

**TAPPING THE INVISIBLE MARKET:  
THE CASE OF THE CRUISE INDUSTRY**

A Dissertation

by

SUN YOUNG PARK

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2006

Major Subject: Recreation, Park and Tourism Sciences

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Approved by:

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Head of Department,	Joseph O'Leary

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## ABSTRACT

Tapping the Invisible Market: The Case of the Cruise Industry. (August 2006)

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The definition of business success has evolved from winning larger market share in fierce competition to creating one’s own markets. Exploring new markets is crucial especially for tourism businesses, as one of the basic motives for leisure travel is seeking new or different experiences. Nonetheless, current non-customers have rarely been studied in the context of tourism.

Using the cruise industry as a case, the first purpose of this study was to enhance the understanding of current non-customers (i.e., “the invisible market”). Current non-customers of the cruise industry were defined as leisure travelers who take other leisure vacation types, but have not taken a cruise vacation in the last five years (i.e., past-cruisers) or have never taken a cruise vacation (i.e., non-cruisers). The second purpose was to propose practical approaches for the cruise industry to utilize to tap the invisible market based on the findings.

This study consists two phases using a sequential study design. In Phase 1, 22 guided conversations were conducted with people with and without cruise experiences using a modified Zaltman Metaphor Elicitation Technique to explore their images of

cruise vacations. The findings suggested that current non-customers had different images of cruise vacations than current customers.

In Phase 2, a conceptual model was developed based on the findings of Phase 1 and the literature on destination image and choice, the Model of Goal-directed Behavior and the leisure constraints model. Eleven hypotheses were tested with data collected from a survey of U.S. leisure travelers using descriptive statistics and structural equation modeling. Most relationships (e.g., directions and valence) among constructs were found to be in accordance with previous studies.

Further, results suggested that current non-customers were more similar to than different from current customers in terms of socio-demographics and general vacation behavior. However, results implied that current non-customers' biases or negative images of cruise vacations could be the underlying factors that influence their decisions not to choose cruise vacations over other leisure vacation types. Practical recommendations for innovative marketing strategies are presented for the cruise industry.

## **DEDICATION**

To my parents

## ACKNOWLEDGEMENTS

*“When you want to accomplish something, always remember your enthusiasm and determination with which you start.”*

First of all, I would like to sincerely thank my parents for having been very supportive of me for chasing my goals irrespective of geographical locations and circumstances. Even though they wonder why I sometimes choose more complex and less-traveled roads, their continuous and unconditional support and love have helped me keep going forward, grow and become a better person. They are always my best mentors.

I am grateful to have learned from faculty members with diverse insights at the Department of Recreation, Park and Tourism Sciences. Especially, I am truly indebted to my advisors. I would like to sincerely thank my co-advisor, Dr. Jim Petrick who has always encouraged me to persevere and has granted me the assistantship opportunities to become a better academic. His cheerful spirit and willingness to always help students have helped me realize again that days can be brightened by one’s own positive attitudes despite temporary obstacles.

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matters that we experience in life. I have learned to be more patient and confident from my advisors.

I would like to thank Dr. David Scott, my committee member, for his prompt and helpful feedback. I have learned from him how a professor can earn respect from students by being unambiguous, consistent and sincerely caring for their needs. I would like to also thank Dr. Mary Zimmer, my committee member, who has always welcomed me with smiles. She has listened to me with an open mind, has given me helpful comments and has encouraged me to widen and deepen my ideas.

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# CHAPTER I

## INTRODUCTION

### Overview of Chapter I

Is battling competitors the best way to achieve and sustain significant success? This conventional belief turned out not to be the case for the successful businesses in 30 industries which included the tourism industry (e.g., hotels and airlines) between 1880 and 2000 (Kim & Mauborgne, 2005). According to Kim and Mauborgne (2005), the key to success can be found by creating new markets with innovative strategies, which make current competition irrelevant. In this chapter, the importance of paying attention to current non-customers in the tourism industry; the reasons for the cruise industry being chosen as a case; and study purposes are discussed. Further, discussions on this study's organization, limitations and delimitations and definition of terms used in this study are presented.

### Background of the Study

The notion of business success has been evolving from winning larger market share in fierce competition to re-defining and creating new markets with a goal of profitability (Christensen & Raynor, 2003; Christensen, Anthony, & Roth, 2004; Kim & Mauborgne, 2005). Thus, it has been argued that innovative strategies, especially, exploring and tapping current non-customers is increasingly crucial for business success

---

This dissertation follows the style of *Tourism Management*.

(Christensen & Raynor, 2003; Christensen, Anthony, & Roth, 2004; Drucker, 2003; Kim & Mauborgne, 2005; Vishwanath & Mark, 1997).

This change can be witnessed in the tourism industry where some tourism businesses and destinations are coordinating their efforts to build “uniqueness” and to develop market segments that match their strengths. Nonetheless, it seems that many tourism businesses have been concentrating on competition-based strategies. This might have resulted in ill effects on the industry as a whole rather than “strategies that can make existing competition irrelevant” (Kim & Mauborgne, 2005, p. 5).

For example, the airline industry’s intense competition-based strategies brought about over-capacity and price wars, which has led many airlines to file bankruptcy or to have significant financial losses in the 1980’s and 1990’s (Baily & Allen, 2005; Barla & Koo, 1999). The notable exception is *Southwest Airlines* that has prospered throughout turmoil with innovative strategies to develop new markets that other airlines did not pay much attention to and by serving these markets with inimitable corporate culture (Bonabeau & Meyer, 2001; Christensen & Raynor, 2003; Christensen, Anthony, & Roth, 2004; Gillen & Lall, 2004; Gittell, 2003; Hartley, 2004; Kim & Mauborgne, 2005).

One of the industries that seem to have focused on competition for market share is the cruise industry with vast expansion of capacity. Many cruise lines have attempted to increase loyalty of existing current customers with frequent passenger programs (e.g., “Past Guest Program” by Carnival Cruise Lines; “The Mariner Society” by Holland America Line; “Latitudes” by Norwegian Cruise Line).

The Cruise Lines International Association (CLIA) represents 19 cruise lines and over 16,000 travel agency members in the U.S. and Canada (CLIA, 2005). The CLIA member cruise lines have welcomed an increasing number of passengers at 8.1 percent per annum on average since 1980, having reached a total of 9.1 million passengers in 2004 (CLIA, 2005). Similar to the U.S. domestic travel market's trend toward shorter trips (35% of leisure person-trips for 1 to 2 nights; 28% of them for 3 to 6 nights) (Travel Industry Association of America, 2004), shorter cruises (2 to 5 days) have shown the highest growth rate (724.5% from 1980 to 2004) of all cruise types (CLIA, 2005).

Nonetheless, the current client base of the cruise industry is relatively narrow. While the number of passengers has grown 8.1 percent annually (1.4 million in 1980 to 9.1 million in 2004; CLIA, 2005), these passengers account for 15 percent of the total U.S. population (288.4 million; CLIA, 2005). According to CLIA studies (2004, 2005), among the study sample of those who were over 25 years old with more than \$40,000 annual household incomes (44% of U.S. total population), approximately 34 percent (43.5 million) have taken a cruise, but the rest (84.4 million people) have never taken a cruise (CLIA, 2005) (Figure 1-1).



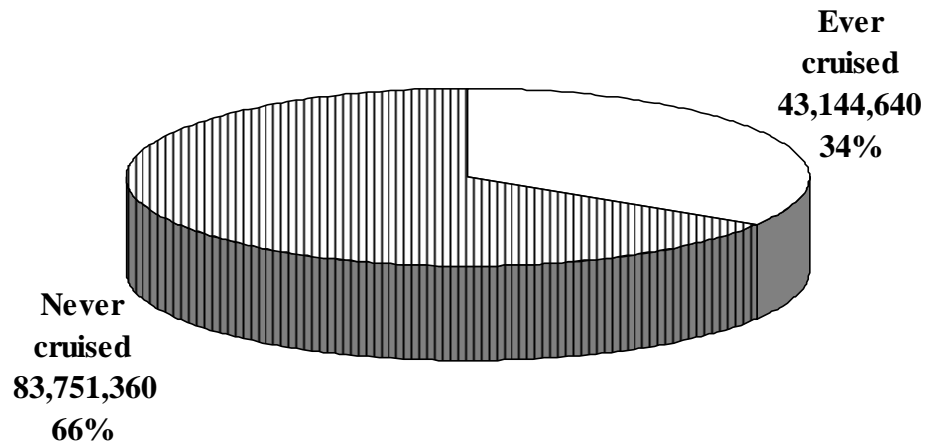


Fig. 1-1. The composition of current customers and current non-customers for a cruise vacation in the U.S. (CLIA, 2005)

*Notes:* The sample criteria of CLIA studies (2004, 2005) were those who were over 25 years old with annual household incomes more than \$40,000. This accounted for 44 percent (127.9 million) of total U.S. population (288.4 million).

