agencies in marketing this region as a tourism destination.	3.95	.99
14.The development of safety and security programs and systems for tourists and the tourism community.	3.92	.92
15.Collecting information that inventories a destination's products and services.	3.89	.86
16. An inventory of information to monitor the attitudes of the local population towards the tourism industry.	3.64	.97
17. Research that aids the development of new tourist services.	3.80	.94
18. Protecting and improving more wildlife habitat.	4.09	.94

Note:1=Not at all Favorable 2=Unfavorable 3=Neutral 4=Favorable 5= Highly Favorable

Table 4.8

Descriptive Analysis of Destination Competitive Strategy Items (cont.)

Destination Competitive Strategy	Mean	Deviation
19. Promoting ethical responsibility towards the natural environment.	4.15	.91
20. Expanding educational opportunities for the visiting public in terms of natural/ environmental quality and protection.	4.03	.92
21. Encouraging citizen participation in decision-making about tourism development	3.83	.98
22. Sensible use of natural resources.	4.27	.83
23. Environmental considerations in the marketing of tourism.	4.08	.93
24. Environmental training of tourism staff.	3.90	1.00

Note:1=Not at all Favorable 2=Unfavorable 3=Neutral 4=Favorable 5= Highly Favorable

Table 4.9

Top 12 Favorable Destination Competitive Strategies

Destination Competitive Strategy	Mean > 4
1. The development of a strong destination image.	4.38
2. Use of modern, advanced technology and information systems.	4.37
3. Increasing tourists' spending.	4.30
4. Sensible use of natural resources.	4.27
5. The selection of appropriate target markets (tourist groups).	4.23
6. Promoting ethical responsibility towards the natural environment.	4.15
7. Increasing tourists' length of stay.	4.11
8. Protecting and improving more wildlife habitat.	4.09
9. Environmental considerations in the marketing of tourism.	4.08
10. Both education and training programs for present/future industry personnel.	4.05
11. Overcoming seasonality (peak and off-season) in tourists' visits.	4.03
12. Expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection.	4.03

RELIABILITY AND VALIDITY OF MEASUREMENT SCALES

Reliability of Measurement Scales

Reliability is a fundamental issue in any measurement scale. Scale reliability is considered as the proportion of variance attributed to the true score of the latent construct (DeVellis, 1991; Gable & Keilty, 1998). It usually is measured by internal consistency reliability that indicates the homogeneity of items comprising a measurement scale. The meaning of internal consistency is the extent that its items are inter-correlated. Thus, high inter-item correlations explain that the items of a scale have a strong relationship to the latent construct and are possibly measuring the same thing.

Usually, the internal consistency of a measurement scale is assessed by using Cronbach's coefficient alpha and calculating the Cronbach's alpha along with the item-to-total correlation for each item examined in the overall reliability of the measurement scale. It is generally recommended that if a measurement scale having a Cronabach's coefficient above .70 is acceptable as an internally consistent scale so that further analysis can be possible. However, if the scale has a coefficient alpha below .70, the scale should be examined for any sources of measurement errors such as inadequate sampling of items, administration errors, situational factors, sample characteristics, number of items, and theoretical errors in developing a measurement scale (Gable & Keility, 1998).

Table 4. 10

Summary of the Measurement Reliability (Cronbach's Alpha)

Measurement Scale	Number of Items	Cronbach's Alpha (α)
Tourism Development Impacts	14	.76
Environmental Attitudes	15	.88
Place Attachment	9	.90
Preferences about Tourism Attraction Development	12	.81
Support for Destination Competitive Strategy	24	.94

As an initial examination of the reliability for the measurement scales for the five constructs proposed in this study, the Cronbach's alpha coefficients were calculated in SPSS 10.0 and presented in Table 4.10 (see also Appendix F 1 to F5). All of the measurement scales for the five constructs obtained an acceptable level of a coefficient alpha above .70, indicating that the measurement scales are reliable and appropriate for further data analysis.

Particularly, in assessing the reliability of the place attachment scale, it was discovered that the level of alpha reliability increased from .83 to .90 after item 7 "The time I spend in my community could just as easily be spent somewhere else" was deleted. Accordingly, more caution on this item should be taken in further analysis.

As another approach to assessing the reliability, the composite reliability and variance extracted were calculated and reported in the next section of Confirmatory Factor Analysis (CFA). Composite reliability refers to a measure of the internal consistency of indicators to the construct, depicting the degree to which they indicate the corresponding latent construct (Hair, Anderson, Tatham, & Black, 1998). A commonly used threshold value for an acceptable level of composite reliability is .70. If the composite reliability is above .70, the indicators for the latent construct are reliable and are measuring the same construct. As a complementary measure of the composite reliability, the variance extracted can be calculated to explain the overall amount of variance in the indicators accounted for by the corresponding latent construct. A commonly used acceptable cut-off point is .50. If the variance extracted values are high, the indicators are truly representative of the latent construct.

Validity of Measurement Scales

Whereas reliability is related to how consistent a set of items are, validity is associated with whether a particular construct is the underlying cause of item covariation (DeVellis, 1991). Validity usually refers the extent to which the measurement items or indicators measure what they are supposed to measure (Hair et al., 1998). Construct validity deals with the adequacy of a scale as a measure of a specific variable.

In general, there are two types of evidence for scale validity: judgmental and empirical evidence (Gable & Keilty, 1998). Judgmental validity can be obtained before

the measurement scale is administered to the target study population. It is mainly used as a method for examining the adequacy of the conceptual and operational definition of the measurement scale on the basis of the theoretical background. The face or content validity provides evidence for the judgmental validity. For the empirical evidence, after the measurement scale is administered to the study population, the relationships among the items within the measurement scale are examined as well as relationships to the measurements. The empirical evidence for validity can be obtained by criterion-related validity and construct validity.

In order to verify the face or content validity, the measurement scales for the constructs were examined by professors and graduate students in the Department of Hospitality and Tourism Management at Virginia Polytechnic Institute and State University. Further, tourism and economic development specialists from the Public Service Program, and also staff from the Chamber of Commerce and Convention & Visitors Bureau examined the appropriateness and adequacy of the operational terminologies and contents of the measurement scales in targeting tourism stakeholders. Through these procedures, the content validity of the measurement scales was achieved and further procedures and research for this study were supported.

For the criterion-related validity, as discussed in the Chapter 3, concurrent validity was performed to test if there was a correlation between the criterion variables and the measurement scales. The results of Pearson correlation and linear regression analysis are presented in Table 4.11. All of the Pearson correlations indicated that there is some degree of correlation between measurement scales and criterion-variables. Additionally, the results of linear regression analysis revealed that all of the models were significant at the .01 statistical level, while explaining between 7% and 29% of the variance.

Table 4.11

The Results of Concurrent Validity

Measurement Scale	Criterion-Variables	Pearson Correlation Min. – Max.	Multiple Regression
Tourism Development Impacts (14 items)	Overall impact of tourism development in the community	-.120 - .392	R = .539 R^2 = .290 F = 14.79 p < .001
Environmental Attitudes (15 items)	Would you oppose or support tourism development in your community?	-.109 - .099	R = .217 R^2 = .047 F = 1.99 p < .014
Place Attachment (10 items)	Your quality of life	-.163 - .302	R = .380 R^2 = .244 F = 11.52 p < .001
Preferences about Tourism Attraction Development (12 items)	Would you oppose or support tourism development in your community?	.085 - .367	R = .484 R^2 = .234 F = 15.72 p < .001
Support for Destination Competitive Strategies (24 items)	How would you evaluate the competitiveness of your community as a tourism destination?	-.049 - .146	R = .254 R^2 = .065 F = 1.71 p < .019

Since two statistical procedures -- Pearson correlation and multiple regression -- provided empirical evidence of concurrent validity for the five measurement scales for the constructs, this study was supported in using those measurement scales. However, the measurement scales for the environmental attitudes and support for destination competitive strategy had comparatively low correlations with the criterion variables so that in further analysis, much attention was given to these scales to provide valid results.

Construct validity (convergent and discriminant validity) will be reported in the next section along with the results of confirmatory factor analysis (CFA), since CFA can produce empirical evidence of construct validity.

Convergent validity was used to measure the extent to which items purporting to measure one construct indeed converge. This type of validity evidence can be assessed by examining the t-tests for confirmatory factor analysis loadings, since statistically significant t-tests for all confirmatory factor loadings indicate effective measurement of the same construct (Anderson & Gerbing, 1998; Hair et al., 1998). Discriminant validity refers to a measure of the indicators of dissimilar constructs that theoretically and empirically should not be related to each other (Hair et al. 1998). Thus, the indicators that measure one construct should not be related to the indicators that measure another construct if the constructs have discriminant validity. This discriminant validity can be assessed by examining χ^2 in terms of every possible pair of estimated constructs.

MEASUREMENT MODEL

Each measurement model of the five constructs can be examined through a process of confirmatory factor analysis (CFA). A confirmatory factor analysis (CFA) is used to test the measurement model specifying the posited relations of the observed variables to the underlying constructs. This CFA approach examines whether or not the collected data are consistent with a highly constrained hypothesized model, or a priori specified model (Byrne, 1998; Maruyama, 1997). Thus, CFA allows identification and clustering of the observed variables in a pre-specified, theory-driven hypothesized model to evaluate to what extent a particular collected data set confirms what is theoretically believed to be its underlying constructs (Mueller, 1996).

In this study, a total of five measurement models of the five constructs were proposed and tested; tourism development impacts, environmental attitudes, place attachment, preferences about tourism attraction development, and support for destination competitiveness. As the detailed theoretical and empirical aspects of each construct and observed indicators were discussed in Chapters II and III, all of the measurement models were developed on the basis of conceptual, theoretical, and empirical reviews. Through a process of CFA, each measurement model was confirmed in terms of measuring the underlying constructs. Since CFA is performed on the basis of the premise that the observed variables are not perfect indicators for the underlying constructs, each construct in the measurement model was tested separately and then the overall measurement model was evaluated. As discussed in Chapter III, the model estimation process for each model will be provided along with statistical results. Modification indices, Absolute Fit Measures (AFM), Incremental Fit Measures (IFM), and Parsimonious Fit Measures (PFM) are utilized to evaluate the proposed model

In processing the CFA, the covariance matrices based on Product Moment Correlation and standard deviation were used as input data matrices to analyze the data, since the analysis of correlation matrix data may create problematic results (Byrne, 1998; Jöreskog & Sörbom, 1993). Additionally, as the method of parameter estimation, maximum likelihood (ML) was utilized because the collected usable sample was quite large (N=646), the scales of observed indicators were continuous, the normal distribution of the observed variables were met according to the results of skewness and kurtosis, and the variables in the the hypothesized model were believed to be valid.

Further, the Ml estimation method has been widely used in studies of structural equation modeling because this estimation method has been found to be quite robust even if the normal distribution of the observed variables are violated (Chou & Bentler, 1995). Particularly, when the observed data are normally distributed and the collected data are large enough, the ML method is suggested to estimate the parameters because it creates computational simplicity, accuracy, and correctness of statistical results.

Confirmatory Factor Analysis (CFA) for Tourism Development Impacts

Fourteen indicators were utilized to measure the tourism development impacts (see, Table 3.2 & Figure 3.2). For the input file, after specifying 14 observed indicators, the diagonal elements of the covariance matrix are fixed at one. The variance/covariance matrix of the tourism development impact construct was assigned to a symmetric matrix with all parameters free to be estimated.

While the standardized solution calculates standardized coefficients based on a standardized latent construct, but unstandardized observed variables, the completely standardized solution is estimated based on a standardized latent construct and standardized observed variables (Bollen, 1989; Bollen & Long, 193; Mueller, 1996). Lastly, modification indices (MI) and fitted variance-covariance matrix residuals (RS) were examined.

The results of the initial estimation of the CFA of the tourism development impact construct were not acceptable since there was a Chi-square value of 2,986.89 with 77 degrees of freedom ($\underline{p} < .001$) and a Root Mean Square Error of Approximation (RMSEA) of .242. RMSEA explains the error of approximation in the population; values should be less than .05 for a good fit. Accordingly, other fit indices also indicated a poor fit and suggested that the estimate parameters should be modified. First of all, based on the results of the t-value, standard error, squared multiple correlations (R^2), and completely standardized solution, six indicators (items 5, 6, 6, 11, 12, and 13) were deleted because of low t-values, high standard error, low explained variances, and relatively less important variables as indicators of the tourism development impact construct.

According to Byrne (1998), the t-value, which represents the parameter estimate divided by its standard error, should be greater than $\pm$ 1.96 at the .05 significant level to be an important indicator for the associated construct. The squared multiple correlation which examines the extent to which the measurement model adequately represents the observed indicators should be high, ranging from .00 to 1.00. These values are also used to estimate the indicator reliability that explains the extent to which an item adequately measures its associated underlying construct (Bollen, 1989; Mueller, 1996).

After six indicators were deleted, the CFA with 8 indicators was re-run to estimate whether or not the collected data fit the modified model. Still, the results of the CFA indicated a poor fit with a Chi-square value of 608.28 with 20 degree of freedom and a RMSEA of .214. Other fit indices also did not produce satisfactory results. These included the Goodness-of-Fit Index (GFI = .81), the Adjusted Goodness-of-Fit Index (AGFI = .66), and the Normed Fit Index (NFI = .82). However, the modification indices (MI) for THETA-DELTA (TD) showed that the model would achieve a better fit if highly correlated indicators were adjusted. Additionally, even though indicator 14 had a significant t-value at a level of .05 (10.60), this indicator had a potentially high error variance (TD = .84), and a low contributing variance in measuring the construct (R^2 = .17) so that this item was deleted to achieve a better fitting model

In adjusting the error-correlated indicators (error covariances), there are three options that can follow to improve the model fit; 1) One of the correlated indicators can be deleted; 2) the estimation of two error-correlated indicators can be performed by estimating the error covariance; and 3) the composite mean score from two error-correlated indicators can be used to recreate the covariance matrices. However, the specification of correlated errors for the purpose of improving the model fit should be made based on the theoretical or empirical justification (Byrne, 1998; Jöreskog, 1993).

According to the results of the modification indices (MI), four sets of correlated errors were found; between items 1 and 2 (MI = 131.59), items 8 and 9 (MI = 124.38), items 9 and 10 (MI = 123.40), and items 8 and 10 (MI = 88.88). By looking at the statements in item I (tourism has created jobs for our community) and item 2 (tourism has attracted investment to our community), the two indicators are conceptually and empirically related in that they explain that tourism development contributes to the local economy (Yoon, 1998). Additionally, item 8 (tourism has encouraged a variety of cultural activities by the local residents), item 9 (tourism has resulted in more cultural exchange between tourists and residents), and item 10 (tourism had resulted in positive impacts on the cultural identity of our community) are also conceptually associated with tourism cultural impacts (Yoon, 1998).

For this study, the composite mean scores from items 1 and 2, and items 8, 9, and 10 were calculated and re-created the covariance matrices for estimating the re-specified

model in CFA. This procedure may be somewhat beneficial in that the original items are not ignored so that information related to these items could be interpreted for practical purposes. Further, this composite mean score may build stronger variances in estimating a better fitting model.

After recreating the covariance matrices as an entered matrix for the CFA, the re-specified model with four indicators was estimated. The final results of the CFA for tourism development impacts are presented in Table 4.12. The re-specified model results in a Chi-square (χ^2) of 3.53 with 2 degrees of freedom that is not significant at a level of .05 ($\underline{p}$ = .17). All other fit indices also showed that the data successfully fit the model with GFI = 1.00, RMSR = .01, AGFI = .99, NNFI = 1.00, and PNFI = .33.

Additionally, the completely standardized factor loadings which determine the relative importance of the observed variables as indicators of the tourism development impact construct revealed comparatively high loadings, ranging from .59 to .88. In terms of estimating the squared multiple correlations (R^2), which are used to examine the extent to which the measurement model adequately represents the observed indicators (Byrne, 1998; Kline, 1998), R^2 values ranged between .35 and .78. These coefficient scores also serve as indicator reliabilities (Bollen, 1989).

Further, the composite reliability of this measurement construct resulted in .86, which exceeded the recommended threshold level of .70 (Hair et al., 1998, p. 642). As another measure of reliability, the variance extracted measure was also calculated as shown in the formula in Chapter III. This measure represents the overall amount of variance in the indicators accounted for by the latent construct. The value should exceed a threshold guideline level of .50 for the construct (Hair et al., 1998, p.653). In this study, the extracted variance for the construct of tourism development impacts revealed a value of .61, which exceeded a recommended level of .50.

Overall, the tourism development impact construct retained four observed indicators with satisfactory results of fit indices, as discussed. Mainly, the measurement items that are related to tourism economic and cultural impacts are relatively important indicators to measure tourism development impacts in this study.

Table 4.12

The Results of CFA for Tourism Development Impacts

Construct & Indicators	Completely Standardized Loadings	Construct & Indicator Reliability	Variance Extracted
Tourism Development Impacts		**.86**	**.61**
1. Tourism has created jobs and attracted investment to the community (Item 1 & 2).	.85	.72	.28
2. Our standard of living has increased considerably because of tourism (Item 3).	.77	.59	.41
3. Tourism has given economic benefits to local people and businesses (Item 4).	.88	.78	.22
4. Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community (Items 8,9, &10)	.59	.35	.65
Goodness-of-Fit Statistics			
Absolute Fit Measures			
Chi-square (χ^2) of estimate model	3.53 (df = 2, p = .17)		
Goodness-of-fit index (GFI)	1.00		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.03		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.99		
Non-normed fit index (NNFI)	1.00		
Normed fit index (NFI)	1.00		
Parsimonious Fit Measures			
Parsimony goodness-of-fit index(PGFI)	.20		
Parsimony normed fit index (PNFI)	.33		
Comparative fit index (CFI)	1.00		
Incremental fit index (IFI)	1.00		

Note: All t-value were significant at the level of .05.

Confirmatory Factor Analysis (CFA) for Environmental Attitudes

A total of 15 observed indicators were utilized to evaluate whether the collected data fit the model of environmental attitudes (see, Table 3.3 & Figure 3.3). The results of the initial estimation of the CFA for the construct did not show a well-fitting model. having a Chi-square value of 525.27 with 90 degrees of freedom ($p < .01$) and an RMSEA of .087. Other fit indices also indicated that the specified model was not acceptable and needed to be re-specified, showing GFI = .90, AGFI = .87, NNFI = .85, and PNFI = .73. After reviewing the t-values, standard errors, squared multiple correlations, and completely standardized loadings, five items (4, 6, 9, 12, and 14) were deleted due to their low contributions in fitting the data to the model.

With the re-specified model having ten observed indicators, CFA was run to estimate the model. The results indicated that the model was improved, but still did not produce the satisfactory results of a well-fitting model, showing a Chi-square value of 105.23 with 35 degrees of freedom ($p < .01$) and a RMSEA value of .056, even though other fit indices yielded a somewhat acceptable level of value, including GFI = .97, AGFI = .95, NNFI = .96, and PNFI = .74.

Subsequently, this means that the model possibly contained error-correlated indicators. Therefore the modification indices were examined. There was clear evidence of misspecification associated with the pairing of items: 1 and 11 (MI = 10.55), items 2 and 7 (MI =15.46), items 3 and 5 (MI = 17.5), items 7 and 8 (MI = 10.82), and items 8 and 10 (MI = 26.72) (see Table 3.3 and Figure 3.3).

These misspecified error variances are comparatively larger than those remaining. According to Aish and Jöreskog (1990), these measurement error covariances may result from some systematic error rather than random error, and these may also derive from specific characteristics of either the items or the respondents. It may also be due to a mis-specified model. Consequently, those four items having comparatively low values of the squared multiple correlation and completely standardized loadings, and high values of standard error variances were deleted (Items 3, 7, 8, and 11). A total of six observed indicators remained to estimate the re-specified model.

Table 4.13

The Results of CFA for Environmental Attitudes

Construct & Indicators	Completely Standardized Loadings	Construct & Indicator Reliability	Variance Extracted
Environmental Attitudes		**.83**	**.45**
1. We are approaching the limit of the number of people the earth can support (Item 1).	.66	.44	.56
2. Humans have the right to modify the natural environment to suit their needs (Item 2).	.52	.27	.73
3. Mankind is severely abusing the environment. (Item 5)	.67	.45	.55
4. The so-called "ecological crisis" facing humanity has been greatly exaggerated (Item 10).	.72	.52	.48
5. The balance of nature is very delicate and easily upset (Item 13).	.64	.41	.59
6. If things continue on their present course, we will soon experience a major ecological catastrophe. (Item 15).	.79	.63	.37
Goodness-of-Fit Statistics			
Absolute Fit Measures			
Chi-square (χ^2) of estimate model	5.54 (df = 9, p = .78)		
Goodness-of-fit index (GFI)	1.00		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.99		
Non-normed fit index (NNFI)	1.00		
Normed fit index (NFI)	1.00		
Parsimonious Fit Measures			
Parsimony goodness-of-fit index (PGFI)	.43		
Parsimony normed fit index (PNFI)	.60		
Comparative fit index (CFI)	1.00		
Incremental fit index (IFI)	1.00		

The results of the estimation for the final specified model with six indicators are presented in Table 4.13. Overall, the model produced quite satisfactory results, having a Chi-square value of 5.54 with 9 degrees of freedom (p = .79) and a RMSEA value of .00. Other fit indices also yielded quite strong values of a well-fitting model (GFI = 1.00, RMSR = .01, AGFI = .99, NNFI = 1.00, PNFI = .60).

Further, the completely standardized loadings for the six observed indicators ranged from .52 to .79, and the squared multiple correlations (R^2) ranged between .27 and .63. The estimates of the reliability and variance extracted for this construct yielded a construct reliability of .83, and a variance extracted value of .44. These values were assessed to see whether the specified indicators were sufficient in representing the environmental attitude construct. However, the construct reliability exceeded the recommended level of .70, but the variance extracted measure was somewhat short of the recommended level of .50. This may due to the value of item 2, which had both a low squared multiple correlation (.27) and a comparatively high error variance (.73). Thus, more caution on this item was taken to produce a better fitting hypothesized model in a further analysis that includes CFA for an overall measurement model. Still this measurement scale with six indicators is reliable and acceptable to measure the construct of environmental attitude.

Confirmatory Factor Analysis (CFA) for Place Attachment

The measurement scale for place attachment is comprised of 10 observed indicators. However, as discussed in the earlier section concerning reliability and validity, item 7, "The time I spend in my community could just as easily be spent somewhere else," did not contribute to building a high reliability of the scale for the place attachment construct (Cronbach's alpha = .90 without this item, and Cronbach's alpha = .83 with this item). Since the reliability coefficient estimates the internal consistency of the measurement items or assesses the extent to which the items are inter-correlated, high inter-item correlations explain that the items of a scale have a strong relationship to the latent construct and are possibly measuring the same thing. Accordingly, item 7 may not be a reliable item to measure place attachment so that during the process of CFA, much

attention was given to this time in terms of its standard error, squared multiple correlation (R^2), and completely standardized factor loadings.

The results of the initial estimation of the proposed model was not acceptable for a well-fitting model. The Chi-square value of 517.11 with 35 degrees of freedom was statistically significant ($p < .001$), suggesting that the hypothesized model was not entirely adequate. The probability value associated with the Chi-square represents the likelihood of obtaining a Chi-square value that exceeds the Chi-square value when a null hypothesis is true. Accordingly, it can be explained that the proposed hypothesized model of place attachment represents an unlikely condition with the current specified model and should be rejected and re-specified in terms of estimating the parameters. Other indices also provide evidence of an unacceptable model with GFI = .83, RMSR = .094, AGFI = .74, NNFI = .85, and PNFI = .68). Consequently, four items (1, 7, 8, and 9) were dropped, having a low squared multiple correlation (< .30), a high error variance (> . 70), and low completely standardized loadings (< .50). Then the CFA was run with the re-specified model with six indicators.

In the second estimation of the re-specified model, the Chi-square value of 167.32 with 9 degrees of freedom decreased ($p < .001$), but the results still did not produce a well-fitting model. Other fit indices were also improved, but did not support that the re-specified model was acceptable as a well-fitting final model.

However, since all of the completely standardized loadings ranged from .56 to .93, and also squared multiple correlations were between .32 and .86, the error covariance matrices in the modification index were examined. Among the six items, the highest MI value in terms of misspecified parameters was found between Items 6 and 10 (MI = 119.73), and also revealed the completely standardized expected change value of .30. Additionally, evidence of error covariance was found between Items 4 and 5 (MI = 24.38), and Items 3 and 5 (MI = 12.12). These modification values indicated clear evidence of misspecification for parameters, and needed to be adjusted. Based on the t-value, completely standardized loading, and error variance, item 10 was dropped. Because Item 5 had an error-correlated variance with two other items, it was deleted from further analysis. Results of CFA for place attachment are presented in Table 4.14.

Table 4.14

The Results of CFA for Place Attachment

Construct & Indicators	Completely Standardized Loadings	Construct & Indicator Reliability	Variance Extracted
Place Attachment		**.89**	**.68**
1. I am very attached to my community. (Item 2)	.84	.81	.19
2. I identify strongly with my community. (Item 3)	.90	.89	.11
3. This community means a lot to me. (Item 4)	.79	.79	.21
4. No other place can compare to this community. (Item 6)	.64	.31	.69
Goodness-of-Fit Statistics			
Absolute Fit Measures			
Chi-square (χ^2) of estimate model	.45 (df = 2, p = .80)		
Goodness-of-fit index (GFI)	1.00		
Root mean square residual (RMR)	.00		
Root mean square error of approximation (RMSEA)	.00		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	1.00		
Non-normed fit index (NNFI)	1.00		
Normed fit index (NFI)	1.00		
Parsimonious Fit Measures			
Parsimony goodness-of-fit index(PGFI)	.20		
Parsimony normed fit index (PNFI)	.33		
Comparative fit index (CFI)	1.00		
Incremental fit index (IFI)	1.00		

With a total of four indicators for place attachment, CFA was run to estimate whether the re-specified hypothesized model fit the collected data. As presented in Table 4.14, the Chi-square value of .45 with 2 degrees of freedom represented a better fit compared to the previous model, and indicated a well fitting model. Other goodness-of-fit indices also supported that the hypothesized model fits the collected sample data fairly well (GFI = 1.00, RMSR = .001, AGFI = 1.00, NNFI = 1.00, and PNFI = .30). All of the t-values associated with each of the loadings exceeded the critical values for the significant level of 0.05 (1.96). Accordingly, it can be said that all variables were significantly related to the construct of place attachment. The posited relationships among the indicators and constructs were verified.

Further, the highest squared multiple correlation which assessed the extent to which the measurement model was adequately represented by the observed measures was .89 (Item 3, "I identify strongly with my community") and the lowest squared multiple correlation was .31 (Item 6, "No other place can compare to the community"). Accordingly, it can be interpreted that, approximately 89% of the variance of Item 3 was explained by the place attachment construct.

Additionally, item indicated the highest completely standardized loading of .90, meaning that the item was the relatively highest indicator in measuring place attachment. However, much attention should be given to Item 6 having the lowest loading (.31), and the highest standard error (.69), even though this item exceeded the critical t-value at the significant level of .01, because this item could contribute to a poor fit in the overall measurement model.

The reliability and variance extracted measures of this construct were estimated to assess whether those four specified observed indicators were sufficient to represent place attachment. The results revealed that the construct reliability value was .89 and the variance extracted value was .68, which exceeded the recommended levels of .70 and .50, respectively. Overall, the goodness-of-fit indices and other estimated parameters and variances substantially support that the hypothesized model with four observed indicators fit the data fairly well.

Confirmatory Factor Analysis (CFA) for Development Preferences about Tourism Attractions

This measurement scale consisted of 12 tourism attraction items. The respondents were asked to indicate how much each tourism attraction was preferred in the community. The Pearson correlations with standard deviations were calculated and entered into the CFA as an input file.

The initial estimations of the hypothesized model did not produce satisfactory results, indicating a Chi-square value of 928.29 with 54 degrees of freedom ($\underline{p} < .001$) and a RMSEA value of . 158. Based on the examination of the t-value, standard error, squared multiple correlations (R^2), and completed standardized factor loadings, those items having unacceptable values of estimated parameters and variances were dropped, including Items 1, 2, 3, 8, 9, and 11. Then, CFA was run again to estimate whether the re-specified model with six observed indicators fit the data.

However, the re-estimated hypothesized model still was not adequate, showing that a Chi-square value was 118.37 with 9 degrees of freedom and the RMSEA was .14. Other indices were somewhat improved but did not support that the model fit fairly well to the data (GFI = .94, RMSR = .04, AGFI = .87, NNFI = .81, and PNFI = .53). Based on the examination of modification indices which represent misspecified error covariances, it was identified that the error variance of Item 12 was highly correlated with the error variances of four other items (MI ranged from 10.06 to 35.30). Subsequently, Item 12 was eliminated.

The next highest modification index (MI) value of misspecified parameters was 29.32, between Items 5 and 7. By looking at the statement of Item 5 (“Small independent businesses - e.g., gift shops, guide services, campgrounds:), and Item 7 (“Pre-arranged attractive and flexible tour packages”), these two items can be reasonably combined into one item, so that the statement reads “small independent businesses such as gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds.” Accordingly, the composite mean score from these two items was calculated in order to create a new covariance matrix with the other remaining items (4, 6, and 10). Table 4.15 presents the resulted model.

Table 4.15

The Results of CFA for Preferences about Tourism Attraction Development

Construct & Indicators	Completely Standardized Loadings	Construct & Indicator Reliability	Variance Extracted
Tourism Attraction Development		**.75**	**.44**
1. Supporting visitor services (Item 4). (e.g. hotels, restaurants, entertainment, etc)	.56	.32	.68
2. Small independent businesses (Items 5 &7) (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds).	.85	.72	.28
3. Cultural and folk events (Item 6). (e.g. concerts, arts and crafts, dances, festivals).	.61	.37	.63
4. Information for tourists (Item 10).	.58	.33	.67
Goodness-of-Fit Statistics			
Absolute Fit Measures			
Chi-square (χ^2) of estimate model	2.96 (df = 2, p = .23)		
Goodness-of-fit index (GFI)	1.00		
Root mean square residual (RMR)	.01		
Root mean square error of approximation (RMSEA)	.03		
Incremental Fit Measures			
Adjusted goodness-of-fit index (AGFI)	.99		
Non-normed fit index (NNFI)	.99		
Normed fit index (NFI)	.99		
Parsimonious Fit Measures			
Parsimony goodness-of-fit index(PGFI)	.20		
Parsimony normed fit index (PNFI)	.33		
Comparative fit index (CFI)	1.00		
Incremental fit index (IFI)	1.00		

Finally, the re-specified hypothesized model with four indicators was estimated in CFA. The results of estimated variances and fit indices were presented in Table 4.15. Overall, the hypothesized model is adequate and fit the collected data fairly well, having a Chi-square value of 2.96 with 2 degrees of freedom ($\underline{p}$ = .23) and other goodness-of-fit indices (GFI = 1.00, RMR = .01, AGFI = .99, NNFI = .99, and PNFI = .33).

The t-value associated with each of the loadings exceeded the critical values for a significant level of 0.05 (1.96) and a significant level of .001 (2.576). This means that all variables were significantly related to the construct of preferences about tourism attraction development, verifying the posited relationships among the indicators and constructs. The completely standardized loadings ranged from .56 to .85. Item 2 related to "small independent businesses" was found as relatively the most important indicator among the observed four indicators. The examples of the tourism attractions given for this indicator were gift shops, pre-arranged attractive and flexible tour packages, guide services, and campgrounds.

Having a construct reliability of .75, which exceeded a recommended level of .70, the specified four indicators for this construct were somewhat sufficient to represent the development preferences about tourism attractions. However, for the variance extracted measure, this construct had a value of .44, falling somewhat short of the recommended level of .50. This means that more than half of the estimated variance for the specified indicators for the construct was not enough (Hair et al., 1998, p.654). These insufficient extracted variances may be due to the comparatively low correlations with the construct and the high error covariance. In further analysis, much attention was given to each of the observed indicators of this construct because the high standard errors may create large error variances of the estimated parameters.

However, the overall model goodness-of-fit indices and the estimated parameters and variances substantially supported hypothesized model with four observed indicators fitting the model well to the data.

EFA and CFA for Support for Destination Competitive Strategy

Exploratory Factor Analysis for Support for Destination Competitive Strategy

The measurement scale of support for destination competitive strategy consists of 24 indicators. Prior to performing CFA, an exploratory factor analysis (EFA) was conducted only for the purposes of reducing the number of variables from the observed indicators in the measurement scale. Basically, factor analysis investigates relationships between a set of observed variables and the construct, and examines the covariation among a set of observed indicators in order to achieve underlying structures and collect information on the construct (Byrne, 1998; Hair, Anderson, Tatham, & Black, 1998).

Specifically, EFA is conducted when links between the observed indicators and the construct are unknown or uncertain. Since the measurement scale in this study was newly measured for the study and was somewhat exploratory in nature, the determination of how and to what extent the observed indicators are linked to the construct of destination competitive strategy was essential. Typically, the underlying factors derived from EFA are represented as correlations among sets of many interrelated variables

This procedure may help to decrease multicollinearity or error variance correlations among indicators in the CFA of the measurement model. Such errors should be avoided as much as possible in structural equation modeling procedures. As a result, the identified items within a factor were calculated to create a composite mean score. These composite factors were treated as indicators to measure the construct of support for destination competitive strategy. Thus, from the composite mean scores, the covariance matrix was calculated and entered as an input file in the CFA.

Since factor analysis is based upon correlations among variables, not respondents, R-type factor analysis is employed. Furthermore, since the results from promax rotation (the extracted factors are correlated with each other) were similar to the results of the varimax rotation, the results of varimax rotation were reported so that the extracted factors were independent and not correlated with each other. Regarding the sample size (N= 646) of each variable, a 27- to-1 ratio was achieved so that the sample size was big enough to run the factor analysis because it is normally recommended that a ten-to one ratio of the sample size is acceptable (Hair et al., 1998).

With 24 items relating to support for destination competitive strategy, EFA was performed. In order to derive and identify the underlying factors, a latent root criterion (eigenvalue) value of above 1.0 and a factor loading of 0.30 was used as the benchmark for including items in a factor. However, it was found that a number of variables, including Items, 9, 10, 14, 15, 16, and 17 were strongly loaded on more than two factors. Ideally, the determination of the uncorrelated factors was a major purpose of the EFA. Those items double-loaded on the factors may create error covariances of misspecification parameters in CFA, and those variables should be eliminated. This may help to decrease standard errors as well as error covariances in this specific study.

Consequently, a total of 18 items of support for destination competitive strategy was utilized for EFA. As an initial analysis, the Anti-image matrix indicated that most of the values were negative or had a small value of partial correlation. The Bartlett test of sphericity, which tests the presence of correlations among the variables indicates that the Chi-square was 6,980.605 (df=153) with a significance of $p < .001$. The measure of sampling adequacy (MSA), which analyzes a degree of intercorrelations, results was .91. Basically, these examinations confirmed that since the initial analysis was acceptable, further factor analysis was possible.

As presented in Table 4.16 (See also, Appendix G), three factors were derived from the 18 support for destination competitive strategy items. All of the factor loadings were over .50 and had an eigenvalue > 1.0. The first factor explained 27.69 percent of the variance with an eigenvalue of 7.22. This factor was termed “Sustainable Management and Practices” on the basis of the interpretation of the overall item context. The item having the highest loading was “promoting ethical responsibility towards the natural environment,” followed by the item “sensible use of nature resources.”

The second factor explained 24.76 percent of the variances with an eigenvalue of 3.19. This factor was termed “Marketing Efforts and Activities,” since all of the variables loading on this factor were related to marketing strategies and actions such as target market, destination image, overcoming seasonality, and promotion and operations for international tourists. Additionally, the highest loading item was “increasing tourists’ length of stay,” and the lowest loading item was “use of modern, advanced technology and information systems.”

Table 4.16
The Results of EFA for Support for Destination Competitive Strategy

Support for Destination Competitive Strategy	Factor Loading	Composite Mean
Factor 1: Sustainable Management & Practices		**4.05**
1. Promoting ethical responsibility towards the natural environment. (Item 19)	.894	
2. Sensible use of natural resources. (Item 22)	.857	
3. Environmental considerations in the marketing of tourism. (Item 23)	.841	
4. Expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection. (Items 20)	.837	
5. Protecting and improving more wildlife habitat. (Item 18)	.836	
6. Environmental training of tourism staff. (Item 24)	.802	
7. Encouraging citizen participation in decision-making about tourism development. (Item 21)	.621	
Explained Variance	**27.69**	
Factor 2: Marketing Efforts & Activities		**4.17**
1. Increasing tourists' length of stay. (Item 5)	.783	
2. The selection of appropriate target markets. (Item 2)	.769	
3. The development of a strong destination image.(Item 1)	.750	
4. The development of strong linkages with tourism wholesalers and retailers. (Item 3)	.734	
5. Overcoming seasonality (peak and off-season) in tourists' visits. (Item 4)	.724	
6. Increasing tourists' spending. (Item 8)	.700	
7. Tourism promotion and operations for targeting international tourists and visitors. (Item 7)	.636	
8. Use of modern, advanced technology and information systems (e.g. Internet). (Item 6)	.620	
Explained Variance	**24.76**	

Table 4.16
The Results of EFA for Support for Destination Competitive Strategy (cont.)

Support for Destination Competitive Strategy	Factor Loading	Composite Mean
Factor 3: Destination Management Organizations' Roles		**3.79**
1. Local government and agencies' roles as facilitators for tourism development. (Item 12)	.829	
2. The leadership roles of local government and agencies in marketing this region as a tourism destination. (Item 13)	.788	
3. Establishing the cost of providing different levels of quality for various types of tourism experiences. (Item 11)	.634	
Explained Variance	**11.95**	
Total Variance Explained	**64.40**	

Note: 1 = Not at all favorable 5 = Highly favorable
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .95
Bartlett's Test of Sphericity $p < .001$.

Lastly, the third factor explained 11.95 percent of the variances with an eigenvalue of 1.18. Based on the examination of each item loaded on this factor, this factor was considered as "Destination Management Organizations' Roles." The retained variables were "local government and agencies' roles as facilitators for tourism development," "the leadership roles of local government and agencies in marketing this region as a tourism destination," and "establishing the cost of providing different levels of quality for various types of tourism experiences." Basically, these statements were associated with destination management organizations' role in terms of how to develop and market tourism destinations.

Overall, 64.40 percent of the variance was explained by three underlying factors for support for destination competitive strategy. "Sustainable management and practices," "Destination marketing efforts and activities," and "Destination Management Organizations' Roles" were identified as favorable strategies supported by tourism stakeholders.

Confirmatory Factor Analysis for Support for Destination Competitive Strategy

From the exploratory factor analysis with 18 observed items, three factors were derived, and the composite mean score of the items loading on the factors were calculated, as shown in Table 4.16. In order to create an input file for CFA, the composite mean scores were utilized and the correlation matrix with standard deviations was created for estimating the hypothesized model for CFA.

The results of CFA are presented in Table 4.17. Since the hypothesized model retained only three indicators, the model was saturated and the fit was perfect (Chi-square = .00, p =1.00). In terms of other coefficient scores, t-values were significant at a level of .001; the values of the completely standardized loadings were between .53 and .85. The squared multiple correlations ranged from .28 and .72. In terms of the construct reliability, the value of .71 slightly exceeded the recommended level of .70, so that these three specified indicators representing the construct were moderately sufficient. Further, an extracted variance value of .46, which is somewhat short of the recommended level of .50, explained that more than half of the estimated variance for the specified indicators for the construct was not enough to be accounted for by the construct. Accordingly, the items which have low reliability and high error variance were examined in further analysis, such as CFA for the overall measurement scale.

Table 4.17

The Results of CFA for Support for Destination Competitive Strategy

Construct & Indicators	Completely Standardized Loadings	Construct & Indicator Reliability	Variance Extracted
Support for Destination Competitive Strategy		**.71**	**.46**
1. Sustainable Management & Practices	.53	.28	.72
2. Marketing Efforts & Activities	.62	.39	.61
3. Destination Management Organizations' Roles	.85	.72	.28
Goodness-of-Fit Statistics			
The model is saturated and the fit is perfect.			

TESTING THE HYPOTHESIZIED MODEL

The study began with the development of a conceptual and theoretical model with linkages between the latent constructs and their measurable variables. The supporting relevant theories and discussion of the measurement variables associated with the constructs were provided in the early sections of the literature review and the methodology in Chapters II and III. Once the hypothetical constructs via their empirical observed indicators were operationalized, the hypothesized structural model of how the constructs are interrelated with each other was defined by the proposed hypotheses. Subsequently, it was specified that the proposed hypotheses could be tested by SEM.

In structural equation modeling (SEM), the development of the hypothetical model depicting the linkages between the latent constructs and their empirical observed indicators is considered as a measurement model, while the theoretical relationships between or among the constructs is referred to as a structural model (Bollen, 1989; Byrne, 1998; Jöreskog, 1993). The measurement model can specify the patterns of how the observed indicators load on the constructs, and also provides the measurement properties of how much the observed indicators are reliable (reliability) and valid (validity). A structural model can specify which of the construct(s) directly or indirectly influence or change the values of other constructs in the model (Byrne, 1998; Maruyama, 1998). During the process of structural equation modeling, once the necessary information and requirements of the full structural model are derived, the exogenous (similar to independent) and endogenous (similar to dependent) constructs can be defined. Specifically, changes in the values of the exogenous constructs are not explained by the model, but changes in the values of the endogenous constructs are influenced by the exogenous constructs in the model. Accordingly, all of the constructs fall into one of these two categories.

In this proposed structural model, five theoretical constructs were discussed in terms of not only their posited relationships with the observed indicators, but also structural relationships among the constructs. Those include tourism development impacts, environmental attitudes, place attachment, preferences about tourism attraction development, and support for destination competitive strategy.

Overall Measurement Model

Prior to estimating the overall measurement model, each measurement model was separately examined to investigate whether the collected data fit the specified observed indicators of the construct successfully. Based on the results of the goodness-of-fit indices, modification indices, and estimated coefficient scores such as t-values and multiple correlations, the measurement models for each construct were modified and re-specified.

Consequently, the final measurement model for each construct with the observed indicators was determined on the basis of the statistical and theoretical soundness of the constructs. Thus, each final model represented the best-fitting model to the data in terms of parsimony and substantive meaningfulness.

Accordingly, 21 observed indicators associated with five constructs were determined from CFA, as shown in Figure 4.2 and Table 4.18. This overall measurement model to be tested consisted of five constructs represented by tourism development impacts (TDI), environmental attitudes (EA), place attachment (PA), preferences about tourism attraction development (TAD), and support for destination competitive strategy (DCS). Given these five constructs, four observed indicators loaded onto TDI; six observed indicators loaded onto EA, four observed indicators loaded onto PA, four observed indicators loaded onto TAD, and three observed indicators loaded onto DCS.