This concentrated client base seems to have led to intensive competition such as widespread discounts among cruise lines to enlarge their share of current customers (Hobson, 1993), as has happened in the airline industry, leaving the potential market (people who have never cruised) largely ignored (Dickinson & Vladimir, 1997). The cruise industry's dependence on existing clientele pose three potential pitfalls.

First, the industry's products and services might only be designed according to the existing clientele's expectations and be less attractive to other potential markets. Second, the more cruise experiences that existing current customers have, the higher their expectations become (Zeithaml & Bitner, 2003), making it more challenging for cruise offerings to meet those expectations.

The third potential pitfall of the cruise industry's competition for current customers is that one of the overriding factors for leisure vacation choice is seeking new or different experiences (Bello & Etzel, 1985; Dann, 1977; Crompton, 1979; Lee & Crompton, 1992; Jeong & Park, 1997; Wahlers & Etzel, 1985). To fulfill the need for seeking new or different experiences, people take different types of leisure vacations, a cruise vacation being one of them. As stated by CLIA (2005, p. 1), "Cruisers are not exclusively cruisers; rather they are frequent vacationers who cruise as part of their vacation mix." Accordingly, should these current cruisers seek other leisure vacation options, the cruise industry may be left with products and services that might not meet the needs of latent current customers.

Therefore, gaining a better understanding about why some people do "not" choose a cruise vacation, while spending time, effort and money on other types of vacations might be one of the essential elements for future success in creating new markets for cruise vacations. This would help the cruise industry re-examine the conventional belief that it is more profitable to retain repeat current customers than attract new ones (e.g., Rosenberg & Czepiel, 1984; Peppers & Rogers, 1993), as there has yet to be any evidence that shows how applicable this belief is to the cruise industry. It might be that the total costs expended on gaining a larger portion of current customers (e.g., retention costs such as discounts and marketing costs) could exceed the inevitable initial costs (e.g., marketing costs) for developing new markets.

In the emerging market-orientation economy, an understanding of potential current customers is important for a firm so as not to be solely led by current customers'

needs and wants particularly as this presents the firm with a myopic perspective (Hammel & Prahalad, 1994). Similarly, it has been suggested that defining one's own identity by breaking away from the conventional category of one's business would bring about new competition in which novel success can be established (Moon, 2005).

Much of the focus of the tourism literature seems to have been on the reasons why people behave the way they do (e.g., destination choice; leisure activity choice; and tourist motivation). However, there is a lack of understanding about why some people do "not" choose certain leisure vacation types under the same conditions that current customers are under (e.g., a lack of time and money). In the case of the cruise industry, studies on the reasons that former cruisers choose (or do not choose) a cruise vacation are limited in understanding why some people "never" take a cruise vacation. Apart from the absence of systematic understanding about those who never take a cruise vacation, it seems that the existing literature provides a limited theoretical framework to examine the non-customer market of the cruise industry. This implies that a new or different conceptual framework is called for.

Studies of leisure constraints (e.g., Crawford and Godbey, 1987; Crawford, Jackson & Godbey, 1991), for example, have found that the most common constraints for leisure participation are a lack of time and money (i.e., costs or expenses) (Jackson, 2000). However, it can be argued that these reasons might not vary between or within current customer or non-customer groups (or any leisure travelers). In other words, today's busy lifestyle might not render most individuals enough free time and extra money to pursue all the leisure activities they desire.

Further, the existing studies within the leisure constraints framework raise a couple of questions. Do some leisure travelers not choose cruise vacations, because they perceive a higher level of constraints for doing so than those who take them? If the common constraints to take cruise vacations were to be removed, would they choose to go on cruise vacations? It can be argued that those who have never taken cruise vacations might do so because of factors other than constraints. That is, their interpretation of cruise vacations might de-motivate them and lead them to choose other vacation types.

Thus, the reasons that people report as reasons for not choosing cruise vacations might not be the actual influencers of their behavior, because we are often unaware of the causes of behavior or are unwilling to express them (Crompton, 1979; Dann, 1981; LeDoux, 1996; Mill & Morrison, 1985; Ritchie, 1996). Further, as cited by LeDoux (1996), neuroscientists (e.g., Gazzaniga & LeDoux, 1978; Nisbett & Wilson, 1977) have found that respondents tend to provide the reasons for behavior “from social conventions, or ideas about the way things normally work in such situations or just plain guesses” (LeDoux, 1996, p. 32). This implies that conventional research methods on tourist motivation or constraints asking respondents to report the reasons for their behavior might be limited in understanding the influencers.

A potentially better understanding of not taking cruise vacations might be achieved by examining current customers’ and current non-customers’ “frames of reference, a perceptual filter or lens between event and interpretation,” which is defined as “the set of ideas, outlooks we generally use in viewing things such as unspoken assumptions,

expectations or decision rules, which are contingent on various factors” (Zaltman, LeMasters, & Heffring, 1982, p. 21). The use of research methods infrequently used in existing tourism literature might also help understand why some people never take cruise vacations. Hence, it is believed that motivation should be understood thoroughly to assist in making both marketing and management successful. Equally important, yet much less understood is why some people do “not” choose certain behavioral options under the same or similar conditions that those who choose them.

### **Importance of the Study**

Exploration of current non-customers for the cruise industry is important, considering the continually increasing capacity of the cruise industry and the limited base of current clientele. Further, exploration seems necessary for the cruise industry’s future success, as the basic motive for leisure travelers is seeking new or different experiences, which may indicate leisure travelers’ choice to switch to other vacation types, leaving the cruise industry with current offerings that might not meet the invisible market’s needs and wants.

The types of current non-customers can vary extensively, depending on the criteria. When current non-customers refer to latent demand in a broad sense, they can include those who have never patronized as well as those who have stopped patronizing (i.e., purchase behavior) (e.g., Davies & Prentice, 1995); those who are psychologically inclined toward the supplier’s offerings; or those who can be defined based on multiple combinations of these criteria.

Awareness, interest and desire can be used to define current non-customers or non-participants. This can be traced to the classical Attention → Interest → Desire → Action (AIDA) model (Lewis, 1898) which originally depicted the influence of personal selling (later applied to public advertising) on consumer behavior (Barry, 1987). According to this model, the potential customer should be aware of the product information; be interested in the product; want to purchase the product; and only then, they purchase the product, influenced by personal selling or advertising. Similarly, interest and desire were used to categorize non-participants by Jackson and Dunn (1988).

The criteria for current non-customers in terms of both psychological and behavioral were used by Backman and Wright (1990) in which interest and past participation occurrences were based on categorizing types of non-participants. These two criteria were also used for defining customer loyalty for which both attitudinal (i.e., cognitive and affective loyalty; psychological attachment; commitment) and behavioral (i.e., conative and action loyalty; intentions to or actually re-purchase) dimensions were required (Dick & Basu, 1994; Jacoby & Chestnut, 1978; Morais, Dorsch, & Backman, 2004; Oliver, 1999). Unlike customer loyalty, categorization of current non-customers can help suppliers transcend intense competition within current customers to create their own uncontested markets.

Arguing for “reaching beyond existing demand,” Kim and Mauborgne (2005, p. 101) suggested finding out the commonalities of non-customers (i.e., aggregating new demand) is the key to success. The authors defined three tiers of non-customers according to the relative distance from current customers. The first tier is “Soon-to-be,”

those who buy an industry's offerings only when needed, but are ready to switch anytime with low psychological inclination. The second tier is "Refusing," those who refuse to buy from an industry, mainly because the offerings are beyond their means or are perceived unacceptable. Finally, the third tier is "Unexplored," those who never thought of buying an industry's offerings and have never been conceived of as a target market by an industry. They further suggested that an industry/company should concentrate on the tiers that are judged to have the most potential, given marketplace circumstances and its own strengths, but should also deepen the understanding of the commonalities across various non-customer tiers (Kim & Mauborgne, 2005).