In order to estimate the overall measurement model, this study utilized two split samples instead of using an entire sample ($\underline{N}$ = 646) for CFA. The idea of this application is to address the question of whether the hypothesized model in one sample replicates a second independent sample from the same population so that the cross-validation of estimated parameters and relationships with the constructs can be assessed. It also can be tested to see whether the estimated parameters and relationships with the constructs are meaningful and equivalent, given a specified sample size across two sets of samples.

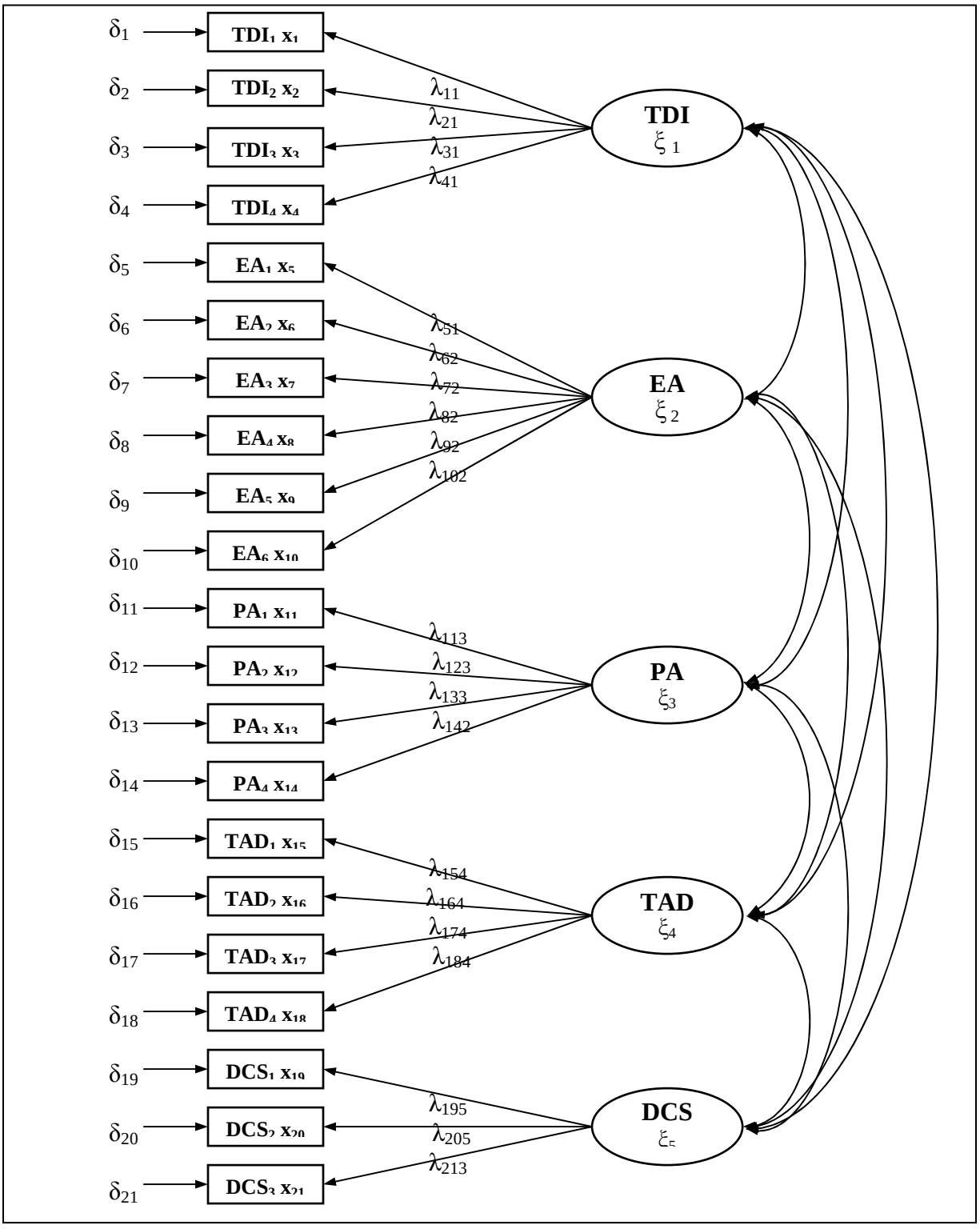


Figure 4.2 Overall Hypothesized Measurement Model of Five Constructs

Table 4.18

Five Constructs and 21 Observed Indicators for the Overall Measurement Model

Constructs & Indicators
Tourism Development Impacts (TDI)
TDI_1: Tourism has created jobs and attracted investment to the community.
TDI_2: Our standard of living has increased considerably because of tourism.
TDI_3: Tourism has given economic benefits to local people and businesses.
TDI_4: Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.
Environmental Attitudes (EA)
EA_1: We are approaching the limit of the number of people the earth can support
EA_2: Humans have the right to modify the natural environment to suit their needs
EA_3: Mankind is severely abusing the environment.
EA_4: The so-called "ecological crisis" facing humanity has been greatly exaggerated
EA_5: The balance of nature is very delicate and easily upset.
EA_6: If things continue on their present course, we will soon experience a major ecological catastrophe.
Place Attachment (PA)
PA_1: I am very attached to my community.
PA_2: I identify strongly with my community.
PA_3: This community means a lot to me.
PA_4: No other place can compare to the community.
Tourism Attraction Development (TAD)
TAD_1: Supporting visitor services. (e.g. hotels, restaurants, entertainment, etc)
TAD_2: Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds)
TAD_3: Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)
TAD_4: Information for tourists.
Support for Destination Competitive Strategy (DCS)
DCS_1: Sustainable Management & Practices
DCS_2: Marketing Efforts & Activities
DCS_3: Destination Management Organizations' Roles

Note: EA 2,4 and 6 were reverse-coded

In applying SEM, numerous approaches of cross-validation studies have been made, depending upon the objective of the studies (Anderson & Gerbing, 1998; Byrne, 1998). The split sample approach is commonly used to validate results, given that the sample size is sufficient. Since the sample size for this study is quite sufficient ($N = 646$) to split into two sub-samples to meet the basic requirement in sample size for SEM, this study used the split sample method for validating the results.

Consequently, this study tested the model replication of the overall measurement model with 5 constructs and 21 observed indicators across the first subsample ($n = 322$), and the second subsampe ($n = 324$). The first subsample can be called a calibration sample, and the second subsample can be used as a validation sample (Byrne,1998; Shumacker & Lomax, 1996). These two split samples were randomly chosen from the entire collected sample. Accordingly, the overall measurement model was tested to see whether the results from the validation sample replicated the results from the calibration sample in terms of the estimated parameters and relationships with the constructs. The final best-fitting model obtained from CFA for the calibration sample was tested to see whether the hypothesized model fit the validation sample very well without any major changes of parameter estimation.

CFA of Overall Measurement Model with the Calibration Sample

With the calibration sample ($n = 322$, 49.8% of the collected sample), the overall measurement model with 5 constructs and 21 observed indicators was tested by CFA. This method was used to estimate the hypothesized model fit and adequately describe the calibration data.

An initial estimation of the measurement model did not produce acceptable levels of model fit, having a Chi-square value of 313.27 with 179 degrees of freedom ($p < .01$). Some of goodness-of-fit indices also revealed that the initial hypothesized model did not fit the data very well, showing GFI (.91), AGFI (.89), and RMSEA (.05). These results also indicated that the initial hypothesized model was not reliable and valid. The modification indices suggested that more valid and reliable results of the overall measurement model could be obtained by re-specifying the measurement model.

Based on an examination of modification indices, the indicators highly correlated with other indicators or constructs were eliminated and a total of six indicators were deleted; two indicators (TDI2 and TDI3) from tourism development impacts, two indicators from environmental attitudes (EA2 and EA5), one indicator from tourism attraction development (TAD1), and one indicator from support for destination competitive strategy (DCS1). Consequently, the re-specified overall measurement model with five constructs and 15 observed indicators was estimated by CFA.

In an assessment of model fit, the appropriateness of parameter estimates, the individual measurement models, and the measurement model as a whole should be evaluated to estimate a well-fitting model. Specifically, in an estimation of the fit of individual parameters, the feasibility of the parameters estimates, the appropriateness of the standard errors, and the statistical significance of the parameter estimates should be examined (Byrne, 1998).

First of all, since the viability of individual estimated values should be determined at an initial stage in assessing the fit of individual parameters in a model, estimated parameters were examined in terms of not only the correct sign and size, but also as to their consistency with the underlying theory. Subsequently, unreasonable estimates having correlation values of greater than 1 and negative variances were not found in the results of CFA for the re-specified model.

As shown in Table 4.19, which contains the estimates, standard errors, and t-values for each observed indicator, all of the estimated parameters of the t-values exceeded a recommended level of t-value for $\pm$ 1,96 at a significant level of 0.05. The examination of unstandardized solutions and the standard error showed that all of the estimated parameters were reasonably and statistically significant. As a result, it can be suggested that all of these estimated parameters are important to the hypothesized model.

As the second step in the estimation of parameters, the squared multiple correlations (R^2) were examined to see whether the hypothesized measurement model appropriately represented the observed indicators (Byrne, 1998; Kline, 1998). These correlations were also assessed to determine the indicator and construct reliability. As presented in Table 4.20, the squared multiple correlations ranged from .27 to 90.

Table 4.19
Parameter Estimates for Overall Measurement Model (Calibration Sample=322)

Lamda – X		TDI	EA	PA	TAD	DCS
	Estimates	0.65				
TDI1	Standard Error	(0.07)				
	T-value	9.02				
	Estimates	0.53				
TDI4	Standard Error	(0.06)				
	T-value	8.54				
	Estimates		0.85			
EA1	Standard Error		(0.06)			
	T-value		13.39			
	Estimates		0.69			
EA3	Standard Error		(0.06)			
	T-value		11.55			
	Estimates		0.76			
EA4	Standard Error		(0.06)			
	T-value		12.83			
	Estimates		0.86			
EA6	Standard Error		(0.06)			
	T-value		15.28			
	Estimates			0.77		
PA1	Standard Error			(0.04)		
	T-value			19.91		
	Estimates			0.89		
PA2	Standard Error			(0.04)		
	T-value			22.44		
	Estimates			0.75		
PA3	Standard Error			(0.04)		
	T-value			19.92		
	Estimates			0.63		
PA4	Standard Error			(0.06)		
	T-value			11.02		
	Estimates				0.52	
TA2	Standard Error				(0.04)	
	T-value				13.68	
	Estimates				0.50	
TA3	Standard Error				(0.04)	
	T-value				12.03	
	Estimates				0.45	
TA4	Standard Error				(0.04)	
	T-value				11.21	
	Estimates					0.51
DCS2	Standard Error					(0.05)
	T-value					10.95
	Estimates					0.42
DCS3	Standard Error					(0.05)
	T-value					7.92

Table 4.20

Results of CFA for Overall Measurement Model (Calibration Sample = 322)

Constructs	Indicators	Completely Standardized Loadings	Indicator Reliability	Error Variance	Construct Reliability	Extracted Variance
TDI	TDI1	.75	.56	.44	.67	.50
	TDI4	.67	.45	.55		
EA	EA1	.72	.52	.48	.80	.50
	EA3	.64	.41	.59		
	EA4	.69	.48	.52		
	EA6	.80	.64	.36		
PA	PA1	.88	.78	.22	.91	.71
	PA2	.95	.90	.10		
	PA3	.99	.78	.22		
	PA4	.58	.33	.67		
TAD	TA2	.76	.58	.42	.74	.48
	TA3	.68	.46	.54		
	TA4	.64	.41	.59		
DCS	DCS2	.87	.76	.24	.67	.51
	DCS3	.52	.27	.73		

TDI = Tourism Development Impacts

TDI_1 = Tourism has created jobs and attracted investment to the community.

TDI_4 = Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.

EA = Environmental Attitudes

EA_1 = We are approaching the limit of the number of people the earth can support

EA_3 = Mankind is severely abusing the environment.

EA_4 = The so-called "ecological crisis" facing humanity has been greatly exaggerated

EA_6 = If things continue on their present course, we will soon experience a major ecological catastrophe.

PA = Place Attachment

PA_1 = I am very attached to my community.

PA_2 = I identify strongly with my community.

PA_3 = This community means a lot to me.

PA_4 = No other place can compare to this community.

TAD = Tourism Attraction Development

TAD_2 = Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds)

TAD_3 = Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)

TAD_4 =Information for tourists.

DCS = Support for Destination Competitive Strategy

DCS_2 = Marketing Efforts & Activities

DCS_3 = Destination Management Organizations' Roles

Additionally, the composite reliability of this measurement construct resulted in TDI (.67), EA (.80), PA (.91), TAD (.74), and DCS (.67). TDI and DCS fall somewhat short of composite reliability at the recommended threshold level of .70 (Hair et al., 1998, p. 642). These results could be due to a number of indicators used to measure the constructs. However, since the sample size for this study was sufficient enough to estimate the hypothesized model, having a slightly smaller value than indicated for composite reliability would not affect the construct correlations for the hypotheses tests.

Further, the completely standardized factor loadings were evaluated and resulted in a range between .52 and .95. These completely standardized loadings were used to determine the relative importance of the observed variables as indicators of the constructs. Lastly, the extracted variances that represent the overall amount of variance in the indicators accounted for by the latent constructs and values were calculated and showed TDI (.50), EA (.50), PA (.71), TAD (.48), and DCS (.51), which exceed a recommended level of .50 except for the TAD (Hair, Anderson, Tatham, & Black, 1998).

Having estimated the parameters of the measurement model, the hypothesized model as a whole was examined by using three types of fit indices: absolute fit indices, incremental fit indices, and parsimonious fit indices. The results of the goodness-of-fit statistics with the calibration sample ($\underline{n}$ = 322) were reported in Table 4.21.

First of all, the absolute fit index is to directly measure how well an priori model reproduces the collected sample data. In other words, it is used to assess how closely the model compares to a perfect fit (Bollen, 1989; Hu & Bentler, 1995; Maruyama, 1998). These indices include Chi-square (χ^2) of the estimated model, Goodness-of-fit index (GFI), Root mean square residual (RMR), and Root mean square error of approximation (RMSEA). The Chi-square (χ^2) of the estimated model was examined to test the closeness of fit between the unrestricted sample covariance matrix and the restricted covariance matrix. The Chi-square (χ^2) value of 88.14 with 80 degrees of freedom was not statistically significant at $\underline{p}$ = .25, thereby suggesting that the hypothesized overall measurement model with five constructs and 15 indicators was appropriate and should be accepted at this statistical level.

Table 4.21

Goodness-of-fit Indices for the Overall Measurement Model (Calibration Sample =322)

Measures	Goodness-of-Fit Statistics
Absolute Fit Indices	
Chi-square (χ^2) of the estimated model	88.14 with 80 df (p = .25)
Goodness-of-fit index (GFI)	.96
Root mean square residual (RMR)	.03
Root mean square error of approximation (RMSEA)	.02
Incremental Fit Indices	
Adjusted goodness-of-fit index (AGFI)	.95
Non-normed fit index (NNFI)	.99
Normed fit index (NFI)	.95
Parsimonious Fit Indices	
Parsimony goodness-of-fit index(PGFI)	.64
Parsimony normed fit index (PNFI)	.73
Comparative fit index (CFI)	1.00
Incremental fit index (IFI)	1.00
Relative fit index (RFI)	.94

The goodness-of-fit index (GFI) that was used for comparing the hypothesized model with no model at all yielded a value of .96. This index takes a value from zero to 1.00, with values to close to 1.00 being indicative of a good fit (Byrne, 1998; Hu & Bentler, 1995). Thus, the result of the GFI for this study produced an acceptable level.

Next, the value of the root mean square residual (RMR) was .03. Since this index was used to estimate the average residual value derived from the fitting of the variance-covariance matrix for the hypothesized model (five constructs with 15 indicators) to the variance-covariance matrix of the sample data, the smaller value is the better fitting model. In other words, this value indicates the average value across all standardized residuals ranging from zero to 1.00. In order to have a well-fitting model, this value should be less than .05. Accordingly, the RMR value of .03 represented the correlations to within an average error of .03, which was acceptable as a well fitting hypothesized model for this study.

Lastly, the root mean square error of approximation (RMSEA) represents an index to quantify model misfit, suggesting that a value of less than .05 indicates a good fit, and values greater than .08 indicates reasonable errors of approximation in the population (Hu & Bentler, 1995). The value of RMSEA for this hypothesized measurement was .02, which falls inside the acceptable level. Additionally, this value also yielded a 90% confidence interval ranging from .00 to .037, and the p-value for the test of closeness-of-fit equaled 1.00. Subsequently, the value of RMSEA of .02 that fell within the bounds of .00 and .037 represented a good degree of precision.

Overall, based on the examination of the absolute fit statistical indices, the hypothesized model represented a well-fitting model to the data, in that the hypothesized model fit the data for the calibration sample fairly well. Consequently, it can be suggested that further analysis such as structural equation modeling was possible and valid.

For the second estimated goodness-of-fit statistics, the incremental fit indices were examined. These incremental fit indices were used to evaluate the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model (Hu & Bentler, 1995). This includes the adjusted goodness-of-fit index (AGFI), the non-normed fit index (NNFI), and the normed fit index (NFI).

The adjusted goodness-of-fit index (AGFI) may be considered an absolute goodness-of-fit index (Byrne, 1998; Hu & Bentler, 1995). This index is similar to GFI, but is also somewhat different in that it is adjusted for the number of degrees of freedom in the specified model. Since the value of AGFI was .95,which exceeded a recommended level of .90, the hypothesized model fit the calibration sample fairly well.

The NNFI takes the complexity of the model into account in the comparison of the hypothesized model with the independent model. This index is similar to TLI (Tucker and Lewis' index) that was developed to quantify the degree to which a particular exploratory factor model is an improvement over a zero factor model when assessing maximum likelihood (Hu & Bentler, 1995). Since a value greater than .95 is an acceptable level for well fitting data, the value of NNFI of .99 was accepted, suggesting that the hypothesized model fit the data well.

The NFI represents the proportion of total covariance among observed variables explained by a target model when using the null model as a baseline model (Hu &

Bentler, 1995). The values of NFI range from zero to 1.00. A value of NFI having a greater than .95 is acceptable for indicating a well-fitting model. The value of NFI was .95, suggesting that the model fit the data fairly well. Overall, the hypothesized model successfully represented an adequate fit to the data.

Finally, the parsimonious fit indices provide information about a comparison between models of differing complexity and objectives by evaluating the fit of the model versus the number of estimated coefficients needed to achieve that level of fit. These indices include the parsimony goodness-of-fit index (PGFI), the parsimony normed fit index (PNFI), the comparative fit index (CFI), the incremental fit index (IFI), and the relative fit index (RFI).

The parsimony goodness-of-fit index (PGFI) is related to the issue of the parsimony of the model and takes into account the complexity of the hypothesized model in the assessment of overall model fit (Byrne, 1998). The value varies between zero and 1.00, with higher values indicating greater model parsimony. Accordingly, as shown in Table 4.21, the value of the PGFI was .64, suggesting that the hypothesized model fit the data parsimoniously. The parsimony normed fit index (PNFI) explains the complexity of the model in its assessment of goodness-of-fit. Basically this index is used for the comparison of models with differing degrees of freedom. A higher value of the PNFI indicates a better model fit. The value of the PNFI for this study was .73, which was an acceptable value for a well-fitting model.

The incremental fit index (IFI) presents the issues of parsimony and sample size that is associated with NFI, which is used to compare a restricted model with a full model using a baseline null model. The value of the comparative fit index (CFI) measures the improvement in non-centrality by going from the least restrictive model to the most saturated model. The values of the CFI range from zero to 1.00. The relative fit index (RFI) is equivalent to CFI. The higher value of IFI, CFI, and RFI indicate a better model fit to the data. As shown in Table 4.23, the value of IFI, CFI, and RFI was 1.00, 1.00 and .94 respectively, suggesting that these values were sufficient to support a well-fitting model to the data.

As a result, the review of the three types of goodness-of-fit indices for the overall measurement model (the calibration sample) revealed that the consistent patterns of

values of fit indices indicated that the model was well-fitted to the data, meaning that the hypothesized model was reliable and valid in representing the calibration sample. In addition to these multiple criteria, the examination of the theoretical and practical aspects of the hypothesized model with 5 constructs and 15 observed indicators supported the assessment that this hypothesized model was adequate in describing the collected data.

CFA of the Overall Measurement Model with the Validation Sample

The major purpose of this section is to address the question of whether the overall measurement model that has been re-specified in the calibration sample replicates a validation sample. Accordingly, the overall measurement model with 5 constructs and 15 observed indicators that has been hypothesized as a well-fitting model by
CFA for the calibration sample data was examined to see whether it adequately described the validation sample (n = 324, 50.2% of a total sample).

As a result, an initial estimation of the measurement model for the validation data described a well-fitting model to the data without any change within the re-specified estimated parameters. As presented in Table 4.22, all of the estimated parameters of the t-value exceeded a recommended level of $\pm$ 1,96 at a significant level of 0.05. The examination of unstandardized solutions and the standard errors showed that all of the estimated parameters were reasonably and statistically significant.

Additionally, the squared multiple correlations (R^2) that examined whether the hypothesized measurement model appropriately represented the observed indicators yielded between .39 and .90. The composite reliability of the constructs resulted in TDI (.64), EA (.81), PA (.90), TAD (.74), and DCS (.77), and the completely standardized factor loadings resulted in a range between .55 and .95. Lastly, the extracted variances that represent the overall amount of variance in the indicators accounted for by the latent construct were calculated and showed TDI (.47), EA (.52), PA (.66), TAD (.49), and DCS (.64), which exceeded a recommended level of .50, except TAD. These results confirmed that all estimated parameters showed similar patterns to the results of the calibration sample in terms of the number of indicators, and the estimated coefficients of the parameters.

Table 4.22
Parameter Estimates for the Overall Measurement Model(Validation Sample = 324)

Lamda - X		TDI	EA	PA	TAD	DCS
	Estimates	0.56				
TDI1	Standard Error	(0.07)				
	T-value	9.60				
	Estimates	0.61				
TDI4	Standard Error	(0.06)				
	T-value	10.83				
	Estimates		0.72			
EA1	Standard Error		(0.06)			
	T-value		11.45			
	Estimates		0.81			
EA3	Standard Error		(0.06)			
	T-value		12.64			
	Estimates		0.85			
EA4	Standard Error		(0.06)			
	T-value		14.03			
	Estimates		0.89			
EA6	Standard Error		(0.06)			
	T-value		15.24			
	Estimates			0.89		
PA1	Standard Error			(0.04)		
	T-value			20.87		
	Estimates			0.91		
PA2	Standard Error			(0.04)		
	T-value			22.56		
	Estimates			0.82		
PA3	Standard Error			(0.04)		
	T-value			20.18		
	Estimates			0.65		
PA4	Standard Error			(0.06)		
	T-value			10.43		
	Estimates				0.58	
TA2	Standard Error				(0.04)	
	T-value				13.99	
	Estimates				0.44	
TA3	Standard Error				(0.04)	
	T-value				10.51	
	Estimates				0.51	
TA4	Standard Error				(0.04)	
	T-value				11.95	
	Estimates					0.56
DCS2	Standard Error					(0.05)
	T-value					14.25
	Estimates					0.51
DCS3	Standard Error					(0.05)
	T-value					10.75

Table 4.23
Results of CFA for the Overall Measurement Model (Validation Sample, n = 324)

Constructs	Indicators	Completely Standardized Loadings	Indicator Reliability	Error Variance	Construct Reliability	Extracted Variance
TDI	TDI1	.62	.39	.61	.64	.47
	TDI4	.74	.55	.45		
EA	EA1	.63	.40	.60	.81	.52
	EA3	.68	.47	.53		
	EA4	.74	.55	.45		
	EA6	.80	.63	.37		
PA	PA1	.91	.82	.18	.90	.66
	PA2	.95	.90	.10		
	PA3	.89	.79	.21		
	PA4	.55	.30	.70		
TAD	TA2	.79	.63	.37	.74	.49
	TA3	.61	.37	.63		
	TA4	.68	.46	.54		
DCS	DCS2	.92	.86	.14	.77	.64
	DCS3	.65	.42	.58		

TDI = Tourism Development Impacts
TDI_1 = Tourism has created jobs and attracted investment to the community.
TDI_4 = Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.

EA = Environmental Attitudes
EA_1 = We are approaching the limit of the number of people the earth can support
EA_3 = Mankind is severely abusing the environment.
EA_4 = The so-called "ecological crisis" facing humanity has been greatly exaggerated
EA_6 = If things continue on their present course, we will soon experience a major ecological catastrophe.

PA = Place Attachment
PA_1 = I am very attached to my community.
PA_2 = I identify strongly with my community.
PA_3 = This community means a lot to me.
PA_4 = No other place can compare to the community.

TAD = Tourism Attraction Development
TAD_2 = Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds)
TAD_3 = Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)
TAD_4 =Information for tourists.

DCS = Support for Destination Competitive Strategy
DCS_2 = Marketing Efforts & Activities
DCS_3 = Destination Management Organizations' Roles

The evaluation of goodness-of-fit statistics for the validation sample was done by three types of fit indices: absolute fit indices, incremental fit indices, and parsimonious fit indices (Hair, et al, 1998). As shown in Table 4.24, all of the fit indices yielded acceptable levels of a well-fitting model to the data.

For example, the absolute fit index that directly measures how well an a priori model reproduces the collected sample data showed that the Chi-square (χ^2) of the estimated model is 92.66, with 80 degrees of freedom (p = .16). The goodness-of-fit index (GFI) is .96; the root mean square residual (RMR) is .03; and the root mean square error of approximation (RMSEA) is .02. The incremental fit indices that evaluated the proportionate improvement in fit by comparing a target model with a more restricted, nested base line model produced an adjusted goodness-of-fit index (AGFI) of .94, a non-normed fit index (NNFI) of .99, and a normed fit index (NFI) of .95.

Table 4.24

Goodness-of-fit Indices for the Overall Measurement Model (Validation Sample, n=324)

Measures	Goodness-of-Fit Statistics
Absolute Fit Indices	
Chi-square (χ^2) of the estimated model	92.66 with 80 df (p = .16)
Goodness-of-fit index (GFI)	.96
Root mean square residual (RMR)	.03
Root mean square error of approximation (RMSEA)	.02
Incremental Fit Indices	
Adjusted goodness-of-fit index (AGFI)	.94
Non-normed fit index (NNFI)	.99
Normed fit index (NFI)	.95
Parsimonious Fit Indices	
Parsimony goodness-of-fit index(PGFI)	.64
Parsimony normed fit index (PNFI)	.73
Comparative fit index (CFI)	.99
Incremental fit index (IFI)	.99
Relative fit index (RFI)	.94

Finally, the parsimonious fit indices provided information for comparison between models of differing complexity and objectives by evaluating the fit of the model versus the number of estimated coefficients needed to achieve that level of fit. For example, the parsimony goodness-of-fit index (PGFI) was .64, the parsimony normed fit index (PNFI) was.73, the comparative fit index (CFI) was .99, the incremental fit index (IFI) was .99, and the relative fit index (RFI) was .94.

As a result, the review of the three types of the overall measurement model with the validation sample revealed that the consistent patterns of values of fit indices supported that the model fit the data well, meaning that the re-specified hypothesized model from the calibration sample was reliable and valid in representing the validation sample.

In addition to these multiple criteria of model fit indices, the examination of the theoretical and practical aspects of the hypothesized model with five constructs and 15 observed indicators supported that the assessment of this hypothesized model was adequate in describing the split data in both the calibration sample and the validation sample. Accordingly, further analysis such as full structural equation modeling for the hypotheses tests was possible and reliable.

Convergent and Discriminant Validity

Convergent and discriminant validity can both be considered as subcategories of construct validity (Kline, 1998; Zikmund, 1997). In construct validity, the empirical evidence is consistent with the theoretical logic about the concepts. Convergent validity refers to the confirmation of the measurement of a construct by the use of multiple methods. A measure has convergent validity when it is highly correlated with different measures of similar constructs. Discriminant validity refers to the ability of some measures to have a low correlation with measures of dissimilar concepts. Simply, it is related to the distinctiveness of constructs. The correlations between two scales for two distinct constructs should not be high for discriminant validity. In applying this concept, the observed indicators used to measure the different constructs in models should provide different results.

Particularly, in terms of the convergent validity, if the indicators specified to measure a common underlying factor have relatively high loadings on that factor, convergent validity is achieved (Anderson & Gerbing, 1988; Byrne, 1998; Kline, 1998). These high loadings imply that strong correlations on the posited underlying construct are achieved and the measurement scales are measuring what they are intended to measure (Hather, 1994; Kline, 1998).

In a study of structural equation modeling, the standardized factor loading can be examined to evaluate the convergent validity with an associated t-value from the results of CFA. As seen in Table 4.19 (calibration sample) and 4.22 (validation sample), the estimated coefficient standardized of the factor loadings on their posited underlying construct yielded statistically significant results at the level of .05. Each observed indicator exceeded the recommended level of t-value ($\pm$1.96). Fifteen indicators of standardized factor loadings ranged from .52 to .99. Therefore, it can be concluded that the measurement scale achieved convergent validity of the constructs.

For discriminant validity, this study used the procedures suggested by Anderson and Gerbing (1988), to be sure that the constructs are not measuring the same concept or idea. Accordingly, taking one pair of two constructs at a time, the results of the unconstrained CFA were compared with the results of a constrained model. The unconstrained CFA model was allowed to covary freely, while the constrained model fixed to the factor covariance to zero, meaning that there was no correlation between two constructs (Byrne, 1998).

In other words, discriminant validity can be examined by constraining the estimated correlation parameter between each pair of constructs to 0.0 (the fixed model). This implies that the correlation parameter is given as 0.0 to indicate that the two constructs are uncorrelated. The unconstrained model (the free model) indicates that the correlation between factors was estimated. A Chi-square difference test between the constrained model and unconstrained model was performed. A significant Chi-square difference between the models provided evidence of discriminant validity between the pair of the constructs being tested (Anderson & Gerbing, 1988; Bagozzi, 1980, p.142).

Additionally, a significantly lower Chi-square value for the unconstrained model indicates that discriminant validity is achieved (Bagozzi & Phillips, 1982) and the

goodness-of-fit statistics are improved in the unconstrained model when discriminant validity is achieved (Klein, Ettenson, & Morris, 1998).

The summary of Chi-square difference tests between the constrained model and the unconstrained model on each pair of constructs is presented in Table 4.25. The Chi-square differences ranged from 34.83 to 487.37. Since the critical value of the Chi-square test is 9.21 at the alpha value of .01, all of the estimated Chi-square difference values were clearly significant. In addition, when the correlation between the constructs was unconstrained, the models improved in terms of the Chi-square value, GFI, AGFI, RMSEA, and CFI. Accordingly, this evidence can confirm that not all of the constructs are correlated perfectly.

Table 4.25

Results of Discriminant Validity Tests with the Calibration Sample (n=322)

Constructs	Correlation	Constrained Model (Fixed)		Unconstrained Model (Free)		$\Delta\chi^2$	Δdf	P -value
		χ^2	df	χ^2	df			
TDI – EA	-.05	82.69	9	1.85	8	80.84	1	< .001
TDI – PA	.34	78.46	9	6.97	8	71.49	1	< .001
TDI – TA	.34	75.82	5	4.41	4	71.41	1	< .001
TDI –DCS	.27	60.00	2	0.03	1	59.97	1	< .001
EA – PA	-0.07	509.67	20	22.30	19	487.37	1	< .001
EA – TA	.05	234.20	14	13.37	13	220.83	1	< .001
EA – DCS	.04	69.34	9	3.61	8	65.73	1	< .001
PA – TA	.21	226.98	14	12.48	13	214.5	1	< .001
PA – DCS	.22	70.02	9	7.93	8	62.09	1	< .001
TA – DCS	.63	35.62	5	.79	4	34.83	1	< .001

Note: TDI = Tourism Development Impacts, EA = Environmental Attitude
PA = Place Attachment, TA = Tourism Attraction Development, and DCS = Support for Destination Competitive Strategy

Structural Equation Modeling (SEM)

This study adopted structural equation modeling (SEM) in testing the hypotheses because SEM has been applied in testing hypotheses about relationships among observed latent variables (Hoyle, 1995b). Particularly, SEM has been considered as a way of testing a specified theory about relationships between theoretical constructs (Jöreskog, 1995).

More specifically, the structural equation model is used to test a hypothetical model that prescribes relationships between latent constructs and observed variables that are indicators of latent constructs. The relationships between the constructs can be identified by providing path coefficients (parameter values) for each of the research hypotheses. Each estimated path coefficient can be tested for its respective statistical significance for the hypotheses' relationships, while including standard errors and calculated t-values (Bollen, 1989a; Byrne, 1998; Hair et al., 1998; Loehlin, 1992).

Initial Theoretical Structural Model

The primary objectives of this study were to develop a theoretical model of tourism destination competitiveness and to empirically test the interplay of relationships among the following constructs: 1) perceived tourism impacts, 2) environmental attitudes, 3) place attachment, 4) development preferences about destination attractions/resources, and 5) support of enhancement strategies for destination competitiveness.

In testing the proposed hypotheses for this study, an initial theoretical structural model was examined with three exogenous constructs and two endogenous constructs, as presented in Figure 4.3. The properties of the five research constructs are as follows: three exogenous – tourism development impacts (TDI), environmental attitudes (EA), and place attachment (PA); and two endogenous – tourism attraction development (TA) and support for destination competitive strategy (DCS). A total of 15 observed indicators (10 for exogenous constructs and 5 for endogenous constructs) were used to measure these five research constructs.

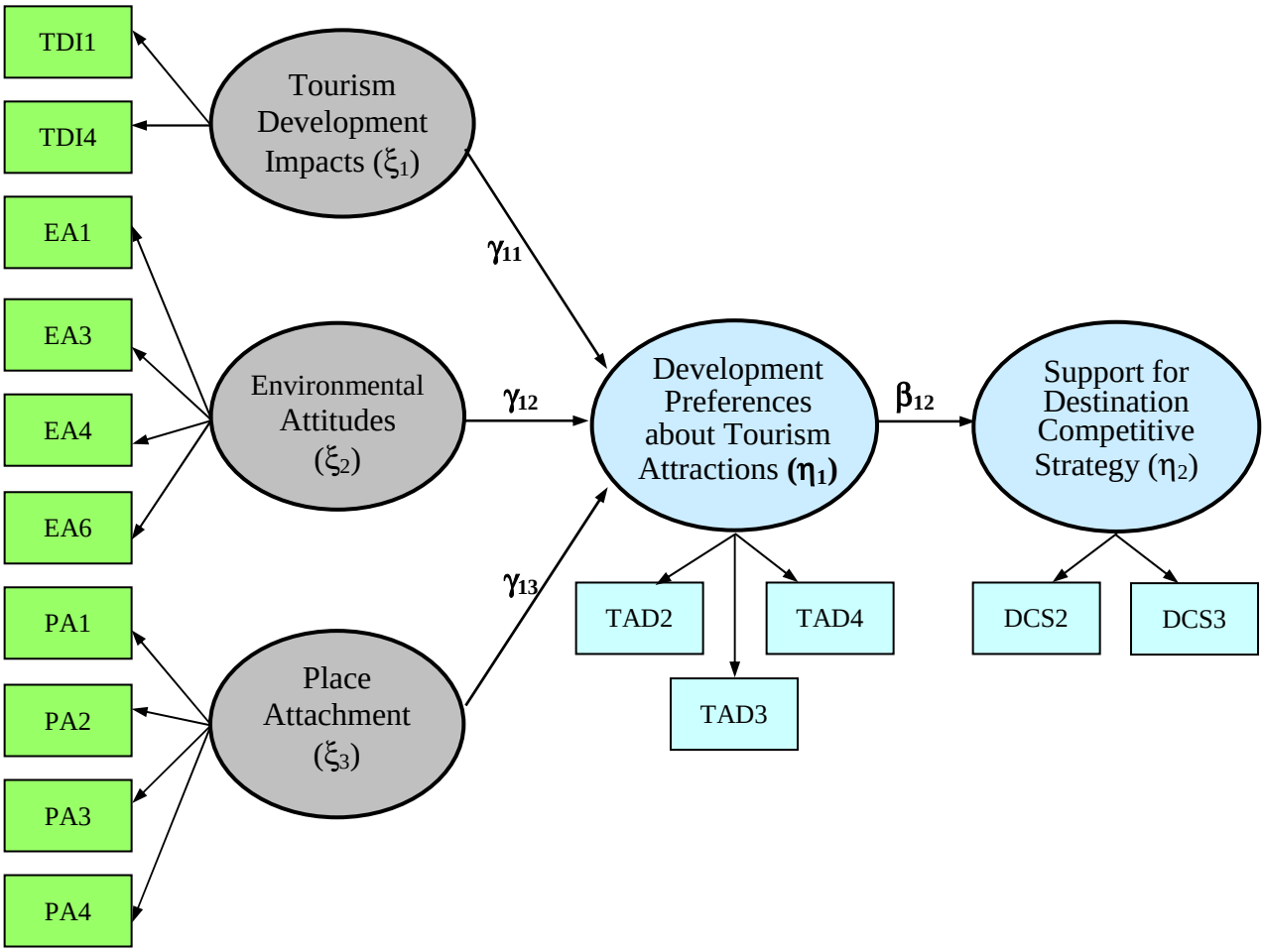


Figure 4.3 Initial Theoretical Structural Model

TDI1 = Tourism has created jobs and attracted investment to the community.
TDI4 = Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.
EA1 = We are approaching the limit of the number of people the earth can support
EA3 = Mankind is severely abusing the environment.
EA4 = The so-called "ecological crisis" facing humanity has been greatly exaggerated
EA6 = If things continue on their present course, we will soon experience a major ecological catastrophe.
PA1 = I am very attached to my community.
PA2 = I identify strongly with my community.
PA3 = This community means a lot to me.
PA4 = No other place can compare to the community.
TAD2 = Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds)
TAD3 = Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)
TAD4 = Information for tourists.
DCS2 = Marketing efforts & activities
DCS3 = Destination management organizations' roles

Since the primary interest in SEM for testing hypotheses is to examine the relationships between/among the exogenous and endogenous constructs, the relationship can be specified by two types of matrices: a Gamma matrix (γ), and a Beta matrix (β) (Bollen, 1989; Byrne, 1998; Mueller, 1996). The Gamma matrix represents the regression coefficients that link the exogenous constructs and the endogenous constructs, while the Beta matrix specifies the regression coefficients that link the endogenous constructs. Accordingly, this study comprised three Gamma parameters to be estimated and one Beta parameters to be estimated. Each of parameters to be estimated represents one of the proposed research hypotheses in this study.

For example, γ_{11} defines hypothesis 1 (There is a positive relationship between tourism stakeholders' perceptions of the benefits of tourism impacts and development preferences about tourism attractions/resources), and β_{12} represents hypothesis 4 (There is a positive relationship between tourism stakeholders' preferences about tourism attractions/ resources development and support for the enhancement strategies of destination competitiveness). Consequently, the initial structural equation model with three Gamma paths and one Beta path was tested using the LISREL program for structural equation modeling (SEM). Unlike the analysis of the overall measurement model (the calibration and validation samples), the entire sample ($\underline{N}$=646) was included to examine this initial theoretical structural model.

The review of the initial theoretical structural model revealed that the Chi-square value was 180.46 with 83 degrees of freedom ($\underline{p} < .001$). This result indicated that the initial theoretical model was not acceptable as a well-fitting model to the data. This indicated that the proposed initial model was underestimated and could be improved. However, given the known sensitivity of the Chi-square test to the sample size (Bollen & Long, 1993; Byrne, 1998), other goodness-of-fit indices have been suggested to help model evaluation (Bentler, 1990; Jöreskog & Sörbom, 1996a). Because the sample size for this study was 646 cases, the use of the Chi-square value provides little guidance in determining the extent to which the proposed model fits the data (Byrne, 1998). Review of goodness-of-fit statistics revealed that the initial theoretical model fit the data somewhat well (GFI = .96, AGFI = .95, CFI =.98, RMSEA = .043, PGFI = .67, and PNFI = .76). However, there was evidence of the misfit in the model.

Revised Structural Model

The review of the modification indices suggested that the initial theoretical model could be improved in order to represent a better model fit to the data. For example, the maximum modification index (MI) was 58.57 for theta-epsilon (TE) between TAD2 and TAD3 (TE - 1, 2), implying that these error variances were highly correlated and provided evidence of misfit in the model (see Figure 4.4). Since every correlated error covariance must be justified and interpreted substantially (Jöreskog, 1993), the correlated error variance between the indicator TAD2 (small independent businesses - e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds) and TAD3 (cultural and folk events - e.g. concerts, arts and crafts, dances, festivals) could be justified on the basis of studies done by Jurowski (1994) and Yoon, Gursoy, and Chen (2001). Both studies indicated that the respondents supported both small independent business and cultural folk events as tourism attractions, and these indicators successfully measured the construct of supporting tourism attraction development, which explained correlations between the indicators. Consequently, the covariance between these two indicators was reasonably acceptable.

After re-estimating the theoretical model with TE (1,2) specified as a free parameter, the Chi-square value dropped to 127.03 with 82 degrees of freedom ($p < .001$). Goodness-of-fit statistics were improved. However, the review of modification indices still revealed a misfit in the model and suggested that there was strong error-variance between TAD1 and TAD 3 (information for tourists), which was a value of 19.2 for TE (1.3). Again, according to the studies done by Jurowski (1994) and Yoon et al. (2001), the error covariance was reasonably acceptable. The indicators TAD3 and the indicator TAD4 measured the same construct of supporting tourism development, which was evidence of a correlation between these two items. Subsequently, the re-specified model with an error covariance between the indicator TAD3 and the indicator TAD4 freely estimated was evaluated to see whether the model fit the data well. The second re-specified model provided a Chi-square value of 107.93 with 81 degrees of freedom ($p = .024$), and other goodness-of-fit statistics reached quite satisfactory levels for a well-fitting model (GFI = .98, AGFI = .97, CFI =.99, and RMSEA = .023).