The invisible market for the cruise industry consists of at least five different segments of current non-customers, which are comparable to Kim and Mauborgne's (2005) non-customer tiers. The first type is unmotivated non-customers whose motivation is absent (i.e., no desires are formed). This type of non-customers is comparable to "Unexplored" tier by Kim and Mauborgne (2005). They might be simply unaware of the existence of the offerings, because they have not been exposed to relevant information; have a lack of interest in learning the information they are exposed to; or are not interested in making an effort to look for new or unfamiliar information.

The second type is non-customers who are de-motivated to take a cruise vacation because their perceptions of cruise vacations are unappealing (i.e., negative or disagreeable) to them. These non-customers are comparable to "Refusing" tier by Kim and Mauborgne (2005). They might also perceive that their goals for taking leisure

vacations and cruise attributes do not match or that cruise vacations are beyond their means.

The third type is non-customers desiring to take a cruise vacation but are unable to or unwilling to negotiate the temporally or contextually constraining factors (e.g., availability of time and resources) which would be necessary and sufficient for them to form goal intentions (i.e., behavioral intentions). The fourth type is non-customers who are sufficiently motivated and have goal intentions, but do not have commitment with specific plans for when, where and how to take a cruise vacation (i.e., implementation intentions).

The fifth type is those who take cruise vacations (albeit randomly and rarely) only when circumstances are extremely favorable, but are ready to stop taking them anytime. This type is comparable to “Soon-to-be” tier based on opportunistic purchase behavior and their readiness to switch to other types of vacations. The possible reason could be that they do not associate the benefits of leisure vacations particularly with cruise vacations (Table 1-1).



Table 1-1

Comparison of types of current non-customers of the cruise industry to Kim and Mauborgne's (2005) non-customers

Type of current non-customers for cruise	Current non-customers' tier (Kim and Mauborgne, 2005)	Potential reasons for non-choice
Absence of motivation or desires	Unexplored: never thought of buying the offering of an industry; never been targeted by an industry	Unawareness: -Unexposed to information -Lack of interest to or unwilling to learn about the information exposed to
De-motivated: Not motivated to choose a cruise vacation over other vacation types	Refusing: resistant to buying the offering of an industry	Lack of desire: Perceive cruise attributes are unappealing to them (learned via either external information) -Perceive that their goals and cruise attributes do not match -Perceive cruises are beyond one's means
Not goal-intended: Motivated but unable to or unwilling to negotiate or overcome external constraints or obstacles; thus, no goal intentions	n/a	-Perceive external constraints (i.e., availability of time and resources) are insurmountable. -They might wish to take a cruise vacation, but not strong enough for forming intentions.
Not implemented: Motivated, intended, but no specific plans for a cruise vacation	n/a	-Insufficient catalysts from the marketers' to act on their motivation and intentions. -No commitment is made to act on what is wanted and intended.
Opportunistic Take cruise vacations albeit rarely only when circumstances are extremely favorable (e.g., substantial discounts by cruise lines)	Soon-to-be: buy the offering only when necessary but ready to switch to other offerings	-They do not associate the benefits of the offering uniquely with that particular offering.

In this study, current non-customers of the cruise industry (i.e., the Invisible Market) are defined as those who have never taken a cruise vacation (i.e., Non-Cruisers) and those who have not taken a cruise vacation in the past five years (i.e., Past Cruisers). The latent demand of the cruise industry consists of both of these segments who are leisure travelers who take more than one leisure vacation paid for per year and have annual household incomes over \$40,000 (CLIA, 2002, 2004).

### **Purposes of the Study**

The purposes of this study are to enhance the understanding of the currently invisible market for the cruise industry (i.e., leisure travelers who have recently stopped taking cruise vacations or have never taken a cruise vacation and choose other leisure vacation types) and to propose practical approaches for the cruise industry to utilize for taking advantage of these potential markets. This is achieved by examining how current non-customers think and feel about a cruise vacation; and comparing the perceptions of current non-customers with those of current customers. Second, it is addressed by developing and testing a model of cruise vacation choice decision-making. Third, the empirical findings are interpreted in terms of practical implications for the cruise industry.

The objectives are two-fold: 1) to systematically study the perceptions of current customers and current non-customers toward cruise vacations utilizing scientific methods unbounded by any one discipline (i.e., using photos, pictures, senses) and to compare them to find out the main differences and similarities between the two groups'

perceptions; and 2) to develop a conceptual model based on the literature and the ideas obtained from qualitative examinations and test the model by conducting a survey with randomly selected U.S. leisure travelers.

### **Organization of the Study**

Currently, there exists no specific theory or conceptual framework for examining non-cruisers (Yarnal, et. al., 2004). A recent study by CLIA (TNS/NFO Plog, 2004) has dealt with the topic, although samples have been former cruisers instead of non-cruisers who had never cruised. Hence, this study utilizes both inductive as well as deductive approaches to enhance the theoretical development of the topic.

According to Wallace's wheel (1969) model, theory development and testing can be expressed as inductive or deductive depending on the study's main purpose. The inductive route is on the left side of the circle in which repeated observations arrive at empirical generalizations, from which theories are constructed. In comparison, the deductive route is on the right side of the circle in which existing theories are tested with hypotheses and empirical data. However, it has been noted that many (if not most) research studies utilize both inductive and deductive approaches (Zaltman, LeMasters, & Heffring, 1982) and the two approaches have more commonalities than differences except for terminologies (Heath, 1992). Even in an inductive process, certain hypotheses are injected in the observer's mind, which enables selective observations in a certain context. For example, an observer is aware of "what to observe" which are relevant to the study (Figure 1-2).

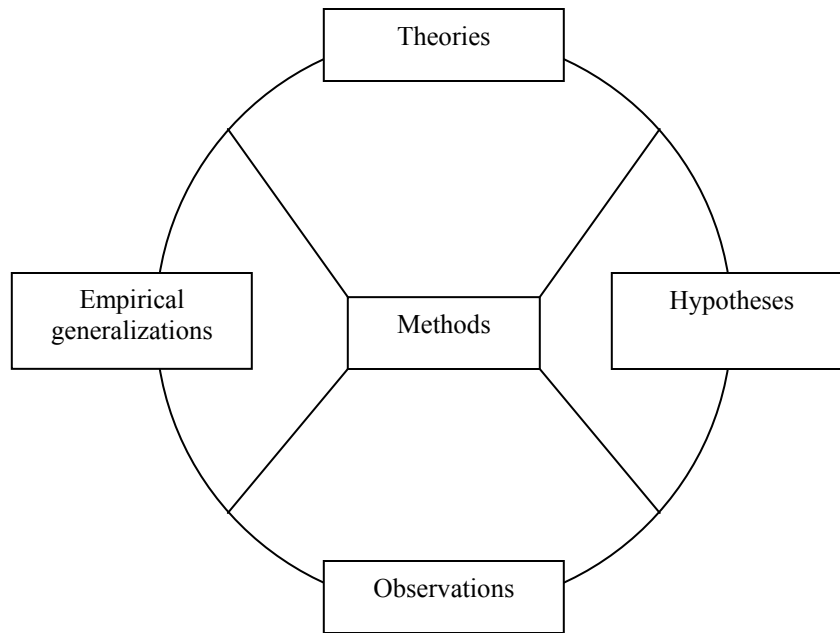


Fig. 1-2. Wallace's wheel (Wallace, 1969).

It has been argued that empirical examination on tourist motivation is challenging, mainly because people are either unwilling to reveal their real motives and motivators or are unaware of those factors (Crompton, 1979; Dann, 1981; Mill & Morrison, 1985; Ritchie, 1996).

Similarly, LeDoux (1993) argued that researchers should be careful when using “verbal reports based on introspective analyses of one’s mind as scientific data,” because “our own understanding of why we do what we do is not necessarily knowable to the conscious self” (p. 32) (also cited by Zaltman, 1997). This implies that the methods often used in the tourism literature (i.e., the use of a questionnaire or direct questioning in verbal interviews) might be limited in understanding tourist motivation. Therefore,

the same logic would apply to examining the absence of motivation or de-motivation of those who do not participate in or choose a particular leisure vacation type.