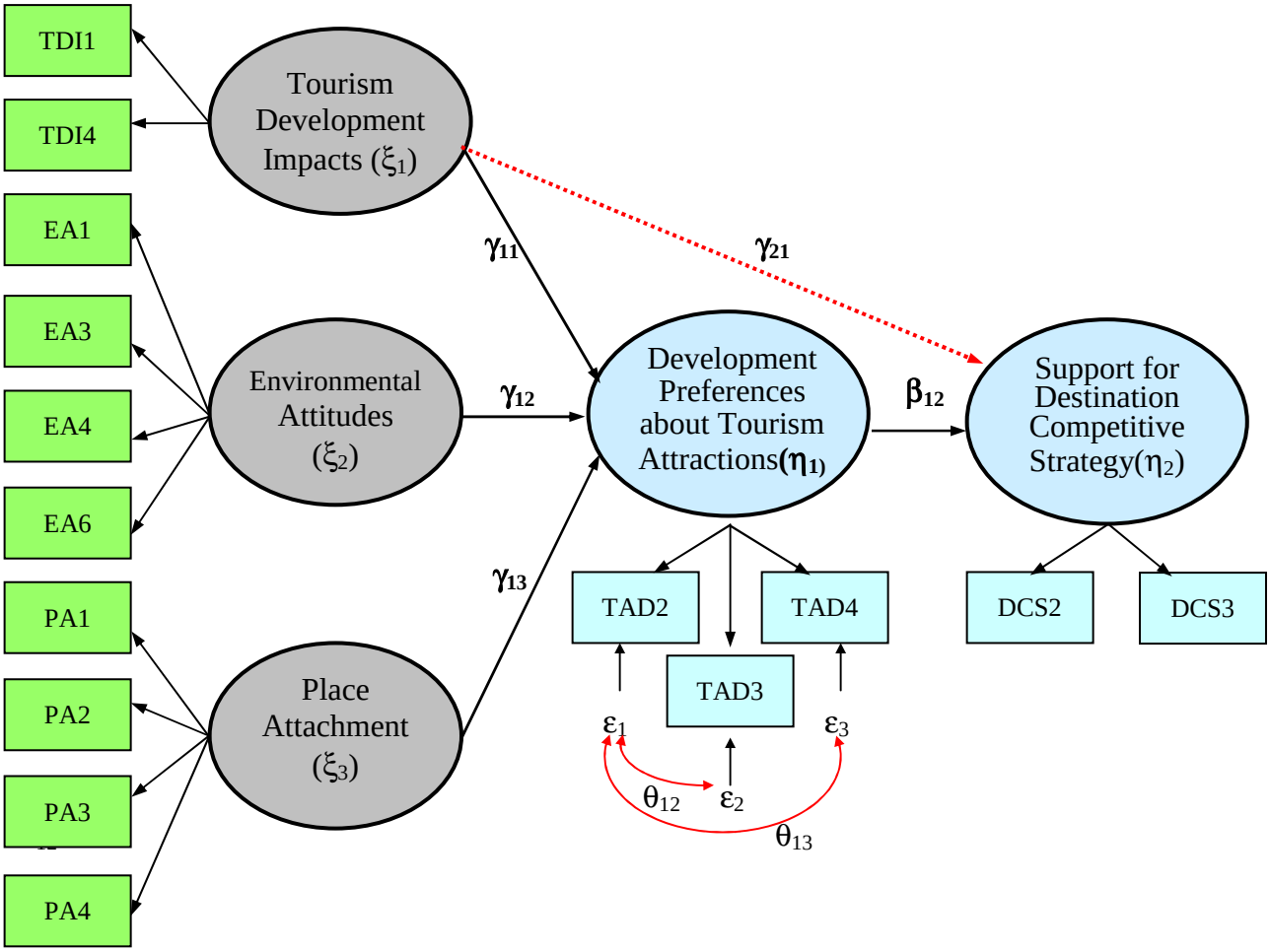


Figure 4.4 Revised Structural Model

TDI1 = Tourism has created jobs and attracted investment to the community.
TDI4 = Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.
EA1 = We are approaching the limit of the number of people the earth can support
EA3 = Mankind is severely abusing the environment.
EA4 = The so-called "ecological crisis" facing humanity has been greatly exaggerated
EA6 = If things continue on their present course, we will soon experience a major ecological catastrophe.
PA1 = I am very attached to my community.
PA2 = I identify strongly with my community.
PA3 = This community means a lot to me.
PA4 = No other place can compare to the community.
TAD2 = Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campground)
TAD3 = Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)
TAD4 = Information for tourists.
DCS2 = Marketing Efforts & Activities
DCS3 = Destination Management Organizations' Roles

Lastly, the examination of modification indices revealed that the model could have a better fit if a direct path was added from tourism development impacts (TDI) to support for destination competitive strategy (DCS) (Gamma 2, 1), which was not hypothesized to be tested in this study. The value of the modification index for Gamma (2.1) was 5.76, which was the highest modification index compared to other Gamma paths, including .09 for Gamma 2,2 and 1.49 for Gamma 2,3. It would be reasonable to assume that if respondents perceive more benefits from tourism development, they would be likely to support destination competitive strategies. As a result, it was reasonable to draw a path link between tourism development impacts and support for destination competitive strategy (Gamma, 2, 1). Consequently, given the meaningfulness of this influential flow, the final revised model was re-estimated with TE (1,2), TE (1,3), and GA (2,1) as free parameters.

The estimation of the final revised model yielded a Chi-square value of 101.97 with 80 degrees of freedom ($p < .05$), which was not statistically significant. Additionally, all of the goodness-of-fit statistics supported that the final revised model was a well-fitting model to the data and suggested that this model could be a final structural model to be tested for the proposed hypotheses in this study (GFI = .98, RMR = .026, RMSEA = .02, AGFI = .97, NNFI = .99, NFI = .98, PGFI = .65, CFI = .99, and IFI =.99). The summary of the revision processes and the associated goodness-of-fit statistics with added parameters was reported in Table 4.26.

Having assessed the final revised model, a post-hoc test by using sequential Chi-square tests was conducted to provide successive fit information (Anderson & Gerbing, 1988). As presented in Table 4.27, the Chi-square difference tests between the models (theoretical model and revised model 1; revised model 1 and revised model 2) showed that there were no statistical differences at the significance level of .01 (Chi-square critical value is 9.21). However, it was found that there was a statistically significant difference between the revised model 2 and the final model at the significance level of .01 (Chi-square value was 5.96 with 1 degree of freedom). In a case of no difference in the Chi-square test, the more parsimonious model should be selected (Hull, Lehn, & Tedlie, 1995). The final revised model should be the revised model 2 in this study

Table 4.26
Goodness-of-fit Measures for the Structural Equation Model (N= 646)

	Absolute Fit Measures				Incremental Fit Measures			Parsimonious Fit Measures			
	$\chi 2$	GFI	RMR	RMSEA	AGFI	NNFI	NFI	PGFI	PNFI	CFI	IFI
TM	180.46 df = 83 p = .00	.97	.029	.043	.96	.99	.97	.67	.76	.99	.99
R1	127.03 df = 82 p = .00	.97	.029	.029	.96	.99	.97	.67	.76	.99	.99
R2	107.93 df = 81 p = .02	.98	.027	.024	.97	.99	.98	.66	.75	.99	.99
R3	101.97 df = 80 p = .05	.98	.026	.021	.97	.99	.98	.65	.74	.99	.99

Note:
TM = Theoretical model
R1= Revised model with Theta-Epsilon (1,2)
R2 = Revised model with Theta-Epsilon (1,2) and Theta-Epsilon (1,3)
R3 = Final model with Theta-Epsilon (1,2), Theta-Epsilon (1,3), and Gamma (2,1)

χ^2 = Chi-square; GFI = goodness-of-fit index; RMR = root mean square residual; RMSEA = root mean square error of approximation; AGFI = adjusted goodness-of-fit; NNFI = non-normed fit index; NFI = normed fit index; PNFI = parsimonious normed fit index; CFI = comparative fit index; IFI = incremental fit index.

Table 4.27
Sequential Chi-square Testing for Model Comparison

Comparison Model	df Difference	χ^2 Difference	P
Theoretical Model vs. Revised Model 1	1	53.43	< .01
Revised Model 1 vs. Revised Model 2	1	19.10	< .01
Revised Model 2 vs. Final Revised Model	1	5.96	> .01

Furthermore, the review of the squared multiple correlations of the final revised model revealed that tourism development impacts, environmental attitudes, and place attachment explained 18% of the variance in the preferences about tourism attraction development. Meanwhile, 44% of the variance in support for destination competitive strategy was explained by the preferences in tourism attraction development. The final revised structural model was drawn in Figure 4.5. The t-values and completely standardized coefficients for each estimated parameter score were reported. The completely standardized coefficient directly explains the correlation between two constructs: 1) each of three exogenous and endogenous constructs (development preferences about tourism attractions and 2) two endogenous constructs. The t-value associated with each of the path coefficients exceeded the critical value of 1.96 at the significant level of .05 (Mueller, 1996). A more detailed discussion regarding the hypotheses testing will follow in the next section.

ANALYSIS OF HYPOTHESES TESTING

The results of structural equation analysis by LISREL were utilized to test the proposed hypotheses in this study. As discussed in the previous section, the relationships between the constructs were examined based on t-values associated with path coefficients between the constructs. If an estimated t-value is greater than a certain critical value ($\underline{p} < .05$, t-value = 1.96) (Mueller, 1996), the null hypothesis that the associated estimated parameter is equal to 0 was rejected. Subsequently, the hypothesized relationship was supported. The summary of the hypotheses testing is presented in Table 4.28.

In this study, a total of four hypotheses were proposed and tested by using structural equation modeling . The relationship between tourism development impacts and tourism attraction (Gamma γ_{11}) represented hypothesis 1, and the relationship between environmental attitudes and development preferences about tourism attractions (Gamma γ_{12}) explained hypothesis 2. The relationship between place attachment and development preferences about tourism attractions (Gamma γ_{13}) specified hypothesis 3. Lastly, the relationship between preferences about tourism attractions and support for destination competitive strategy (β_{21}) defined hypothesis 4.

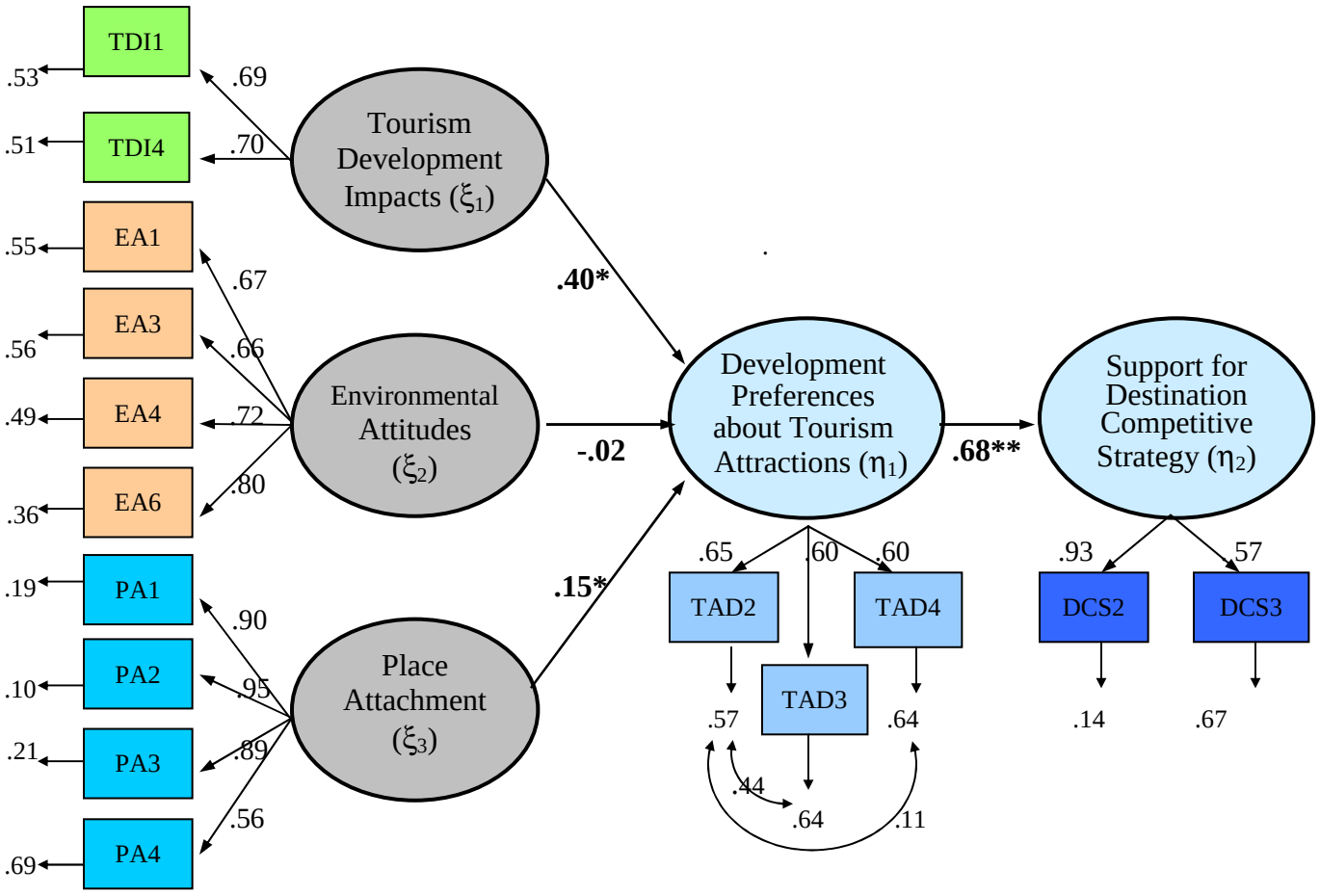


Figure 4.5 Final Revised Structural Equation Model for Destination Competitive Strategy

* = p <.05 ** = p < .01
TDI1 = Tourism has created jobs and attracted investment to the community.
TDI4 = Tourism has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community.
EA1 = We are approaching the limit of the number of people the earth can support
EA3 = Mankind is severely abusing the environment.
EA4 = The so-called "ecological crisis" facing humanity has been greatly exaggerated
EA6 = If things continue on their present course, we will soon experience a major ecological catastrophe.
PA1 = I am very attached to my community.
PA2 = I identify strongly with my community.
PA3 = This community means a lot to me.
PA4 = No other place can compare to this community.
TAD2 = Small independent businesses. (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds)
TAD3 = Cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals)
TAD4 = Information for tourists.
DCS2 = Marketing efforts & activities
DCS3 = Destination management organizations' roles

H1: There is a positive relationship between tourism stakeholders' perception of the benefits of tourism impacts and preferences about tourism attractions/resources development.

The result of SEM analysis indicated that the path from the construct of tourism development impacts and the construct of tourism attraction development was significant and positive (t-value = 5.53, $\underline{p} < .05$). This result supported that if tourism stakeholders positively perceive tourism development impacts, they would prefer to develop tourism attractions/resources.

Specifically, if tourism stakeholders more strongly agreed that tourism has created jobs, attracted investment, has encouraged a variety of cultural activities, and has resulted in more cultural exchange and identity to the community, they would support the development of small independent businesses (e.g. gift shops, prearranged attractive and flexible tour packages, guide services, and campgrounds), cultural and folk events. (e.g. concerts, arts and crafts, dances, festivals), and information for tourists.

In fact, this finding was consistent with the findings of previous studies. Researchers have demonstrated that if people receive benefits from tourism development such as job creation, economic gain, cultural exchange, and cultural identity, they would support tourism development (Jurowski, Uysal, & Williams, 1997;Perdue, Allen, & Long, 1987; Yoon, Gursoy, & Chen, 2001)

H2: There is a relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development.

Hypothesis 2 investigated the relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development. However, the result of SEM analysis did not support hypothesis 2, having a t-value of -.032, which was not statistically significant at the level of .05.

This finding suggested that tourism stakeholders' environmental attitudes did not affect their preferences about tourism attractions/resources development. More specifically, this study indicated that tourism stakeholders' ecocentric attitudes did not lead to their preferences or support for tourism attraction development.

Table 4.28
Summary of Hypotheses Testing

Hypothesis	Hypothesized Path	Completely Standardized	T-value	Results
H1	TDI to TAD (γ_{11})	.34	5.53*	Supported
H2	EA to TAD (γ_{12})	-.01	-.032	Not Supported
H3	PA to TAD (γ_{13})	.15	2.73*	Supported
H4	TAD to DCS (β_{21})	.59	7.12*	Supported

Note: * $\underline{p} < .05$ (1.96)
TDI = Tourism Development Impacts
EA = Environmental Attitudes
PA = Place Attachment
TAD = Development Preferences about Tourism Attractions
DCS = Support for Destination Competitive Strategy

H3: There is a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development.

In hypothesis 3, it was postulated that tourism stakeholders who are more attached to the community are more likely to prefer to develop tourism attractions/ resources. The result of SEM analysis supported this hypothesis, having a positive relationship between the constructs (t-value = 2.73, $\underline{p} < .05$). Accordingly, this finding suggested that if tourism stakeholders are more strongly attached to their community, they would have a greater preference for developing tourism attractions/ resources such as small independent businesses, cultural and folk events, and information for tourists.

Additionally, since the place attachment construct was successfully measured by four observed indicators that were related to place identity, it can be argued that tourism stakeholders who have more emotional/symbolic place attachment are more likely to support tourism attractions/resources development.

H4: There is a positive relationship between tourism stakeholders' preferences about tourism attractions/resources development and support for the enhancement strategies of destination competitiveness.

Hypothesis 4 investigated the relationship between development preferences about tourism attractions/resources and support for destination competitive strategy. Support for destination competitive strategy was measured by marketing efforts and activities, and destination management organizations' roles. The structural coefficient and t-values associated with these two constructs were positively significant (t-value = 7.12, $\underline{p} < .05$). Accordingly, hypothesis 4 was supported. This finding indicated that the greater tourism stakeholders' preferences for tourism attractions/resources development in terms of small independent businesses, cultural and folk events, and information for tourists, the more they support destination competitive strategies. Particularly, they are more likely to support marketing efforts and activities and management organizations' role in order to enhance destination competitiveness.

Finally, the results of the structural equation model analysis found that there was an additional significant relationship between tourism development impacts and support for destination competitive strategy (Gamma γ_{21}), which was not hypothesized to be tested in this study. As seen in Figure 4.4, the dotted line represents the re-specified relationship between these two constructs. The estimated t-value and regression coefficient were statistically positively significant (t-value = 2.70, $\underline{p} < .01$), and suggested that there was a positive relationship between tourism development impacts and support for destination competitive strategy.

Reasonably, it can be implied that if tourism stakeholders perceive more positive tourism development impacts in terms of economic and cultural aspects, they are likely to support destination competitive strategies such as marketing efforts and activities and management organizations' role in enhancing tourism destination competitiveness.

CHAPTER V
CONCLUSION AND DISCUSSION

INTRODUCTION

This study was conducted to theoretically develop and empirically test a structural equation model of tourism destination competitiveness from the tourism stakeholders' perspective. The proposed hypotheses that attempted to identify the structural relationships between/among the five constructs in the model were examined through a series of analyses in LISREL. The principle guideline of this study was that the support of tourism stakeholders for tourism planning and development is a key element for the successful operation, management, and long-term sustainability of tourism destinations in order to improve tourism destination competitiveness. Tourism stakeholders' solid knowledge and experiences in tourism management and industry, professional involvement and participation in tourism planning and development, and their long-term community observation and interactions have played an important role in a tourism destination management. Therefore, their perceptions, attitudes, and behaviors regarding tourism management and the tourism industry were major sources of testing the proposed structural model and hypotheses.

In this study, tourism stakeholders included individuals who were working for or involved in chambers of commerce, tourism and government authorities, local tourism agencies, non-government organizations, tourism related associations and councils, convention & visitors bureaus, tourism planning and development companies, tourism related faculties and professionals, local and state parks, outdoor recreation companies and facilities, and visiting and information centers. Particularly, this study focused on tourism stakeholders in the state of Virginia as a study population, rather than in the entire United States.

The major focus of this final chapter is to present the summary, discussion, and managerial and theoretical implications of the findings of the analyses. Then, the limitations of the study are discussed and the chapter concludes with suggestions for future research.

SUMMARY AND DISCUSSION OF THE RESEARCH FINDINGS

General Findings and Discussion

Starting from a discussion of the research questions, this study overviewed a theoretical background and empirical studies that exist in the literature. The objective of the study was to develop a theoretical model about tourism destination competitiveness and to empirically test the factors (constructs) that are likely to affect tourism stakeholders' development preferences about tourism attractions/resources and their support of destination competitive strategies (endogenous constructs). The affecting constructs (exogenous constructs) include tourism development impacts, environmental attitudes, and place attachment. The structural model of tourism destination competitiveness also addressed the influence of tourism stakeholders' development preferences about tourism attractions/resources on their support of destination competitive strategies.

The total usable sample size from the randomly selected respondents was 646, after eliminating unqualified respondents (n=60) due to response errors. The review of demographic information indicated that the respondents were surveyed from very diverse tourism stakeholders who are currently working for tourism-related organizations, associations, attractions, and businesses. The results also showed that the survey questionnaires were collected from a wide range of geographically distributed areas covering the entire state of Virginia.

Based on the theoretical review and empirical studies, the measurement scales for each construct were developed and utilized to investigate the relationships between the constructs. An examination of reliability and validity of the measurement scales revealed that the measurement scale for each construct was reliable and valid in terms of the internal consistency and accuracy of what they were supposed to measure. Of significance is that the newly developed measurement scale for support for destination competitive strategy, which is comprised of 24 items, generated a Cronbach's coefficient's alpha of .94. This result indicated that this measurement scale was highly

reliable in assessing support of destination competitive strategies by tourism stakeholders for enhancing destination competitiveness.

For an analysis of the structural equation model for support for the destination competitive strategy, first, confirmatory factor analysis (CFA) was conducted to refine the posited relationships of the observed indicators to the construct. Through CFA processes, the uni-dimensionality of each construct was confirmed and the composite reliabilities for each construct were calculated. Those scores were tourism development impacts (.86), environmental attitudes (.83), place attachment (.89), preferences about tourism attraction development (.75), and support for destination competitive strategy (.71). All of these composite reliabilities exceeded the recommended level of .70 (Hair, Anderson, Tatham, & Black, 1989).

Closer examination of the relationships of the remaining observed indicators to the construct showed that tourism development impacts were measured by four indicators that are related to economic and cultural benefits from tourism development. For example, job creation, attracting investment, and cultural activities and cultural exchange were relatively important indicators to measure tourism stakeholders' perceived tourism development impacts. In terms of environmental attitudes, six indicators remained and measured the construct. Those indicators revealed that tourism stakeholders' environmental attitudes were primarily ecocentric attitudes, rather than anthropocentric, even if other studies discussed these two different perspectives of environmental attitudes (Dunlap & Van Liere, 1978; Dunlap, Van Liere, Mertig, & Jones, 2000). Place attachment that is associated with a symbolic and emotional attachment to the community contained four indicators to measure this construct. The indicators that were related to functional attachment may not be appropriate for targeting tourism stakeholders to measure place attachment to their community because any indicators related to a functional attachment did not remain in measuring the construct of place attachment.

In terms of tourism stakeholders' preferences about tourism attractions/resources development, four indicators remained to measure this construct. Tourism stakeholders preferred to develop small independent businesses and services, cultural and folk events, and information for tourists. These results implied that rather than developing nature-oriented attractions and resources, tourism stakeholders in Virginia wanted to develop

various travel services, activities, events, businesses, and information for tourists. For support for tourism destination competitive strategies, three indicators including sustainable management and practices, marketing efforts and activities, and destination management organizations' role were derived from EFA and retained to measure the construct. As discussed in the literature review, these results supported other researchers' assumptions and arguments of how tourism destination competitive strategies are formed in order to improve destination competitiveness (Crouch & Ritchie, 1999; Hassan, 2000; Mihaič, 2000; Ritchie & Crouch, 1993).

Having confirmed the posited relationships to the construct, the overall measurement model was tested to see if the theoretical measurement model fit the data fairly well. The CFA processes utilized two split samples (calibration sample, n=322) and validation sample, n=324). With the calibration sample, the overall measurement model was re-specified to describe a better-fitting model to the data. Then, the re-specified theoretical measurement model was validated using the validation sample.

Ideally, the results from the validation sample should replicate the results of the calibration sample. The re-specified model from the calibration model was a theoretical model for the validation sample so that the re-specified model was tested to see if the model described the data fairly well without any major re-specifications. Through these processes, the indicators having comparatively high measurement errors and low correlations to the constructs were dropped. As a result, 15 indicators remained to measure the five constructs (Table 4.21). These processes were done to help not only to identify the uni-dimensionality of the constructs but also to clarify the observed indicators of the associated construct.

Findings and Discussion of Research Questions

A structural equation model of destination competitive strategy was utilized to test the hypotheses that attempted to identify the structural relationships between the constructs. Three of the four hypotheses proposed in this study were supported, and those supported hypotheses generated a significant level of t-values and standardized

coefficient scores (Table 4.30). Detailed discussions of findings addressed by the research questions are as follows.

The first research question was: Are tourism stakeholders' development preferences about tourism attractions/resources affected by perceived tourism impacts, environmental attitudes, and/or perceived place attachment? This research question was divided into three hypotheses: H1: There is a positive relationship between tourism stakeholders' perceptions of the benefits of tourism impacts and preferences about tourism attractions/resources development; H2: There is a positive relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development; and H3: There is a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development.

The findings of the structural analysis supported hypotheses 1 and 3 that there is a positive relationship between tourism stakeholders' perceptions of tourism development impacts and preferences about tourism attractions/resources development. Additionally, there is a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development. However, this study did not support hypothesis 2, that there is a positive relationship between tourism stakeholders' environmental attitudes and preferences about tourism attractions/resources development.

Accordingly, this structural analysis concluded that tourism stakeholders' preferences about tourism attractions/resources development are a function of perceived tourism development impacts as well as place attachment. As previous research discussed (Jurowski, 1994, Jurowski, Uysal, & Williams, 1997; Perdue, Long, & Allen, 1987; Yoon, Gursoy, & Chen, 2000) if people perceive more benefits than costs from tourism development, they are more likely to support future tourism development.

Specifically, rather than the environmental and physical benefits from tourism development discussed in other studies (Davis, Allen, & Cosenza, 1988; Getz, 1994; Lankford & Howard, 1994), this study demonstrated that the more tourism stakeholders perceive economic and cultural benefits from tourism development, the more they are likely to support future tourism attractions/resources. For example, positive perceptions in terms of job creation and investment, and cultural exchange and identity make tourism

stakeholders support more tourism attraction development. Those attractions they preferred to develop were small independent business and cultural and folk events such as gift shops, prearranged attractive, flexible tour packages, guide services, campgrounds, concerts, arts and crafts, dances, and festivals. And also, they supported information for tourists to attract more tourists to their communities. These results may be due to the abundant tourism attractions/resources related to heritage and cultural destinations that exist in the research site (Virginia). People in the research site may have received more economic benefits from the above attractions/resources. These tourism attractions/ resources may have created and sustained employees, as well as attracted more investment, so that tourism may have brought economic benefits to stakeholders' communities.

As another finding that should be acknowledged in this study, tourism stakeholders who have expressed more emotional/symbolic attachment to their communities, are more likely to prefer tourism attractions/ resources development. This result indicated that place attachment may be a critical determinant of peoples' supporting tourism development, as other previous studies have discussed (McCool & Martin, 1994; Um & Crompton, 1987; Williams, McDonal, Riden, & Uysal, 1995; Yoon, 1998). This finding also supported the general argument of place attachment that people may be an integral component of place or destination environments and their values and perceptions of the natural and environmental settings surrounding their communities could be evaluated and incorporated into the destination management process.

The second research question was: Is there a relationship between tourism stakeholders' development preferences about tourism attractions/resources and their support of enhancement strategies for destination competitiveness? This research question was addressed by hypothesis 4. The findings of the analysis for hypothesis 4 indicated that there is a positive relationship between tourism stakeholders' preferences about tourism attractions/resources development and support for enhancement strategies for destination competitiveness. Again, the tourism attractions/resources that tourism stakeholders in this study preferred to develop were small independent businesses, cultural and folk events, and information for tourists. The more their preference for developing tourism attractions, the more likely they were to support destination

competitive strategies such as marketing efforts and activities, and destination management organizations' role. Accordingly, this finding implied that this relationship could represent the best combinations or matches between tourism attractions and destination competitive strategies in order to enhance destination competitiveness. These combinations may produce more and a better quality of tourism attractions/resources that are marketed effectively or efficiently to current and potential tourists.

As Hassan (2000) discussed, destination competitiveness is the ability of a destination to create and integrate value-added products and sustain its resources while maintaining market position. Marketing efforts and activities could help to create and sustain the product value of tourism attractions/resources. Competitiveness can be enhanced through incorporating marketing planning and strategies (Bordas, 1994; Buhalis, 2000; Kozak, 2001; Heath & Wall, 1992; Poon, 1994; Ritchie & Crouch, 2000).

This finding indicated that destination organizations' role and function in tourism destinations should not be overlooked in terms of its responsibility to the well-being of all aspects of destination management. Ritchie and Crouch (1993) also discussed that a carefully selected and well-executed program of destination management can serve to improve destination competitiveness. A broad range of activities and roles might be incorporated, according to the tourism attractions/resources they prefer to develop. Consequently, as Crouch and Ritchie (1999) discussed, it should be noted that destination management activities and programs could enhance the appeal of core tourism attractions/ resources, strengthen the quality and effectiveness of the resources, and adjust certain constraints that tourism attractions have in terms of location, safety, and cost.

In conducting post hoc testing of the structural equation model of tourism destination competitiveness, an additional relationship that was not hypothesized was found, and indicated that tourism stakeholders' perceived tourism development impacts directly influenced their support for destination competitive strategies. Reasonably, as similar to other studies (Perdue, Long, & Allen, 1990; Yoon et al., 2000), if people perceive benefits from tourism development, they are willing to support future tourism development. In this case, tourism stakeholders who have perceived benefits from tourism development, particularly in its economic and cultural aspects, are likely to support enhancement strategies for destination competitiveness.

IMPLICATIONS OF THE RESEACH FINDINGS

In an increasingly saturated market, an understanding of how tourism destination competitiveness can be enhanced and sustained is a fundamental issue in successful destination management and planning. Since tourism destinations involve multi-faceted components of natural/cultural tourism resources and a multiplicity of man-made tourism businesses, a systematic analysis and framework for destination competitiveness is required. This analytical model may also contribute to creating and integrating value-added tourism attractions/resources to achieve greater destination competitiveness.

This study was focused on an investigation of the structural relationships between tourism stakeholders' preferences about tourism attractions/resources development and their support for destination competitive strategies that are influenced by tourism development impacts, environmental attitudes, and place attachment. The most critical research finding from this study was the strong relationship (the highest path coefficient score) between preferences about tourism attractions/resources development and support for destination competitive strategies. Accordingly, the managerial implications of this study are more focused on a discussion of this finding, rather than focusing on a discussion of the influence of the perceived tourism development impacts and place attachment on preferences about tourism attractions/resources development.

Importantly, these research findings may help tourism planners, developers, and policy-makers to understand what key tourism players such as tourism stakeholders prefer to develop in tourism attractions/resources and to plan and implement successful competitive strategies. These results are likely to help tourism stakeholders and marketers to collect information and plan appropriate competitive strategies based on the tourism attractions/resources they prefer to develop.

It could be said from the findings of this study that destination competitive strategies supported by tourism stakeholders may be associated with destination marketing efforts and activities, and destination management organizations' role. These competitive strategies can be implemented based on the tourism attractions/ resources of small independent businesses and cultural and folk events that may include gift shops, prearranged attractive, flexible tour packages, guide services, campgrounds, concerts, arts

and crafts, dances, and festivals. Information for tourists in order to attract more tourists to their communities was also an important source of tourism attraction. Accordingly, with not only these tourism attractions/resources but also well-prepared marketing plans and strategies, and effective support and help by destination management organizations, the best strategies for enhancing destination competitiveness may be established for the tourism destinations.

Closer examination of the marketing efforts and activities presented in this study may provide more detailed information and useful sources of managerial applications, because the incorporation of marketing concepts and competitive development strategies may help to enhance destination competitiveness (Bordas, 1994; Kozak, 2001; Poon, 1994). As previous researchers have discussed (Crouch & Ritchie, 1999; Go & Govers, 2000; Peattie & Peattie, 1996), overcoming seasonality and quality management may be important strategies for destination competitiveness so that tourists may spend more time and money at their destinations. Certain marketing programs and activities to overcome seasonality in tourists' visits should be considered. The development of strong linkages with tourism wholesalers and retailers could be suggested.

Moreover, as Poon (1993) argued, including "permanent innovation" and "ceaseless change," and flexible, segmented, customized products and services for tourists may be necessary to enhance destination competitiveness. The selection of appropriate target markets, the development of strong destination image, and tourism promotion and operation for international tourists and visitors may be recommended as specific marketing plans for destination competitive strategies. These marketing strategies may enable tourism destinations to achieve a maximum correlation with tourists' demand to meet their wants and needs.

Additionally, in recent trends of tourism industry, more effective tourism product delivery and services require the use of modern, advanced technology and information systems. This study also found that the respondents (tourism stakeholders) supported the development of advanced technology and information systems. Thus, it is recommended that destination management teams or marketing planners pay attention to this current trend.

Another important finding for destination competitive strategies from this research was related to destination management organizations' roles. Especially, in order to effectively use tourism resources over the long term, destination management organizations' roles could be emphasized and systematically established, because their functions and roles within the tourism destination may be critical in terms of their responsibility to the well-being of all aspects of destination management and operation (Crouch & Ritchie, 1999). As Mihalič (2000) and Ritchie and Crouch (1993) have discussed, destination competitiveness could be enhanced through management organizations' capabilities and efforts. Especially, according to Crouch and Ritchie (1999), destination management organizations' roles should be understood as total "management" rather than "marketing." It should be also noted that their roles emphasize the provision of a form of leadership for destination development that makes extensive use of team work in all DMO-led initiatives (p.149).

More specific implications supported by tourism stakeholders in this study were that tourism destination management organizations may need to play an important role as facilitators between local government and agencies for tourism planning and development. The establishment of effective linkages between local government and agencies was recommended in order to improve destination competitiveness in the long run. Additionally, the development of the leadership of destination management organizations for local government and agencies was also suggested, particularly in marketing tourism destinations to tourists. Lastly, establishing effective cost strategies in providing different levels of quality and various types of tourism experiences can be recommended.

Consequently, as suggested in other studies (Crouch & Ritchie, 1999; Hassan, 2000; Mihalič, 2000; Ritchie & Crouch, 1993), the findings of this research supported that appropriate destination management efforts and marketing activities may help to create and integrate tourism attractions, products, and resources so that tourism destinations could achieve better competitive market environments and positions. Therefore, destination managers and planners may need to understand what combinations or matches of tourism attractions/resources and destination competitive strategies can be achieved to create more competitive tourism destinations.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

As expected in all research, limitations to this study were found and should be addressed to encourage more sound research in the future. The major limitations derived from this study are: 1) research scope and boundaries of the research, 2) selected observed indicators and constructs, 3) lack of residents' and tourists' opinions, 4) absence of longitudinal characteristics, and 5) limited analysis of performance of destination competitive strategies.

This study investigated the structural relationships of tourism destination competitiveness from tourism stakeholders' perspectives. The surveyed data were only collected in the state of Virginia. This geographically limited survey may produce different results and conclusions in terms of the magnitude and directions of relationships among the constructs studied in this research. Tourism stakeholders in other states and countries may have different perceptions, attitudes, and behaviors concerning tourism development and destination competitive strategies. Other geographic boundaries and research scopes should be explored to see if similar findings and results could be addressed. And also, future research may collect data from other competitive states and countries so that comparison studies can be conducted.

This study has been somewhat limited in its selection of observed indicators, variables, and constructs. Even if those observed indicators, variables, and constructs were selected based on the literature review and researcher's observations, other critical variables and constructs may exist to achieve further insights of destination competitiveness. For example, more specific variables and constructs that address international competitive strategies are limited. The various variables and constructs that are related to tourism information systems or management information systems were abbreviated. In current tourism markets, any tourism destination may need to pay more attention to advanced technologies and techniques so that quality products and services are delivered effectively and efficiently. Therefore, future studies may address destination competitiveness that includes information technology and techniques such as tourism information systems.

Another critical limitation to this study is related to the respondents. Generally, in the tourism literature, tourism stakeholders may include residents, tourists, and tourism experts such as people who are involved in organizations, associations, destination management and attractions such as the respondents for this study. However, this study did not include residents' and tourists' opinions of destination competitive strategies. Accordingly, compared with the respondents (tourism stakeholders) surveyed in this study, residents and tourists may express different perceptions, attitudes, and behaviors concerning the issues and topics presented in this study.

As a result, for more comprehensive and thorough investigations of destination competitive strategies supported by all tourism stakeholders, future research is recommended to include both residents and tourists. Conducting studies that include comparisons and differences between/among tourism stakeholders in terms of destination competitive strategies may be possible.

This study also is somewhat limited in terms of longitudinal characteristics, which would it make possible to analyze the potential time-lag for the hypothesized relationships and structural model. This is due to the fact that the data were collected for a two-month period (June and July, 2002). Each measurement scale for the constructs can be refined and validated. This study might reflect ongoing transformations that could influence the relationships between the constructs for future research. Moreover, a longitudinal analysis of the structural model of tourism destination competitiveness may reveal what competitive strategies do a better job in increasing destination competitiveness and performance.

Due to the fact that this study did not include any performance and satisfaction variables to see what and how much destination competitive strategies work for the current tourism market, future research should address this limitation to suggest more appropriate destination competitive strategies to the tourism industry.

Consequently, the above-mentioned limitations should be considered as essential and critical suggestions for future research. Future studies should take into account these limitations to produce more complete research results.

CONCLUDING COMMENTS

Given the fact that, if any, there is a limited number of empirical studies on tourism destination competitiveness, this study developed and empirically tested a structural equation model of tourism destination competitiveness and its relevant constructs from the perspectives of tourism stakeholders. Accordingly, as discussed in the research findings, it is hoped that this study has made valuable contributions to the understanding and insights about tourism destination competitive strategies.

From the results of the comprehensive data analyses and procedures, this study may conclude that in successful tourism development and management for destination competitiveness, a more thorough understanding of tourism stakeholders' attitudes and behaviors toward tourism should be made. As key players in tourism destination competitiveness, their preferences about tourism attractions/resources and support for destination competitive strategies should be understood so that more competitive destination environments and positions can be achieved.

Finally, even though the results and findings of this study are somewhat exploratory in nature, it is expected that the information produced and the implications of the study may be of help to tourism planners, policy-makers, and marketers to build more competitive tourism destination environments and positions in the state of Virginia.

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Appendix A

Cover Letter

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Dear Participant

I am a graduate student in the Department of Hospitality and Tourism Management at Virginia Tech, and I am working on my dissertation on the subject of tourism development and destination competitiveness in Virginia.

The attached questionnaire is an important survey designed to assess your opinions about general issues related to tourism development and destination competitiveness. The answers will only be used for academic research. All information you provide will be strictly confidential.

I would very much appreciate it if you would answer all of the questions carefully, put the completed questionnaire into the enclosed postage-paid envelope, and drop it in any mailbox.

Should you have any questions regarding the survey or research, feel free to contact Yooshik Yoon (Graduate Researcher), at 540-961-3523 (email: yoyoon1@vt.edu)

Thanks for your time and help.

Sincerely,

Yooshik Yoon
Ph.D Student
Dept. of Hospitality and Tourism Management
Virginia Tech

Appendix B
Survey Instrument

Survey of Tourism Development and Destination Competitiveness

Part I: Tourism Development Impacts

Please read each item carefully and circle the appropriate number that indicates how much you agree or disagree with each of the Tourism Development Impact statements.

1= Strongly Disagree 2= Disagree 3 = Neither Disagree nor Agree 4= Agree 5 = Strongly Agree

	Strongly Disagree				Strongly Agree
1. Tourism has created jobs for our community.	1	2	3	4	5
2. Tourism has attracted investment to our community.	1	2	3	4	5
3. Our standard of living has increased considerably because of tourism.	1	2	3	4	5
4. Tourism has given economic benefits to local people and businesses.	1	2	3	4	5
5. High-spending tourists have negatively affected our way of life.	1	2	3	4	5
6. Tourism has changed our traditional culture.	1	2	3	4	5
7. Local residents have suffered from living in a tourism destination area.	1	2	3	4	5
8. Tourism has encouraged a variety of cultural activities by the local residents.	1	2	3	4	5
9. Tourism has resulted in more cultural exchange between tourists and residents.	1	2	3	4	5
10. Tourism has resulted in positive impacts on the cultural identity of our community.	1	2	3	4	5
11. Tourism has resulted in traffic congestion, noise, & pollution.	1	2	3	4	5
12. Construction of hotels & tourist facilities have destroyed the natural environment.	1	2	3	4	5
13. Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places in our community.	1	2	3	4	5
14. Tourism provides more parks and other recreational areas for local residents.	1	2	3	4	5

Part II: Place Attachment

Please indicate **how much you agree or disagree with** each of the following place attachment statements.

1= Strongly Disagree 2= Disagree 3 = Neither Disagree nor Agree 4= Agree 5 = Strongly Agree

	Strongly Disagree				Strongly Agree
1. I would prefer to spend more time in my community if I could.	1	2	3	4	5
2. I am very attached to my community.	1	2	3	4	5
3. I identify strongly with my community.	1	2	3	4	5
4. This community means a lot to me.	1	2	3	4	5
5. I feel like this community is a part of me.	1	2	3	4	5
6. No other place can compare to this community.	1	2	3	4	5
7. The time I spend in my community could just as easily be spent somewhere else	1	2	3	4	5
8. I get more satisfaction being in my community than from visiting any other place	1	2	3	4	5
9. This community is the best place for what I like to do.	1	2	3	4	5
10. This community makes me feel like no other place can.	1	2	3	4	5

♦ **What is your level of satisfaction with the following items?**

	Very Dissatisfied				Very Satisfied
Your leisure life	1	2	3	4	5
Your quality of life	1	2	3	4	5
Your recent travel experiences	1	2	3	4	5
Your recent experiences with local event & festivals	1	2	3	4	5
Local governments' tourism planning & development	1	2	3	4	5
Your participation in tourism development related decision-making	1	2	3	4	5
Protection & preservation of tourism resources while sustaining economic benefits	1	2	3	4	5

Part III: Tourism Attraction Development

Please indicate how much you prefer or do not prefer the development **of each of the following tourism attractions in your community.**

1 = Don't at all Prefer 2 = Don't Prefer 3 = Neutral 4= Somewhat Prefer 5 = Highly Prefer

	Don't at all Prefer				Highly prefe
1. Nature-based tourism development (e.g. skiing, camping, parks, trails).	1	2	3	4	5
2. Attractions designed for large numbers of tourists (e.g. theme parks, resorts).	1	2	3	4	5
3. Cultural or historic-based attractions (e.g. museums, folk villages, historic sites).	1	2	3	4	5
4. Supporting visitor services (e.g. hotels, restaurants, entertainment, etc).	1	2	3	4	5
5. Small independent businesses (e.g. gift shops, guide services, campgrounds).	1	2	3	4	5
6. Cultural and folk events (e.g. concerts, arts and crafts, dances, festivals).	1	2	3	4	5
7. Pre-arranged attractive and flexible tour packages.	1	2	3	4	5
8. Outdoor recreation facilities, programs & events (e.g. hiking, bike rides, climbing).	1	2	3	4	5
9. Improved roads and transportation.	1	2	3	4	5
10. Information for tourists.	1	2	3	4	5
11. Sports facilities and activities.	1	2	3	4	5
12. Business/convention meeting events and facilities.	1	2	3	4	5

Part IV: Tourism Oriented Decisions

How important are the following tourism-oriented decision, made by local tourism authorities, about developing tourism destinations and/or attractions in your community?