As the topic (i.e., understanding why some people do not take a cruise vacation) and the approach (i.e., an elicitation technique) of this study are relatively new, a ‘sequential study design,’ a type of mixed methodology or multi-method (Creswell, 2003; Tashakkori & Teddlie, 1998, 2003) was utilized. A sequential study design consists of two phases starting with a qualitative method and then a quantitative method based on the findings of the qualitative method for inference purposes (Tashakkori & Teddlie, 1998). Therefore, this study consisted of two phases. In Phase 1, a qualitative method was utilized and in Phase 2, based on the findings from Phase 1 as well as the literature, a conceptual model was developed and tested with a U.S. national sample.

### **Limitations and Delimitations**

This study focused on understanding leisure travelers who have stopped taking or have never taken cruise vacations and take other types of leisure vacations by comparing them with those who have taken cruise vacations in the last five years. As there is no existing conceptual framework, model or theory and extensive empirical results on this topic, the findings as a whole are exploratory in nature.

In addition to synthesizing the existing theses and models related to the topic, an extra effort was made to substantiate the findings of Phase 1 (in-depth interviews; “guided conversations” in this study) in Phase 2 (a survey of U.S. leisure travelers). Additionally, this study delimits leisure travelers in terms of duration (i.e., three nights

or more) and frequency (i.e., at least once a year) and cruise vacations in terms of duration (i.e., one night or more, excluding dinners or parties on cruise ships).

As reflected by several survey respondents' comments on reasons for late replies, the timing of the survey, during the devastating hurricane Katrina and Rita season (i.e., October to December, 2005), may have negatively affected the response rate. Accordingly, due to the low response rate, the results of this study, especially structural equation modeling should be interpreted only for investigative purposes, not confirmation of efficacy or superiority of this study's model.

### **Definition of Terms**

The following are definitions of the terms and concepts used in this study (Table 1-2). Both current customers and current non-customers of the cruise industry in this study are those who are over 25 years old with household incomes over \$40,000.

- ◆ Cruisers: current customers of the cruise industry who have taken at least one cruise vacation in the last five years
- ◆ Non-cruisers: current non-customers of the cruise industry who have never taken a cruise vacation
- ◆ Past-cruisers: current non-customers of the cruise industry who have not taken a cruise vacation in the last five years but have taken a cruise vacation in lifetime
- ◆ Invisible market: current non-customers of the cruise industry who take other types of leisure vacations but stopped or have never taken cruise vacations

- ◆ Leisure travelers: people who take a leisure vacation paid for (not paid by the company) at least once a year for more than three nights.
- ◆ Leisure vacation: vacation trips made for leisure purposes. It excludes visiting family or friends in another city or country and staying at their place, but includes your trips to other destinations while visiting your family or friends.
- ◆ Cruise vacation: an overnight trip on a commercial cruise ship where the passengers are presented with activities on-board and off-board (e.g., excursions at ports-of-call) (Longwoods, 1990; cited by Morrison, Yang, O’Leary, & Nadkarni, 2003) for the purpose of leisure.

Table 1-2  
Definitions of current customers and current non-customers for this study

	Current customers of the cruise industry	Current non-customers of the cruise industry
Taken a cruise in the last 5 years	Cruisers	
Have not taken a cruise in the last 5 years, but have taken one in lifetime		Past-cruisers
Have never taken one		Non-cruisers

## Summary of Chapter I

Based on the evolving definition of business success, it was argued that tourism businesses need to explore the unexplored market (i.e., the invisible market) instead of fiercely competing in the existing market for larger market share. This is especially important for tourism businesses, because one of the basic motives for leisure travel is to seek new or different experiences, which implies that current customers for one type of tourism business can switch to another type, leaving tourism businesses with products and services designed to meet the wants and needs of current customers.

The cruise industry was selected as a case to demonstrate this point, because of its rapidly increasing capacity and intense focus on current customers with loyalty programs. These phenomena have also alarmed business strategists of their potential similarity to the airlines industry's severe price wars, which has resulted in self-destructive effects (e.g., bankruptcy and out-of-business).

The first purpose of this study is to enhance the understanding of current non-customers of the cruise industry (i.e., leisure travelers who have stopped taking cruise vacations and have never taken a cruise vacation and choose other leisure vacation types). The second purpose is to propose practical approaches for the cruise industry to utilize to tap potential markets. This is achieved by: examining and comparing current non-customers' image of cruise vacations with those of current customers; developing and testing a model of cruise vacation choice decision; and by providing practical implications of the study findings.



## **CHAPTER II**

### **LITERATURE REVIEW AND CONCEPTUAL MODEL**

#### **Overview of Chapter II**

Tourism refers to “the study of the tourist away from their usual habitat, of the touristic apparatus and responding to their various needs, and of the ordinary (where the tourist is coming from) and non-ordinary (where the tourist goes to) worlds and their dialectic relationships” (Jafari, 2000, p. 585). Tourism as a field of study has emerged from economics in the 1960’s, but has grown at the intersections of multiple social science disciplines (e.g., anthropology, sociology, psychology and marketing) since the 1970’s (Goeldner, Ritchie, & McIntosh, 2000; Jafari, 2000; Jafari & Ritchie, 1981).

In view of the multidisciplinary nature of tourism, the behavior of the tourist has been examined from various perspectives. This chapter begins with a conceptual model for this study (“the Model” henceforth), which synthesizes various models and theories in marketing, psychology, tourism and leisure to describe, explain and predict choice-decisions.

These include models on destination image (e.g., Baloglu, 2001; Baloglu & McCleary, 1999; Beerli & Martin, 2004), destination choice (e.g., Botha, Crompton, & Kim, 1999; Woodside & Lysonski, 1989), constraints to participation in leisure activities (Crawford, Jackson, & Godbey, 1991) and the Model of Goal-directed Behavior (Perugini & Bagozzi, 2001). The delineation of the Model is followed by a review of literature on these models and eleven hypotheses for the corresponding literature.

### **Conceptual Model for the Study**

The main purpose of this study was to enhance the understanding of the “invisible market” (i.e., latent demand from current non-customers) of the cruise industry. Current non-customers of the cruise industry are defined to consist of two sub-markets of leisure travelers (i.e., those who take leisure vacations paid for at least once a year): 1) those who have never taken a cruise vacation (“non-cruisers”); and 2) those who have not taken a cruise vacation in the past five years but have taken at least one in lifetime (“past cruisers”). As suggested by Kim and Mauborgne (2005), a goal of this study was to explore the “overlapping commonalities across [different types of] current non-customers” (p. 114) of the cruise industry.

As a framework to examine current non-customers (i.e., non-participants in certain leisure activities or non-visitors to certain tourist destinations or attractions), the leisure constraints model (Crawford, Jackson, & Godbey, 1999) has been used. The leisure constraints model illustrates three types of constraints or barriers (i.e., interpersonal, intrapersonal and structural) that prevent people from pursuing or participating more often in their desired activities.

However, it has been argued that the classifications of constraints may not be as clear as presumed (Boothby, Tungatt, & Townsend, 1981; Iso-Ahola & Mannell, 1985; Jackson, 1988). In the context of current non-customers of the cruise industry, Yarnal, Kerstetter, & Yen (2005) have contested that the leisure constraints model is limited in understanding the complex nature of current non-customers. This implies that a

different conceptual model is needed for understanding and predicting the behavior of current non-customers of the cruise industry.

Therefore, in this study, a “Model of Cruise Vacation Choice Decision” was developed by synthesizing the literature on choice behavior pertaining to vacation destination (e.g., Baloglu, 2001; Baloglu & McCleary, 1999; Beerli & Martin, 2004, Botha, et al., 1999, Woodside & Lysonski, 1989), non-participation in leisure activities (Crawford, Jackson, & Godbey, 1991) and general goal-directed behavior (Perugini & Bagozzi, 2001).

A concept of image or perceptions toward destinations in models of destination image (e.g., Baloglu, 2000) and destination choice (e.g., Woodside & Lysonski, 1989) could be interconnected with the concept of attitudes toward taking cruise vacations in the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001). The concept of desires in the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001) could be hypothesized to be influenced by intrapersonal constraints (image and perceived physical attributes in this study as explained below) and interpersonal constraints based on the leisure constraints model, while structural constraints was hypothesized to influence the indicator of future behavior (i.e., intention) in this study. In addition, in accordance with the findings in studies of destination image (e.g., Baloglu, 2001; Beerli & Martin, 2004), image was also hypothesized to directly influence intention (Figure 2-1).