	Not at all Important				Extremely Important
1. Supporting economic development of local/regional tourism products.	1	2	3	4	5
2. Local/regional tourism promotion and operation of tourist offices.	1	2	3	4	5
3. Supporting completion of local/regional tourism development plans & strategies.	1	2	3	4	5
4. Long term vision for tourism related to social, economic,& environmental factors.	1	2	3	4	5
5. Policies on zoning, permissible criteria, other controls for tourism development.	1	2	3	4	5
6. Providing guidelines & controls for facilitating tourism development possibilities.	1	2	3	4	5
7. Architectural and engineering designs of specific tourist facilities.	1	2	3	4	5
8. Safety, health & environmental integrity requirements for tourism developments.	1	2	3	4	5
9. Specific licenses/permits or other consents to be granted for tourism development	1	2	3	4	5
10. Varied assessment criteria or standards regarding tourism development.	1	2	3	4	5
11. Determining future/present land use zones for incremental tourism development.	1	2	3	4	5
12. Determining suitable sites that show permissible development of land for tourism	1	2	3	4	5
13. Infrastructure changes for enhancing the tourist experience &visitor management	1	2	3	4	5
14. Recreational, open space and infrastructure plans in the local region.	1	2	3	4	5
15. Establishing fees, taxes, rates etc.from tourism developments & visitor amenities	1	2	3	4	5
16. Funding for expert advice and research to address tourism-related issues.	1	2	3	4	5

Part V: Tourism Destination Competitiveness

Please indicate how favorable or unfavorable you consider **each of the following** destination competitive strategies and actions to be for Virginia**.**

1=Not at all favorable 2=Unfavorable 3=Neutral 4=Favorable 5= Highly Favorable

	Not at all favorable				Highly favorable
1. The development of a strong destination image.	1	2	3	4	5
2. The selection of appropriate target markets (tourist groups).	1	2	3	4	5
3. The development of strong linkages with tourism wholesalers and retailers.	1	2	3	4	5
4. Overcoming seasonality (peak and off-season) in tourists' visits.	1	2	3	4	5
5. Increasing tourists' length of stay.	1	2	3	4	5
6. Use of modern, advanced technology and information systems (e.g. Internet).	1	2	3	4	5
7. Tourism promotion and operation for targeting international tourists and visitors.	1	2	3	4	5
8. Increasing tourists' spending.	1	2	3	4	5
9. The establishment of standards for tourism facilities.	1	2	3	4	5
10. Both education and training programs for present/future industry personnel.	1	2	3	4	5
11. Establishing the cost of providing different levels of quality for various types of tourism experiences.	1	2	3	4	5
12. Local government and agencies' roles as facilitators for tourism development.	1	2	3	4	5
13.The leadership roles of local government and agencies in marketing this region as a tourism destination.	1	2	3	4	5
14.The development of safety and security programs and systems for tourists and the tourism community.	1	2	3	4	5
15.Collecting information that inventories a destination's products and services.	1	2	3	4	5
16. An inventory of information to monitor the attitudes of the local population towards the tourism industry.	1	2	3	4	5
17. Research that aids the development of new tourist services.	1	2	3	4	5
18. Protecting and improving more wildlife habitat.	1	2	3	4	5
19. Promoting ethical responsibility towards the natural environment.	1	2	3	4	5
20. Expanding educational opportunities for the visiting public in terms of natural/ environmental quality and protection.	1	2	3	4	5

21. Encouraging citizen participation in decision-making about tourism development	1	2	3	4	5
22. Sensible use of natural resources.	1	2	3	4	5
23. Environmental considerations in the marketing of tourism.	1	2	3	4	5
24. Environmental training of tourism staff.	1	2	3	4	5

Part VI: General Tourism Attitude

♦ Would you oppose or support tourism development in your community?

Strongly Oppose ___ Oppose____ Moderate____ Support ____Strongly Support ____

♦ How do you perceive the overall impacts of tourism development in your community?

Very Negative____ Negative____ Moderate ____ Positive ____ Very Positive_____

♦ How would you evaluate the competitiveness of your community as a tourism destination?

Not at all Competitive__ Less Competitive__Somewhat Competitive__Highly Competitive__

♦ How would you evaluate the level of tourism development in your community?

Initial Stage___ Development Stage___ Growth Stage___ Maturity Stage___ Decline Stage__

♦ How would you evaluate the attractiveness of your community as a tourism destination?

Not at all Attractive___ Less Attractive ___ Somewhat Attractive____ Highly Attractive___

♦ Have you ever been involved in developing tourism attraction in your community?

Not at all involved___ Seldom involved___ Somewhat involved___ Highly involved_

Part VII: Environmental Attitude

Please indicate **how much you agree or disagree with** each of the following environmental attitude statements.

1= Strongly Disagree 2= Disagree 3= Neither Disagree nor Agree 4= Agree 5= Strongly Agree

Environmental Attitude	Strongly Disagree				Strongly Agree
1. We are approaching the limit of the number of people the earth can support.	1	2	3	4	5
2. Humans have the right to modify the natural environment to suit their needs.	1	2	3	4	5
3. When humans interfere with nature, it often produces disastrous consequences.	1	2	3	4	5
4. Human ingenuity will insure that we do not make the earth unlivable.	1	2	3	4	5
5. Mankind is severely abusing the environment.	1	2	3	4	5
6. The earth has plenty of natural resources if we just learn how to develop them.	1	2	3	4	5
7. Plants and animals have as much of a right to exist as humans.	1	2	3	4	5
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations.	1	2	3	4	5
9. Despite our special abilities, humans are still subject to the laws of nature.	1	2	3	4	5
10. The so-called "ecological crisis" facing humanity has been greatly exaggerated.	1	2	3	4	5
11. The earth is like a spaceship with only limited room and resources.	1	2	3	4	5
12. Mankind was meant to rule over the rest of nature.	1	2	3	4	5
13. The balance of nature is very delicate and easily upset.	1	2	3	4	5
14. Humankind will eventually learn enough about how nature works to be able to control it	1	2	3	4	5
15. If things continue on their present course, we will soon experience a major ecological catastrophe.	1	2	3	4	5

Part IX: Your Demographic Information

- **Gender**: (1) Male (2) Female
- **Your Age**:_____
- **How long have you been living in Virginia?**_____ year(s)
- **Marital Status**: (1) Single (2) Married (3) Widowed/Divorced/Separated
- **Education**: (1) Less than high school (2) High school (3) College (4) Graduate
- **Your Income (before taxes):**
  (1) Less than $30,000 (2) $30,001–$60,000 (3) $60,001-$90,000
  (4) $90,001-$120,000 (5) $120,001 or more
- **Ethnic Groups:**
  (1) Caucasian (2) African-American (3) Hispanic (4) Asian (5) Native American (6) Other
- **How long have you been working for the current company or organization?**
  _____ years
- **Primary organization for whom you work (please mark the appropriate number)**

(1) Chamber of Commerce (2) Private business (not directly related to tourism) (3) Travel information center (4) State & local public park (5) Hotel & resort (6) Government official &Council (7) Non-profit organization & association (8) Convention and Visitors Bureau	(9) Outdoor recreation company, facility, & outfitters (10 Private & commercial theme park & facility (11) Local travel attractions (e.g. museum, theater) (12) College & university (13) Travel agency (14) Planning and development company related to tourism (15) Other (please specify): _____

Thank you for filling out the survey

Appendix C

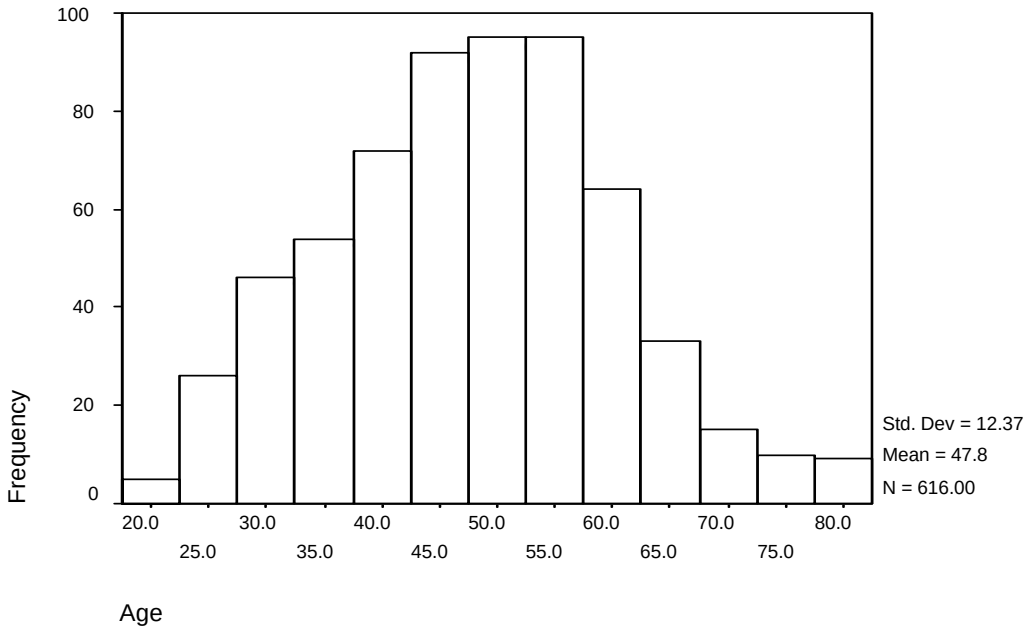
Result of Non-Response Tests by Chi-Square

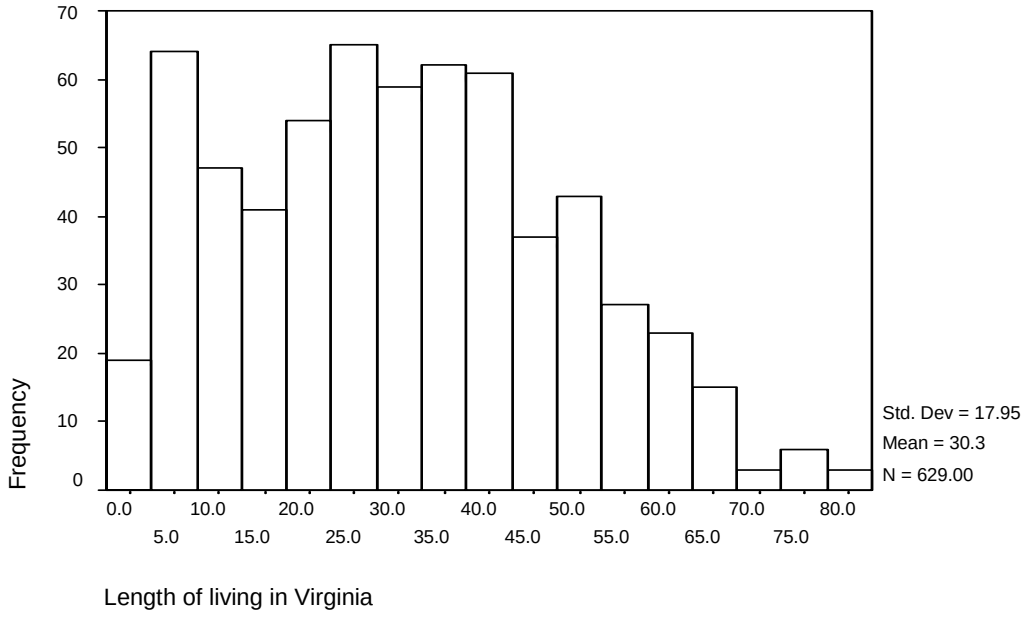
Variables	Early Respondents	Late Respondents	
Gender			
Male	283	12	Pearson χ^2= .129
Female	328	16	$\underline{p}$ < .72
Total	611	28	
Education			
High school	42	2	Pearson χ^2= 1.970
Four year college	303	17	$\underline{p}$ < .37
Graduate school	261	8	
Total	606	27	
Martial status			
Single	86	2	
Married	430	19	Pearson χ^2= 1.69
Widowed/Divorced/Separated	92	6	$\underline{p}$ < .43
Total	608	27	
Ethnic group			
Caucasian	554	25	Pearson χ^2= 11.21
African-American	17	1	$\underline{p}$ < .05 *
Hispanic	8		
Asian	8		
Native American	8		
Others	1	1	
Total	596	27	
Income (before taxes)			
Less than $30,000	69	1	Pearson χ^2= 4.84
$30,001-$60,000	228	16	$\underline{p}$ < .30
$60,001-$90,000	145	5	
$90,001-$120,000	68	2	
$12,001 or more	60	3	
Total	570	27	

Note: * = 6 cells (50%) have expected count less than. The results may not be acceptable.

Appendix D

Normal Distribution of Respondents' Demographic Characteristics





Appendix E.1

Results of Skewness and Kurtosis for Tourism Development Impacts

!PRELIS SYNTAX: Can be edited
SY=E:\DISSER~1\DISSER~2\DATA\TDI.PSF
NS 1 2 3 4 5 6 7 8 9 10 11 12 13 14
OU MA=PM XB XM

Total Sample Size = 646
Listwise Deletion
Total Effective Sample Size = 636

Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	**Skewness**	**Kurtosis**	Minimum	Freq.	Maximum	Freq.
TDI1	0.000	0.871	0.000	-0.824	-0.406	-2.545	9	0.710	354
TDI2	0.000	0.911	0.000	-0.527	-0.610	-2.586	8	0.926	269
TDI3	0.000	0.949	0.000	-0.158	-0.515	-2.250	20	1.396	128
TDI4	0.000	0.904	0.000	-0.458	-0.459	-2.545	9	0.984	248
TDI5	0.000	0.894	0.000	0.647	-0.614	-0.821	309	2.250	20
TDI6	0.000	0.953	0.000	0.156	-0.562	-1.428	121	2.047	33
TDI7	0.000	0.916	0.000	0.433	-0.530	-1.024	234	2.474	11
TDI8	0.000	0.939	0.000	-0.181	-0.246	-2.413	13	1.525	101
TDI9	0.000	0.946	0.000	-0.092	-0.236	-2.413	13	1.716	69
TDI10	0.000	0.946	0.000	-0.172	-0.408	-2.291	18	1.441	118
TDI11	0.000	0.957	0.000	0.102	-0.632	-1.484	109	1.913	4
TDI12	0.000	0.945	0.000	0.260	-0.656	-1.238	168	2.161	25
TDI13	0.000	0.938	0.000	0.299	-0.585	-1.199	179	2.250	20
TDI14	0.000	0.948	0.000	-0.128	-0.299	-2.101	29	1.682	74

Note: TDI = Tourism Development Impacts

Appendix E.2

Results of Skewness and Kurtosis for Environmental Attitudes

!PRELIS SYNTAX: Can be edited
SY=E:\DISSER~1\DISSER~2\DATA\EA.PSF
NS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
OU MA=PM XB XM

Total Sample Size = 646
Listwise Deletion
Total Effective Sample Size = 626

Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	**Skewness**	**Kurtosis**	Minimum	Freq.	Maximum	Freq.
ENVIR1	0.000	0.959	0.000	-0.005	-0.591	-1.688	72	1.695	71
ENVIR2	0.000	0.955	0.000	-0.102	-0.465	-2.139	26	1.559	93
ENVIR3	0.000	0.955	0.000	-0.133	-0.602	-2.028	34	1.447	115
ENVIR4	0.000	0.956	0.000	0.029	-0.401	-1.897	46	1.815	55
ENVIR5	0.000	0.956	0.000	-0.124	-0.584	-1.992	37	1.471	110
ENVIR6	0.000	0.955	0.000	0.111	-0.493	-1.576	90	2.004	36
ENVIR7	0.000	0.943	0.000	-0.271	-0.646	-2.171	24	1.221	170
ENVIR8	0.000	0.954	0.000	-0.133	-0.504	-2.080	30	1.491	106
ENVIR9	0.000	0.916	0.000	-0.383	-0.487	-2.581	8	1.071	215
ENVIR10	0.000	0.956	0.000	-0.098	-0.555	-1.937	42	1.527	99
ENVIR11	0.000	0.954	0.000	-0.124	-0.549	-1.980	38	1.481	108
ENVIR13	0.000	0.947	0.000	-0.184	-0.475	-2.380	14	1.396	126
ENVIR14	0.000	0.949	0.000	-0.086	-0.364	-2.468	11	1.571	91
ENVIR15	0.000	0.957	0.000	0.003	-0.452	-1.760	62	1.775	60

Note: Envir = Environmental Attitude

Appendix E.3

Results of Skewness and Kurtosis for Environmental Attitudes

!PRELIS SYNTAX: Can be edited
SY=E:\DISSER~1\DISSER~2\DATA\PA.PSF
NS 1 2 3 4 5 6 7 8 9 10
OU MA=PM XB XM

Total Sample Size = 646
Listwise Deletion
Total Effective Sample Size = 639

Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	**Skewness**	**Kurtosis**	Minimum	Freq.	Maximum	Freq.
PA1	0.000	0.942	0.000	-0.149	-0.376	-2.510	10	1.444	118
PA2	0.000	0.925	0.000	-0.368	-0.520	-2.510	10	1.103	209
PA3	0.000	0.928	0.000	-0.360	-0.556	-2.510	10	1.110	207
PA4	0.000	0.911	0.000	-0.458	-0.531	-2.547	9	0.990	247
PA5	0.000	0.933	0.000	-0.337	-0.589	-2.361	15	1.142	197
PA6	0.000	0.959	0.000	-0.028	-0.549	-1.842	53	1.646	80
PA7	0.000	0.955	0.000	0.082	-0.400	-1.698	72	2.089	30
PA8	0.000	0.953	0.000	0.054	-0.288	-1.842	53	2.037	34
PA9	0.000	0.954	0.000	-0.083	-0.384	-2.132	27	1.640	81
PA10	0.000	0.957	0.000	-0.043	-0.441	-1.978	39	1.678	75

Note: PA = Place Attachment

Appendix E.4

Results of Skewness and Kurtosis for Tourism Attraction Development

```
!PRELIS SYNTAX: Can be edited
 SY=E:\DISSER~1\DISSER~2\DATA\PTA.PSF
 NS 1 2 3 4 5 6 7 8 9 10 11 12
 OU MA=PM XB XM

Total Sample Size =     646
Listwise Deletion
Total Effective Sample Size =     638
```

Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	**Skewness**	**Kurtosis**	Minimum	Freq.	Maximum	Freq.
TAD1	0.000	0.915	0.000	-0.478	-0.596	-2.475	11	0.972	253
TAD2	0.000	0.955	0.000	0.143	-0.679	-1.402	127	1.935	43
TAD3	0.000	0.890	0.000	-0.545	-0.497	-3.241	1	0.885	285
TAD4	0.000	0.927	0.000	-0.240	-0.334	-2.686	6	1.296	153
TAD5	0.000	0.910	0.000	-0.376	-0.464	-3.036	2	1.062	222
TAD6	0.000	0.889	0.000	-0.513	-0.576	-2.475	11	0.893	282
TAD7	0.000	0.943	0.000	-0.177	-0.475	-2.314	17	1.364	136
TAD8	0.000	0.919	0.000	-0.385	-0.479	-2.509	10	1.081	216
TAD9	0.000	0.903	0.000	-0.532	-0.569	-2.588	8	0.912	275
TAD10	0.000	0.893	0.000	-0.430	-0.517	-2.414	13	0.966	255
TAD11	0.000	0.948	0.000	-0.193	-0.535	-2.196	23	1.364	136
TAD12	0.000	0.941	0.000	-0.249	-0.565	-2.337	16	1.251	165

Note: TAD = Tourism Attraction Development

Appendix E.5

Results of Skewness and Kurtosis for Destination Competitiveness

!PRELIS SYNTAX: Can be edited
SY=E:\DISSER~1\DISSER~2\DATA\DC.PSF
NS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
OU MA=PM XM

Total Sample Size = 646
Listwise Deletion
Total Effective Sample Size = 626
Univariate Summary Statistics for Continuous Variables