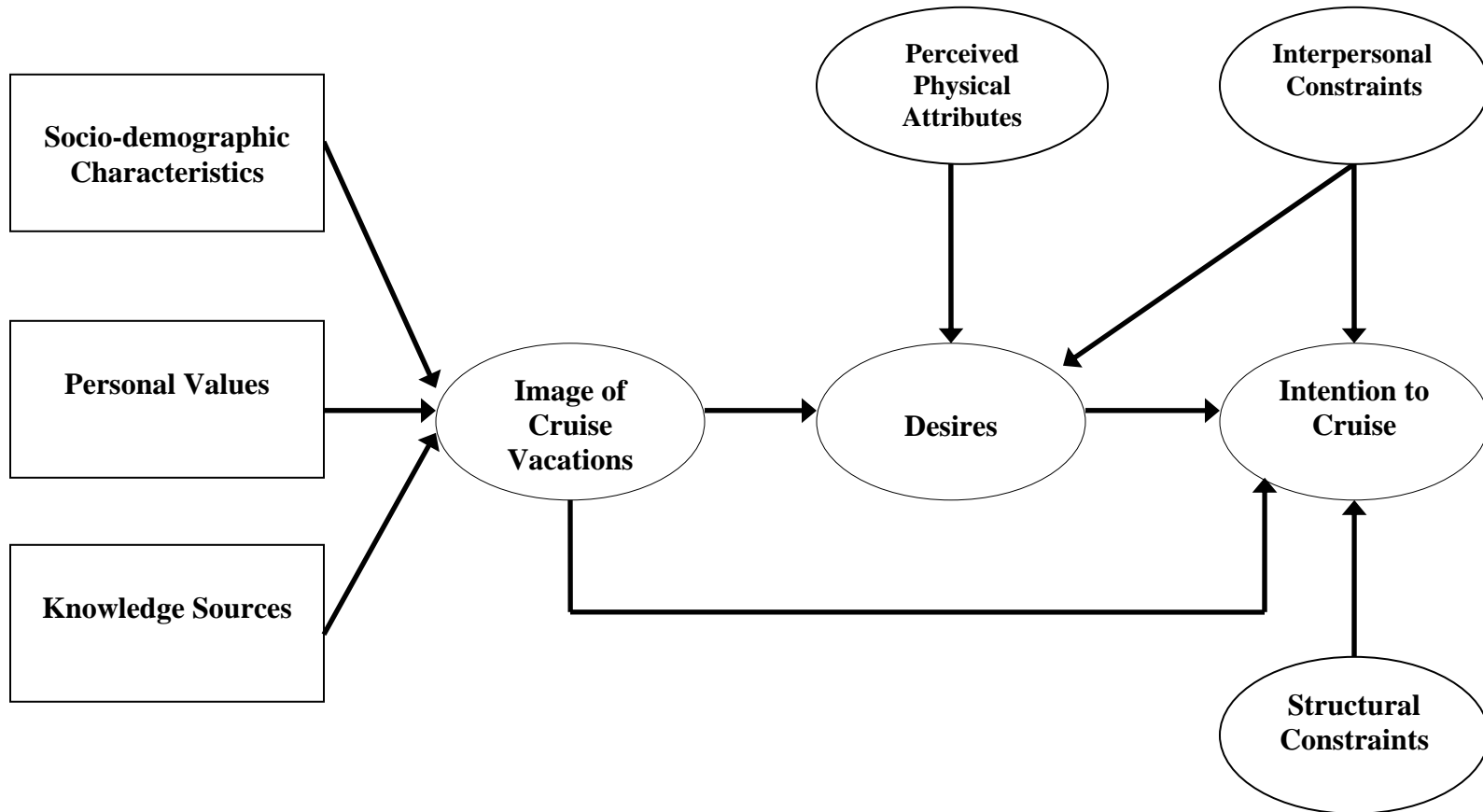


Fig. 2-1. A model of cruise vacation choice decision.

According to models of destination image (e.g., Baloglu & McCleary, 1999; Baloglu, 2000; Beerli & Martin, 2004; Um & Crompton, 1990; Um, 1993) and models of destination choice (e.g., Crompton & Ankomah, 1993; Crompton, Botha, & Kim, 1999; Woodside & Sherrel, 1977; Woodside & Lysonski, 1989; van Raaij, 1986), people's image of a destination are influenced by personal characteristics that consists of socio-demographics (e.g., age, education level and income) and personal values as well as external stimuli (e.g., various information sources from which people gain knowledge about a destination –experience, friends and family, media).

Thus, it is hypothesized in the proposed Model that *Image of Cruise Vacations* is influenced by personal factors such as *Socio-demographic Characteristics* (e.g., age and educational level) and *Personal Values* as well as by external factors such as various *Knowledge Sources*. Examination of these relationships for current customers and current non-customers of the cruise industry should yield empirical evidence for the proposed relationships among variables as well as practical recommendations for marketing efforts. *Image of Cruise Vacations* is also hypothesized to directly affect *Intentions to Cruise*, as found by studies on destination image (e.g., Baloglu, 2000; Prentice & Andersen, 2000).

According to the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001), attitudes influence desires and intention where the effects of attitudes are mediated by the effects of desires on intention. Thus, it is hypothesized in the Model that *Image of Cruise Vacations* which is assumed to be analogous to attitudes influence *Desires* to take a cruise vacation and *Intention* to take a cruise vacation in the next three years.

The leisure constraints model (Crawford et al., 1991) proposed that intrapersonal constraints influence preference or motivation (also referred to as desires) for participating in a leisure activity, while interpersonal constraints (e.g., having no companion to participate with) and structural constraints (e.g., a lack of money and time and commitments to family or work) influence the process between motivation and participation.

Thus, constraints, similar to Perceived Behavioral Control (PBC) in the Theory of Planned Behavior (TPB), are hypothesized to moderate the relationship between *Desires* and *Intention*. However, it should be noted that the concept of constraints does not contain the level of perceived confidence to perform a given behavior, the unconfounded self-efficacy effect, unlike PBC which contains both self-efficacy and perceived control over external factors. In this sense, the concept of negotiation (i.e., the extent to which people are willing to make certain concessions to perform a given behavior) may be closer to the unconfounded notion of perceived control over external factors in PBC.

Nonetheless, in this study, constraints are examined in relation to other concepts for two reasons. First, there exists only one study (Yarnal et al., 2005) which has qualitatively examined negotiation strategies for cruise vacation choice and testing negotiation strategies was not the focus of this study. Second, with the exception of a study by Hubbard and Mannell (2001), existing studies on the non-visitors or non-participants for certain leisure activities or travel destinations have utilized the concept of constraints to examine the factors that prevent them from choosing their desired activity

or destination rather than specific strategies people take to overcome them in relation to constraints.

Specifically, intrapersonal constraints “involve individual psychological states and attributes which interact with leisure preference” (Crawford et al., 1991, p. 311). Crawford et al. (1991) argued that intrapersonal constraints (i.e., “individual psychological states and attributes,” p. 311) is similar to the notion of “psychological orientations” (Huston & Ashmore, 1986; cited by Crawford et al., 1991, p. 314), which contains subjective evaluations about the competency or the ability to perform a particular behavior, normative beliefs (i.e., what s/he thinks must do or what s/he thinks others think must do) and favorable activities (i.e., what s/he likes to do).

Hence, it can be suggested that the notion of intrapersonal constraints is compatible to the three antecedents in the Theory of Planned Behavior, which include attitudes toward the behavior, subjective norm and unconfounded self-efficacy measure in perceived behavioral control, as they both are related to individuals’ beliefs and evaluations of the conditions that either facilitate or inhibit the performance of a given behavior.

As psychological states have not been examined in terms of perceptions of a given behavior as a means to goals, the concept of intrapersonal constraints are divided into two dimensions in this study as *Image of Cruise Vacations* and *Perceived Physical Attributes*, as conceptualized by Crawford and Godbey (1987) and Crawford et al. (1991). Moreover, individuals’ perception of personal physical attributes are categorized as a separate component within intrapersonal constraints in several studies on leisure

constraints (e.g., Boothby, Tungatt, & Townsend, 1981; Howard & Crompton, 1984; Um & Crompton, 1991). This separation also seems appropriate to equate perceptions of a given behavior (i.e., taking a cruise vacation stated as goal-directed behavior) with image of a given behavior and to link it with other relevant variables (e.g., *Desires, Intentions*) in the process of synthesizing various models.

As for the hypothesized direction from *Image of Cruise Vacations* and *Perceived Physical Attributes* to *Desires*, Crawford et al. (1991) argued that intrapersonal constraints are the foremost important barriers, because if individuals cannot overcome intrapersonal constraints, they “would be unlikely to enunciate the *desire* to participate in a given leisure activity” (Crawford et al., p. 314; *Italic is added*). Similarly, in models of destination choice (e.g., Seddighi & Theocharous, 2002; Woodside and Lysonski, 1989), travelers’ perceptions (i.e., cognitive mental categorization or cognitive perceptions and affective associations or feelings) have been found to influence *preferences* (*Italic is added*).

Attitudes have also been found to be mediated by *Desires* in the Model of Goal-Directed Behavior (Perugini and Bagozzi, 2001). Considering that the concept of *Desires* pertains to the motivational mindset in which cognitive and affective association processes take place to form preferences for a particular behavior, *Image of Cruise Vacations* and *Perceived Physical Attributes* which constitute intrapersonal constraints are hypothesized to influence *Desires*.



In accordance with implications from studies on leisure constraints and findings by Terry and O’Leary (1995), it can be argued that having desires is not sufficient for performing a given behavior. Specifically, choosing a type of leisure vacation may be influenced by external or situational factors that people perceive to be relatively uncontrollable (e.g., the weather conditions). Namely, this choice behavior is not entirely under people’s volitional control. The argument that perceived control over factors affecting a behavior and self-efficacy should be examined separately implies that internal and external factors inhibiting a given behavior should be examined separately (e.g., Terry & O’Leary, 1995), although they tend to be correlated, as found by Terry & O’Leary (1995), due to potentially close dependency between the two.

Nonetheless, measures of structural constraints in the existing leisure and tourism literature (e.g., Hubbard & Mannell, 2001; Nyaupane, Morais, & Grafe, 2004) seem to pertain to people’s perception of availability of resources for participating in a leisure activity and choosing a tourism destination or a leisure vacation type rather than perceptions of their ability to control those factors in order to perform a given behavior. Hence, it seems that structural constraints are similar to perceived control over factors affecting a behavior, not self-efficacy. *Structural Constraints* in this study are hypothesized to influence *Intentions* and behavior (i.e., taking a cruise vacation), based on the leisure constraints model (Crawford et al., 1991) and the literature on destination choice models (e.g., Botha et al., 1999; Woodside & Lysonski, 1989) in which it was termed as situational variables or situational inhibitors.

The concept of interpersonal constraints refers to interactions and coordination among individuals to participate in desired leisure activities such as considering the availability of activity partner, the partner's preference for activities and the suitability of partner's health. These constraints "interact with preference for and participation in" the desired leisure activities (Crawford and Godbey, 1987, p. 123). Considering that a future behavioral decision would be indicated by the extent to which individuals' willingness to perform the behavior (i.e., *Intentions*), *Interpersonal Constraints* are hypothesized to influence *Desires* and *Intentions*.

In studies on destination choice, it has been found that travelers' preferences for particular destinations (i.e., *Desires*) influenced *Intentions* to visit a destination (Muhlbacher & Woodside, 1987; Woodside & Carr, 1988). In addition, in studies on the relationship between attitudes and behavior including meta-analytic reviews (e.g., Armitage & Conner, 2001; Bagozzi, 1992; Bagozzi & Kimmel, 1995; Bratman, 1987; Leone et al., 1999; Perugini & Bagozzi, 2001; Terry & O'Leary, 1995), the concept of *Desires* has been found to be different from the antecedents of *Intentions* and *Intentions* in TPB. These studies also found that *Desires* mediate the effects of these antecedents on *Intentions*.

The effects of behavioral intentions (i.e., goal intentions) on actual behavior have been supported, albeit with mixed results. Psychologists have argued that this is because there is another type of *Intentions*, termed *Implementation Intentions* (Heckhausen, 1991; Gollwitzer 1993, 1999; Gollwitzer & Brandstätter, 1997), which refer to constructing specific plans to perform a given behavior in terms of when, where and how, indicating

not only willingness, but also commitment. The potential effects of *Implementation Intentions* can be hypothesized, but not tested in this study, however, because this would require follow-up studies in three years after conducting the current survey to measure actual behavior.

Several concepts are not included in the Model such as motives and past behavior. The basic motives for travel could be captured in *Personal Values*, as motives pertain to general “lasting dispositions recurring with cyclical regularity (Gnoth, 1997, p. 291) which can be fulfilled by a variety of behavioral options. Hence, a variable regarding basic motives is not included in the Model, as the variances among survey respondents were expected to be very small, resulting in less meaningful results.

The effect of past behavior is not included in the Model as well, because its effect has not been consistent. For example, it has not been found to change the effects of self-efficacy on *Intentions* and perceived behavioral control on behavior, although it has been found to significantly influence *Intentions* and behavior by Terry and O’Leary (1995). Ajzen (1987, 1991) has argued that past behavior cannot separately be an explanatory variable for predicting future behavior in TPB, because “perceived behavioral control mediates the effect of past [behavior] on later behavior” (p. 204).

On the other hand, Perugini and Bagozzi (2001) have found that the effect of frequency of past behavior significantly influenced *Desires* ( $\beta = 0.24$  in both weight control and study contexts) and behavior (significant  $\beta = 0.24$  in study context; not significant  $\beta = 0.04$  in weight control context), but not *Intention*, and the effect of recency of past behavior has been found not to significantly influence behavior in the study

context, albeit significant in weight control context ( $\beta = 0.23$ ). Further, past behavior has been found to significantly predict *Intentions* and/or actual behavior in other studies (e.g., Ajzen & Driver, 1992; Bagozzi & Kimmel, 1995; Leone et al., 1999; Norman & Conner, 1996; Quelling & Wood, 1998).

Finally, the notion of Family Lifecycle is not included as part of *Socio-demographic Characteristics*, because of the inconsistent categorization in the literature and its potential role as a moderator that may affect most variables in the Model. While it has been argued to be a part of personal characteristics in the models of destination image and destination choice (e.g., Baloglu & McCleary, 1999; Beerli & Martin, 2004; van Raaij, 1984; Woodside & Lysonski, 1989; Um & Crompton, 1990), it has been also argued that it is a structural constraint in the leisure constraints literature (e.g., Crawford et al., 1991) or a moderating constraint variable that affect other types of constraints (e.g., Mansfeld & Ya'acoub, 1995; Pennington-Gray & Kerstetter, 2002).

Given that family lifecycle would usually be related to age, it can be said that it is part of socio-demographic characteristics of individuals and can have constraining effects on vacation decisions. For instance, an individual having an infant can be related to his or her age, and at the same time, s/he can perceive that having an infant increases one's commitment to family, which reduces relative availability of time and money for leisure vacation. Additionally, having an infant can affect one's perception of availability for a travel partner. Nonetheless, family lifecycle is examined to compare and contrast the characteristics the current customer and non-customer groups.

Therefore, by synthesizing the interrelated concepts among the various models discussed above, the Model depicts the potential influencers and mental states of leisure travelers for choosing or not choosing a cruise vacation. Although it would be ideal to construct a model specifically for explaining and predicting non-choice behavior of cruise current non-customers, the conceptual development and empirical evidence in this area were not sufficient to achieve it. Thus, the Model is also tested on current non-customers as well as current customers of the cruise industry for comparison purposes.

Similar to the limitation of most existing models, the Model is limited in understanding the influence of travel group dynamics or the detailed processes of decision-making, which could be examined in a longitudinal study design. Nonetheless, it is believed that the Model is a first attempt to synthesize various models as stated above that can be interconnected to enhance conceptual development for understanding current non-customers in relation to current customers. Specifically, the relationships among concepts such as image, desires and constraints based on the literature in the Model are hypothesized and are simultaneously tested, which has yet to be done.