Variable	Mean	St. Dev.	T-Value	**Skewness**	**Kurtosis**	Minimum	Freq.	Maximum	Freq.
DC1	0.000	0.874	0.000	-0.670	-0.525	-3.031	2	0.778	321
DC2	0.000	0.898	0.000	-0.435	-0.551	-2.905	3	0.967	250
DC3	0.000	0.925	0.000	-0.292	-0.555	-2.814	4	1.152	190
DC4	0.000	0.923	0.000	-0.361	-0.563	-2.814	4	1.087	210
DC5	0.000	0.913	0.000	-0.437	-0.628	-2.814	4	0.987	243
DC6	0.000	0.877	0.000	-0.623	-0.523	-3.031	2	0.808	309
DC7	0.000	0.928	0.000	-0.341	-0.610	-2.627	7	1.106	204
DC8	0.000	0.888	0.000	-0.593	-0.548	-3.235	1	0.844	295
DC9	0.000	0.930	0.000	-0.325	-0.590	-2.436	12	1.135	195
DC10	0.000	0.921	0.000	-0.395	-0.582	-2.740	5	1.049	222
DC11	0.000	0.939	0.000	-0.104	-0.251	-2.436	12	1.571	91
DC12	0.000	0.935	0.000	-0.271	-0.457	-2.354	15	1.258	160
DC13	0.000	0.927	0.000	-0.368	-0.556	-2.468	11	1.106	204
DC14	0.000	0.930	0.000	-0.298	-0.513	-2.581	8	1.182	181
DC15	0.000	0.930	0.000	-0.233	-0.461	-2.905	3	1.262	159
DC16	0.000	0.945	0.000	-0.175	-0.464	-2.540	9	1.396	126
DC17	0.000	0.938	0.000	-0.242	-0.447	-2.581	8	1.296	150
DC18	0.000	0.912	0.000	-0.491	-0.630	-2.680	6	0.947	257
DC19	0.000	0.906	0.000	-0.537	-0.588	-2.740	5	0.911	270
DC20	0.000	0.921	0.000	-0.404	-0.570	-2.740	5	1.049	222
DC21	0.000	0.937	0.000	-0.281	-0.547	-2.380	14	1.214	172
DC22	0.000	0.891	0.000	-0.606	-0.508	-2.905	3	0.847	294
DC23	0.000	0.915	0.000	-0.462	-0.608	-2.581	8	0.978	246
DC24	0.000	0.931	0.000	-0.349	-0.608	-2.407	13	1.115	201

Note: DC = Destination Competitiveness

Appendix F.1

Result of Reliability for Tourism Development Impacts

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
TDI01	39.4308	41.7480	.4745	.7404
TDI2	39.6447	41.0609	.5141	.7362
TDI3	40.2374	40.6223	.4929	.7372
TDI4	39.5881	42.1702	.4773	.7411
TDI5	41.9497	45.1912	.1527	.7702
TDI6	41.2358	41.1002	.4226	.7443
TDI7	41.8286	44.4698	.2346	.7618
TDI8	40.1116	42.3230	.4121	.7460
TDI9	40.3302	42.5711	.4026	.7470
TDI10	40.1336	42.2923	.3932	.7476
TDI11	41.0346	41.1705	.3809	.7492
TDI12	41.4230	42.1279	.3365	.7537
TDI13	41.5597	42.5114	.3407	.7528
TDI14	40.3239	43.7154	.2650	.7598

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	2188.5161	635	3.4465		
Within People	12816.3571	8268	1.5501		
Between Measures	6073.5289	13	467.1945	571.9693	.0000
Residual	6742.8283	8255	.8168		
Total	15004.8732	8903	1.6854		
Grand Mean	3.1254				

Reliability Coefficients

N of Cases = 636.0 N of Items = 14

Alpha = .7630

Appendix F.2

Result of Reliability for Environmental Attitudes

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
ENVIR1	46.8147	85.2712	.5930	.8741
ENVIR2RE	46.4888	87.6519	.5326	.8769
ENVIR3	46.4665	87.4141	.4988	.8785
ENVIR4RE	46.9345	87.8629	.5184	.8775
ENVIR5	46.4792	85.2292	.6155	.8731
ENVIR6RE	47.2013	88.8394	.4439	.8808
ENVIR7	46.1390	87.3519	.5306	.8770
ENVIR8RE	46.4089	85.7781	.6233	.8729
ENVIR9	45.7700	93.3486	.3133	.8848
ENVIR10R	46.5367	83.5802	.7076	.8688
ENVIR11	46.4441	85.6713	.6099	.8734
ENVIR12R	46.6757	87.8003	.4683	.8800
ENVIR13	46.2268	87.4141	.5809	.8749
ENVIR14R	46.4121	91.0107	.4036	.8819
ENVIR15	46.8546	84.3868	.6852	.8700

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	4138.4852	625	6.6216		
Within People	7795.2000	8764	.8895		
Between Measures	1056.7012	14	75.4787	98.0097	.0000
Residual	6738.4988	8750	.7701		
Total	11933.6852	9389	1.2710		
Grand Mean	3.3231				

Reliability Coefficients

N of Cases = 626.0 N of Items = 15

Alpha = .883

Appendix F.3.1

Result of Reliability for Place Attachment (included Item PA7)

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
PA1	31.0250	33.3411	.4604	.8163
PA2	30.6745	30.3860	.7673	.7867
PA3	30.7089	30.0343	.7848	.7842
PA4	30.5430	30.9570	.7439	.7903
PA5	30.7872	29.6631	.7693	.7841
PA6	31.5978	30.1687	.6101	.8005
PA7	**31.9562**	**44.1956**	**-.4434**	**.8988**
PA8	31.8748	32.5329	.4915	.8134
PA9	31.3427	31.2288	.5969	.8025
PA10	31.5180	30.2344	.6533	.7958

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	2494.1327	638	3.9093		
Within People	5454.4000	5751	.9484		
Between Measures	1569.8942	9	174.4327	257.8430	.0000
Residual	3884.5058	5742	.6765		
Total	7948.5327	6389	1.2441		
Grand Mean	3.4670				

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Reliability Coefficients

N of Cases = 639.0 N of Items = 10

Alpha = .8269

Appendix F.3.2

Result of Reliability for Place Attachment (without Item PA7)

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
PA1	28.3114	38.0957	.4613	.9017
PA2	27.9609	34.7022	.7899	.8785
PA3	27.9953	34.3746	.8021	.8773
PA4	27.8294	35.3549	.7628	.8810
PA5	28.0736	34.0275	.7812	.8783
PA6	28.8842	34.3157	.6437	.8900
PA8	29.1612	37.1887	.4966	.9001
PA9	28.6291	35.6287	.6164	.8913
PA10	28.8044	34.5683	.6719	.8871

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	3132.9748	638	4.9106		
Within People	3704.0000	5112	.7246		
Between Measures	1166.9278	8	145.8660	293.4485	.0000
Residual	2537.0722	5104	.4971		
Total	6836.9748	5750	1.1890		
Grand Mean	3.5507				

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Reliability Coefficients

N of Cases = 639.0 N of Items = 9

Alpha = .8988

Appendix F.4

Result of Reliability for Tourism Attraction Development

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
TAD1	42.7351	34.7445	.2341	.8134
TAD2	44.1959	32.2143	.3424	.8087
TAD3	42.5408	33.8845	.4171	.7967
TAD4	42.9232	32.0333	.5761	.7830
TAD5	42.6975	33.1187	.4923	.7906
TAD6	42.5282	33.5400	.4917	.7914
TAD7	43.1646	31.3402	.5442	.7845
TAD8	42.7759	32.8775	.4404	.7945
TAD9	42.6332	32.6942	.4786	.7912
TAD10	42.5737	33.1209	.5497	.7873
TAD11	43.2226	31.5202	.4783	.7913
TAD12	43.0784	31.2780	.5289	.7859

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	2030.0282	637	3.1869		
Within People	5840.5000	7018	.8322		
Between Measures	1536.5282	11	139.6844	227.4105	.0000
Residual	4303.9718	7007	.6142		
Total	7870.5282	7655	1.0282		
Grand Mean	3.9020				

Reliability Coefficients

N of Cases = 638.0 N of Items = 12

Alpha = .8073

Appendix F.5

Result of Reliability for Destination Competitive Strategy

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
DC1	91.9248	174.9543	.4913	.9346
DC2	92.0768	174.0293	.5245	.9342
DC3	92.3328	172.1583	.5371	.9340
DC4	92.2816	171.3244	.5618	.9337
DC5	92.2000	171.7660	.5467	.9339
DC6	91.9376	175.2317	.4848	.9347
DC7	92.3664	170.9024	.5390	.9341
DC8	92.0016	172.2965	.5981	.9332
DC9	92.3888	168.7092	.6210	.9328
DC10	92.2624	169.7195	.6223	.9328
DC11	92.7232	170.6685	.5857	.9333
DC12	92.4656	168.4768	.6270	.9327
DC13	92.3536	168.5206	.6095	.9330
DC14	92.3840	168.5446	.6625	.9322
DC15	92.4176	169.8077	.6521	.9324
DC16	92.6624	168.4548	.6225	.9328
DC17	92.5008	167.6126	.6846	.9318
DC18	92.2032	170.0372	.5876	.9333
DC19	92.1392	170.3155	.5963	.9332
DC20	92.2656	168.7018	.6548	.9323
DC21	92.4752	170.2786	.5402	.9341
DC22	92.0208	171.1550	.6217	.9329
DC23	92.2112	168.8688	.6450	.9324
DC24	92.3968	167.6243	.6420	.9325

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	4811.2600	624	7.7104		
Within People	7726.3333	14375	.5375		
Between Measures	624.0861	23	27.1342	54.8319	.0000
Residual	7102.2472	14352	.4949		
Total	12537.5933	14999	.8359		
Grand Mean	4.0127				

Reliability Coefficients

N of Cases = 625.0 N of Items = 24

Alpha = .9358

Appendix G

Output from EFA for Destination Competitive Strategy

Destination Competitive Strategy	Factor 1	Factor 2	Factor 3
1. Promoting ethical responsibility towards the natural environment. (Item 19)	.894		
2. Sensible use of natural resources. (Item 22)	.857		
3. Environmental considerations in the marketing of tourism. (Item 23)	.841		
4. Expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection. (Items 20)	.837		
5. Protecting and improving more wildlife habitat. (Item 18)	.836		
6. Environmental training of tourism staff. (Item 24)	.802		
7. Encouraging citizen participation in decision-making about tourism development. (Item 21)	.621		
8. Increasing tourists' length of stay. (Item 5)		.783	
9. The selection of appropriate target markets. (Item2)		.769	
10. The development of a strong destination image.(Item 1)		.750	
11. The development of strong linkages with tourism wholesalers and retailers. (Item 3)		.734	
12. Overcoming seasonality (peak and off-season) in tourists' visits. (Item 4)		.724	
13. Increasing tourist's spending. (Item 8)		.700	
14. Tourism promotion and operations for targeting international tourists and visitors. (Item 7)		.636 .620	
15. Use of modern, advanced technology and information systems (e.g. Internet). (Item 6)			.829
16.Local government and agencies' roles as facilitators for tourism development. (Item 12)			.788
17. The leadership roles of local government and agencies in marketing this region as a tourism destination. (Item 13)			.634
18. Establishing the cost of providing different levels of quality for various types of tourism experiences. (Item 11)			

VITA

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EDUCATIONAL BACKGROUND

Doctor of Philosophy, Ph. D (September, 2002)
Virginia Polytechnic Institute and State University
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Department of Hospitality and Tourism Management
Major: Tourism Management
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Topic of Dissertation: Development of a Structural Model for Tourism Destination Competitiveness from Stakeholders' Perspectives

Master of Science, MS (December, 1998)
Virginia Polytechnic Institute and State University
Blacksburg, Virginia, USA
Department of Hospitality and Tourism Management
Major: Tourism Management
Title of Thesis: Determinants of Urban Residents' Perceived Tourism Impacts: A Study on the Williamsburg and Virginia Beach Areas

Management Business Administration, MBA (February, 1994)
Sejong University, Seoul, South Korea
Department of Tourism Management
Major: Tourism Management
Title of Thesis: Employees' Job Involvement and Job Security Based on Job Characteristics in the Hospitality and Tourism Industry.

Bachelor of Art, BA (February, 1992)
Hanshin University, Suwon, South of Korea.
Department of English Linguistics and Literature

GRADUATE COURSE-WORK TAKEN

Hospitality & Tourism Related Courses (16):

Current Issues in Travel & Tourism MGT, Tourism Economics, Tourism Planning, Travel and Tourism Behavior, Theory of Travel and Tourism, Studies on Tourism Policy, Travel and Tourism Marketing, Global Tourism Market Analysis, Tourism Resources, Hospitality and Tourism Marketing Strategy, Hotel Construction Planning, Hotel MGT, Advanced Seminar in HTM, Advance Studies on HTM, Strategic MGT and Competitive Strategy in the Hospitality Industries, Contemporary Problems in the Hospitality Industry, and Human Resources MGT,

Statistics and Methodology Related Courses (8):

Advanced Quantitative Methods for HTM, Statistics for Behavior Science, Advanced Statistics in Education, Research Methods for HTM, Advanced Quantitative Marketing Methodology, Measurement Theory, Applied Structural Equation Modeling, and Multivariate Statistics and Analysis,

General Graduate Courses (2):

Theory Construction, and Seminar in Buyer Behavior Research,

PUBLICATIONS IN REFEREED JOURNALS

Yoon, Y., & Uysal, M. (accepted). An Examination of the Effects of Motivation and Satisfaction on Destination Loyalty: A Structural Model. Tourism Management.

Hallab, Z., Yoon, Y., & Uysal, M. (accepted). An Identification of Market Segments Based on Healthy-Living Attitude. Journal of Hospitality & Leisure Marketing.

Weaver, P., Kaufman, T., & Yoon, Y. (2002). A Market Segmentation Study Based on Benefits Sought. Tourism Analysis, 6 (3/4): 213-222.

Yoon, Y., Gursoy, D., & Chen, J. (2001). Validating a Tourism Development Theory with Structural Equation Modeling. Tourism Management, 22 (4): 363-372.

Chen, J., Ekinci, Y., Rlley, M., Yoon, Y., & Tjelflasst, S. (2001). What Do Norwegians Think of US Lodging Services? International Journal of Contemporary Hospitality Management, 13 (6): 280-284.

Yoon, Y., Chen, J. & Gursoy, D. (1999). An Investigation of the Relationship between Tourism Impacts and Host Communities' Characteristics. Anatolia: An International Journal of Tourism and Hospitality Research, 10 (1): 29-44.

PUBLICATIONS IN REFEREED PROCEEDINGS

Yoon, Y., & Kim, S. (2002). An Assessment and Construct Validation of Destination Image. 33th TTRA Annual Conference Proceedings, Tourism and Travel Research Association.

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Yoon, Y., Formica, S., & Uysal, M. (2001). Destination Attributes and Travel Market Segmentation. 32nd TTRA Annual Conference Proceedings, Tourism and Travel Research Association, 301-305

Uysal, M., Sharma, A., & Yoon, Y. (2000). Recent Development & Trends in Tourism Demand Studies. TRENDS 2000, 5th Outdoor Recreation & Tourism Trends Symposium.

Gursoy, D., Chen, J., & Yoon, Y. (2000). Using Structure Equation Modeling to Assess the Effects of Tourism Impact Factors and Local Residents' Support for Tourism Development. 31nd TTRA Annual Conference Proceedings, Tourism and Travel Research Association, 243-250.

Chen, J., & Yoon, Y. (1999). A Path Analytical Approach to a Tourism Impact Assessment Model. 30nd TTRA Annual Conference Proceedings, Tourism and Travel Research Association, 236-239.

Yoon, Y., & Chen, J. (1999). A Regional Analysis of the Consequences of Tourism Development from a Community Perspective. 11th Northeastern Recreation Research symposium: Public Land, Recreation, and Tourism Management for the 21st Century, Northeast Recreation Research, 11-16.

Chen, J., Sue, M., Yoon, Y., & Hun, J. (1998). Choice Factors and Destination Loyalty. *29th* TTRA Annual Conference Proceedings, Tourism and Travel Research Association, 97-103.

PUBLICATIONS IN NON-REFEREED PROCEEDING

Yoon, Y., Schroder, B., & Weaver, P. (1999). Perception and Awareness of Explore park by Individuals in the Roanoke Valley. 15th Annual Research Symposium at Virginia Tech, 45-45.

PAPERS UNDER REVIEW IN JOURNALS

Kim, S., & Yoon, Y. (Second Review). Hierarchical Effects of Affective and Cognitive Components on Tourism Destination Image: Use of Second Order Factor Analysis

McGehee, N. G., Yoon, Y., & Cardenas, D. (Third Review). Involvement as an indicator of travel for recreational runners in North Carolina.

ACADEMIC AND TEACHING EXPERIENCES

Instructor (January, 2002 – May, 2002)

Taught HTM 4984 Special Study in Attraction Management
Dept. of Hospitality and Tourism MGT, Virginia Tech, Virginia, USA.

The goal of this course was to acquaint the student with different types of destination attraction management issues, including private and public sector attractions in natural and cultural settings at the local and national levels, theme and amusement parks, historical, cultural and heritage monuments, special events and festivals, impacts of attractions on destination development and marketing, assessment of importance of attractions in local economies.

Teaching Assistant (January, 1999 – December, 2001)

Dept. of Hospitality and Tourism MGT, Virginia Tech, Virginia, USA
August, 2001 – December, 2001
HTM 2454 Travel and Tourism Management (Internet On-line Course)
233 students enrolled,
August, 2000 – May, 2001
HTM 2454 Travel and Tourism Management (Internet On-line Course)
250 students enrolled
HTM 2454 Travel and Tourism Management
HTM 4984 Attraction Management
August, 1999 – May, 2000
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HTM 3474 Hospitality Facilities Planning and Management

Instructor (August, 1994 –February, 1996)

Teaching position for undergraduate course in Dept. of Tourism Management, Kim-Choen College, South of Korea.

In 1996, taught "Communications in Hospitality and Tourism", and "Hotel English and Communication"

In 1995, taught "Hotel English and Communication" and "General English and Communications"

In 1994, taught "Communications in Hospitality and Tourism", and "Tourism English and Communication"

RESEARCH EXPERIENCES

Research Assistant (January, 2002 – 2002)

Working for the grant research project: "The Current and Potential Visitor Market Research: Mountain Lake Resort," ($61,376)

Research Assistant (January, 1997 – June 1997)

Research assistant position for Service Learning Project funded by Virginia Tech. ($3,000). Participating research areas were residents' attitudes and perceptions of tourism development impact, travel motivation and behavior related to culture and natural oriented park, and visitor satisfaction with the travel information center.

Research Assistant (March, 1993- February, 1994)

Assistant Researcher and Administration Position for Korea Tourism Industry research Institute, Seoul, South Korea. Research areas were Tourism Marketing and Strategy, Tourism Panning and Development, and Hospitality Marketing and Management.

Research Coordinator (March 1993 to February 1994)

Served for *Journal of Hotel and Tourism Management* annually published by Korea Tourism Industry Research Institute in Korea, South Korea.

WORK AND PRACTICAL EXPERIENCES

Translator and Consultant for Outdoor Recreation (August, 2002)

Worked for Outdoor Leisure/Recreation Teacher Group sponsored by Education Department of Seoul Metropolitan, Korea ($3,500 plus an all-expenses-paid trip). Duties were translating and consulting for Mountain Skills and Experimental Activity Programs in Yamnuska Mountain School, Canmore, Canada.

Banquet Staff (October, 2000 – August, 2001)

Worked for Donaldson Brown Hotel and Convention Center, Virginia. USA.

Translator and Consultant for Outdoor Recreation (August, 2001)

Worked for Outdoor Leisure/Recreation Teacher Group sponsored by Education Department of Seoul Metropolitan, Korea ($4,000 plus an all-expenses-paid trip). Duties were translating and consulting for Mountain Skills and Experimental Activity Programs in Yamnuska Mountain School, Canmore, Canada.

Translator and Consultant for Outdoor Recreation (August, 2000)

Worked for Outdoor Leisure/Recreation Teacher Group sponsored by Education Department of Seoul Metropolitan, Korea ($6,000 plus an all-expenses-paid trip) . Duties were translating and consulting for Horizon Experimental Learning Program in Horizon Consulting Group, Harrisonburg, USA.

Assistant to General Manager (September, 1999 – December, 1999)

Overall experiences of managerial position at front desk, and housekeeping at Clare Conner Bed & Breakfast, Virginia, USA.

Translator and Consultant for Outdoor Recreation (August, 1998)

Worked for Outdoor Leisure/Recreation Teacher Group sponsored by Education Department of Seoul Metropolitan, Korea ($3,800 plus an all-expenses-paid trip). Duties were translating and consulting for Horizon Experimental Learning Program at Horizon Consulting Group, Harrisonburg, USA.

Management Trainee (December, 1992 - February 1993)

Overall experiences in Convention and Banquet Operation/Management, Room Division, and Food & Beverage at Sheraton Walkerhill Hotel (Five Star), Seoul, South Korea.

UNIVERSITY AND PUBLIC SERVICES

President (December, 2001 – October, 2002)

TTRA, Travel and Tourism Research Association, Virginia Tech Chapter

Vice Present (October, 1998 – December, 2001)

TTRA, Travel and Tourism Research Association, Virginia Tech Chapter

Reader (May, 2001 – August 2002)

Worked for disabled person (partially blind) and conducted research project (Human Resource Management in Hospitality Industry).

PROFESSIONAL MEMBERSHIP

TTRA, Travel and Tourism Research Association
CHRIE, Council on Hospitality, Restaurant & Institutional Education
PCMA, Professional Conventional Management Association

CERTIFICATIONS

Mountain Skills and Experimental Activities, Yamnuska Mountain School, Canmore, Canada, 2002

Mountain Skills and Experimental Activities, Yamnuska Mountain School, Canmore, Canada, 2001

Horizons Certificate, Horizons Experimental Learning Program, Horizons Consulting Group, 2000

Horizons Certificate, Horizons Experimental Learning Program, Horizons Consulting Group, 1998

Internship of Hotel Operation, Sheraton Walker Hill Hotel and Tower, Seoul, South Korea, 1993