While the details of operational definitions (i.e., measurement scales) are presented in the methodology chapter (i.e., Chapter III), the meaning of the concepts in the Model were defined as follows:

- ◆ **Socio-demographic Characteristics:** Indicators that characterize individuals such as age, income and educational level.
- ◆ **Personal Values:** Organized sets of standards that are used by individuals for guiding their thoughts and behavior

- ◆ **Knowledge Sources:** Mechanisms through which individuals gather and learn information on cruise vacations. Internal sources include Experience and Family and Friends, whereas external sources include publicly available sources such as print media (e.g., magazines, newspapers, brochures, and pamphlets), TV programs, commercial intermediary (i.e., travel agencies, travel/auto clubs) or governmental agency (i.e., Convention and Visitors' Bureaus)
- ◆ **Image of Cruise Vacations:** Thoughts and feelings toward taking cruise vacations
- ◆ **Perceived Physical Attributes:** Perceptions about the extent to which physical attributes (e.g., health, sea-sickness, claustrophobia, disability) inhibit taking cruise vacations
- ◆ **Interpersonal Constrains:** Barriers affecting the conditions between individuals such as having no companion to take a cruise vacation with
- ◆ **Structural Constraints:** Situational or external conditions that individuals perceive to be constrains to taking a cruise vacation (e.g., availability of time, money)
- ◆ **Desires:** The motivational state of mind wherein appraisals and reasons to act are transformed into a motivation to do so (Perugini & Bagozzi, 2001, p. 84)
- ◆ **Intention to Cruise:** Instructions people give to themselves to behave in certain ways (e.g., "I am going to take a cruise vacation") (Triandis, 1980, p. 203)

In the following, a review of literature on destination image, destination choice, constraints to participation in leisure or tourism activities and the Model of Goal-directed Behavior are presented.

### **Destination Image**

Tourists' image of travel destinations has been recognized as an important factor in understanding tourist behavior. Images or perceptions that tourists have of travel destinations have been found to influence intentions to visit a destination (Baloglu, 2000; Chalip, Green, & Hill, 2003; Chen & Kerstetter, 1999; Milman & Pizam, 1995; Woodside & Lysonski, 1989); final choice of destination to visit (Moutinho, 1984; Woodside & Lysonski, 1989); behavior during their visit (Hunt, 1975; Pearce, 1982; Chon, 1990); and evaluations of their experience during and after travel (Chon, 1991, 1992; Fairweather & Swaffield, 2002; Lee, Lee, & Lee, 2005).

From a practical perspective, findings of destination image studies have been connected to the marketing efforts of travel destinations in terms of positioning strategies and market segmentation to tailor promotional strategies suitable for target markets (Ahmed, 1991; Baloglu & McCleary, 1999; Bonn, Joseph, & Dai, 2005; Chen & Kerstetter, 1999; Calantone, Benetton, Hakam, & Bojanic, 1989; Court & Lupton, 1997; Dadgostart & Isotalo, 1995; Dolnicar & Grabler, 2004; Fakeye & Crompton, 1991; Goodall, 1988; MacKay & Fesenmaier, 1997; Pike & Ryan, 2004).

Although there has yet to be a unified definition of destination image (Baloglu & McCleary, 1999; Echtner & Richie, 1991, 1993; Gallarza, Saura, & García, 2002), it has been largely used to refer to travelers' total evaluations, impressions or perceptions of destinations, which contain cognitive (e.g., thoughts) and affective (e.g., feelings and emotions) components.

According to Gunn (1972), destination images are formed and modified throughout stages of travel decision-making and behavior from organic, induced and modified-induced images. Organic images are mental representations of a destination created by exposure to external sources (e.g. school learning, stories related to travel destinations). Induced images are organic images modified by destination-specific information before one's decision to travel (e.g., travel brochures, advertisements). Finally, modified-induced images are altered images after travel experience to a destination. This modification process of destination image has been empirically examined in terms of time by Gartner and Hunt (1987) who found that Utah's image had changed positively in 1983 compared to 1971 and in terms of before and after visitation by Chon (1991) who reported a positive change in image of Korea after tourists' visit to the destination.

As the concept of destination image has been treated and measured similar to attitudes (Baloglu & McCleary, 1999; Gallarza, et al., 2002), the measurement of destination image has been mostly based on attributes of the place not "holistic impressions" of the place (Echtner & Richie, 1991, p. 6; Jenkins, 1999). A widely used method for analyzing destination image has been comparing and contrasting Importance vs. Performance or Expectations vs. Satisfaction. That is, respondents have been asked to rate the level of importance of the items extracted from the literature for their image toward a destination and to rate the level of performance for those items (i.e., evaluation). Then, the differences between the level of importance (as expectations) and performance evaluations (or in some cases, satisfaction levels) are used to examine strengths and



weaknesses of destinations perceived by tourists or potential tourists or to compare sub-groups based on those ratings to tailor marketing programs. Thus, this analysis process is similar to that of expectancy-value models (Vroom, 1964; Fishbein, 1967).

However, researchers have argued that destination image has to be examined using both structured and semi- or un-structured methods (Echtner & Richie, 1991, 1993; Govers & Go, 2001; Jenkins, 1999). Further, the survey items should be relevant to the study populations, considering the complex nature of tourism offerings that are different from products and services purchased and consumed in people's home environment (Echtner & Richie, 1991, 1993; Govers & Go, 2001; Jenkins, 1999).

Although some studies have utilized qualitative methods such as free-elicitation (Reilly, 1990), repertory grid method (Embacher & Buttle, 1989; Botterill & Crompton, 1987; Walmsley & Jenkins, 1993) and photo-elicitation (Botterill, 1989), most image studies have used structured methods (Echtner & Richie, 1991, 1993; Jenkins, 1999). It also has been argued that sensory components (i.e., tactile, auditory and olfactory) are crucial parts of people's image of places as emphasized in environmental psychology (Pearce, 2005).

Compared to many studies on the dimensions of destination image and the relationship between image and destination choice, the formation process of destination image along with the factors influencing the process, has been lacking (Baloglu & McCleary, 1999; Gallarza et al., 2002; Phelps, 1986). Specifically, the image formation process for people who have yet to visit the destination has rarely been examined

(Baloglu & McCleary, 1999; Gallarza et al., 2002), because it is challenging to conduct longitudinal studies, albeit the potential benefits they could elicit.

For example, Baloglu and McCleary (1999) have noted that “an ideal case” for their study of destination formation process would have been to differentiate those who “have not visited all four destinations” under examination from those who have not visited one of the four (p. 891). Similarly, Beerli and Martin (2004) have pointed out that their study’s “transversal nature made it impossible to measure the pre-visit image of the destination” (p. 678) and recommended longitudinal studies. The importance of examining destination image prior to actual visitation has also been argued by Oliver (2003) who found that tourists’ pre-visit destination image had not changed after visiting.

According to the literature on destination image and destination choice which incorporates image or attitudes toward destinations (e.g., Baloglu & McCleary, 1999; Baloglu, 2000; Beerli & Martin, 2004; Woodside & Lysonski, 1989; Um & Crompton, 1990; Um, 1993), there are two dimensions of factors that influence the formation of destination image. That is, people conceive cognitive and affective associations with destinations in their minds which are influenced by personal characteristics such as socio-demographic (e.g., age, income and education) and psychological characteristics and what they learn about destinations from various external stimuli (e.g., word-of-mouth, media and marketing campaigns) (Figure 2-2).

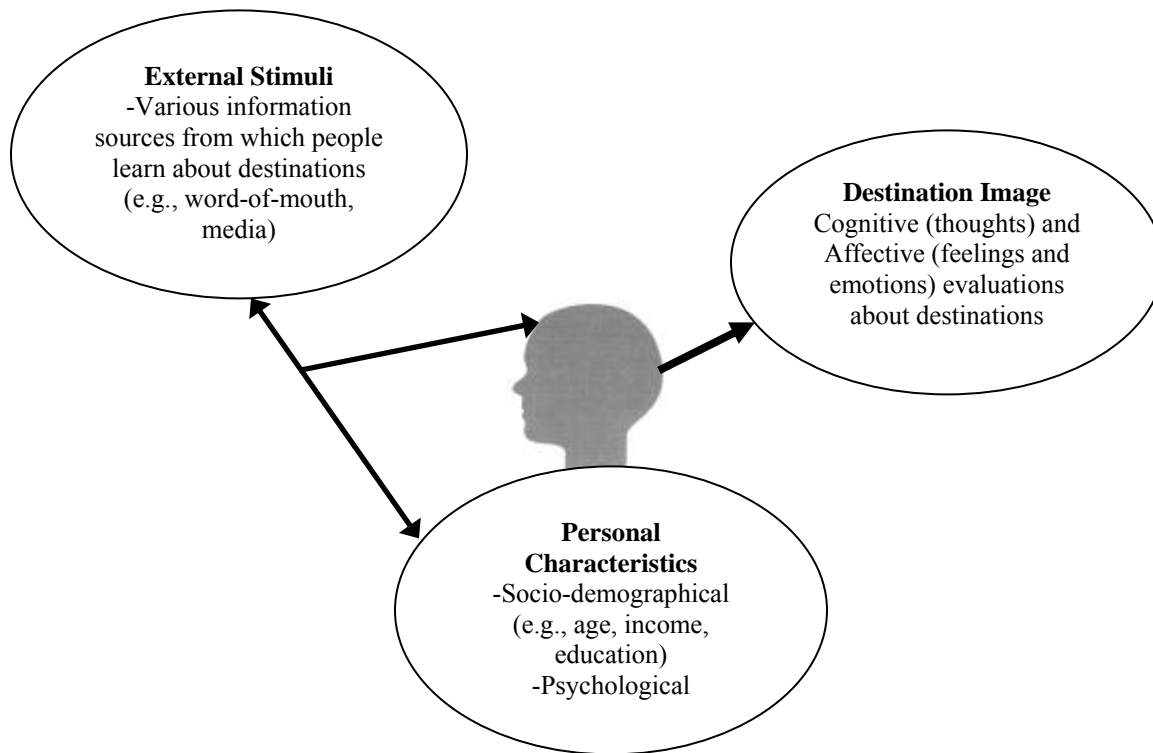


Fig. 2-2. An illustration of destination image formation.

Note: Based on Baloglu & McCleary, 1999; Baloglu, 2000; Beerli & Martin, 2004; Woodside & Lysonski, 1989; Um & Crompton, 1990; Um, 1993

### *Personal Characteristics*

In studies on destination image, factors related to personal characteristics have been categorized as socio-demographic and psychological characteristics. Factors pertaining to socio-demographic characteristics that have been found to influence destination image include age (Baloglu, 1997; Baloglu & McCleary, 1999; Husbands, 1989), education (Baloglu & McCleary, 1999; Beerli & Martin, 2004; Husbands, 1989), gender (Chen & Kerstetter, 1999), occupation, income, marital status (Calantone, et al.,

1989), country of origin (Beerli & Martin, 2004; Bonn, Joseph, & Dai, 2005; Chen & Kerstetter, 1999; Correia & Crouch, 2003) and country of residence (Cohen, 2003; Kozak, Bigne, Gonzalez, & Andreu, 2003; MacKay & Fesenmaier, 2000).

As for psychological factors, people's basic motives for travel influence destination image, which include the importance of relaxation or escape from the usual environment; excitement and adventure; learning new or different things; socialization; and prestige (Baloglu & McCleary, 1999). In addition, people's self-image has been shown to influence the way people perceive destinations (Chon, 1992; Kastenholz, 2004; Sirgy & Su, 2000).

However, factors such as life-stage or -style, personality and personal values have not been examined in the context of destination image, although they have been argued to be part of personal factors. Beerli and Martin (2004) have suggested that values and life-style should be examined for their influences on destination image. A concept closely related to age is family lifecycle (Collins & Tisdell, 2002; Wells & Gubar, 1966), which has been recognized to be an influential demographic variable (Collins & Tisdell, 2002; Lawson, 1991; Mieczkowski, 1990; Oppermann, 1995a; 1995b).

The effect of family lifecycle has been examined in relation to cohort effects (Oppermann, 1995b), the amount of expenditures and types of vacation choice (Lawson, 1991), outbound travelers' various purposes of overseas trips such as business, visiting family and friends and education (Collins & Tisdell, 2002) and destination choice (Oppermann, 1995b). Collins and Tisdell (2002) found that the number of outbound travelers from Australia for a holiday purpose peaked at two family lifecycle stages (i.e.,

bachelor or pre-marriage and a couple whose children are matured and left home or empty nest).

As per studies on cruise vacations, the potential effect of family lifecycle has not been examined by CLIA (2002, 2004) or by Yarnal et al. (2005) for current customers and current non-customers of the cruise industry, although the latter authors have reported cohort effects in relation to travel histories. Due to this lack of empirical evidence, family lifecycle is explored in the current study by comparing current customers and current non-customers.

#### *External Stimuli*

External stimuli that influence destination image refer to various information sources to which people are involuntarily exposed or from which people gain knowledge about travel destinations as a result of active information search. These information sources include the environment (Engel, Blackwell, & Miniard, 1995; also cited by Kerstetter & Cho, 2004; Gitelson & Crompton, 1983) and social interactions (Howard & Sheth, 1969). Namely, external sources include word-of-mouth (i.e., from friends and family), travel advertising by destination management organizations, travel guide books and travel agents' advice.

External sources also include those that are not specific to travel such as TV programs, movies, news, magazines, newspapers, and the Internet (Baloglu & McCleary, 1999; Beerli & Martin, 2004; Gunn, 1972; Kerstetter & Choi, 2004). Some of these internal and external sources have been included and examined within destination image

and destination choice models (e.g., Crompton, 1990; Fakeye & Crompton, 1991; Woodside & Lysonski, 1989; Um & Crompton, 1990). Similar categories of information sources for travel are informal (i.e., personal experience, interpersonal interactions or social environment) and formal (i.e., commercial sources of distribution intermediaries for travel services such as travel agents or tourism information offices) (Gitelson & Crompton, 1983; Hsiesh & O'Leary, 1993; Mansfeld, 1992).

Alternatively, the level of people's familiarity has been measured either as familiarity formed from experience (internal source; Beerli & Martin, 2004; Bignon, Hammitt, & Norman, 1998; Getz, 1991; Chen & Kerstetter, 1991; Chon, 1991), and/or familiarity established via exposure to information about the destination (external source; MacKay & Fesenmaier, 1997; Milman & Pizam, 1995). Most researchers have found a positive relationship between the level of familiarity and the valence of image, except for Chen and Kerstetter (1991) who found no significant differences in image toward rural areas in Pennsylvania between students who were familiar (measured by previous visit or past residence) versus not familiar. This is in line with the findings in neuropsychology and cognitive science that people tend to prefer or evaluate objects more positively when they are more familiar with them via exposure (e.g., Lee, 2001; Regard & Landis, 1988; Zajonc, 1980, 2001).

Other factors that have been found to influence destination image include length of stay (Fakeye & Crompton, 1991) and distance to the destination (Crompton, 1979; Fakeye & Crompton, 1991; Schroeder, 1996). For example, Fakeye and Crompton (1991) found that the longer the tourist stayed in a destination, regardless of the number of

previous visits to the destination, the more positive their image about Social Interaction Opportunities & Attractions and Infrastructure, Food & Friendly People dimensions. Similarly, the closer the tourist resided to the destination, the more positive their image about Infrastructure, Food & Friendly People dimensions.

In the context of a cruise vacation, previous research has revealed that cruisers utilize word-of-mouth the most (40%) as an information source when choosing a cruise vacation (TNS/NFO Plog, 2004). However, it is not yet known from which information sources people with, versus without, previous cruise experience gain knowledge about cruise vacations. Nonetheless, as found by Kerstetter and Cho (2004), people with previous experience based their perceptions on their internal knowledge, because they trusted it more than other information sources.

As non-cruisers have no previous experience, their knowledge about cruise vacations inevitably has to be based on various external sources. In particular, word-of-mouth (i.e., Friends & Family) has been found to be the most often use information source for both current customers (40%) and non-cruisers who take other leisure vacation types (47%) (TNS/NFO Plog, 2004). Therefore, non-cruisers probably gain much of their knowledge about cruise vacations from other people who have been on cruise vacations or whom they consider knowledgeable about cruise vacations.

As for the effects of previous experience, it has been shown in studies on destination image that the influence of previous experience on perceptions toward destinations is significant, but there has yet to be enough evidence suggesting specific relationships between them (Baloglu & McCleary, 1999; Beerli & Martin, 2004). In the

context of cruise vacations, previous research has yet to examine the relationship between previous experience and perceptions toward cruise vacations.

Although this study does not measure the level of satisfaction with previous cruise experience, it would be logical to assume that cruisers take multiple cruise vacations somewhat due to positive perceptions. With this assumption, it can be purported that the more the cruiser has taken cruise vacations, the more positive their image of cruise vacations. In a similar vein, those who have previous cruise experience should perceive cruise vacations more positively than those who have never taken a cruise vacation or have stopped taking cruise vacations in the past five years. Thus, it is hypothesized that:

**Hypothesis 1: The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive.**

**Hypothesis 2a: Current customers' *Image of Cruise Vacations* is more positive than that of past-cruisers.**

**Hypothesis 2b: Past-cruisers' *Image of Cruise Vacations* is more positive than that of non-cruisers.**



### **Tourists' Choice of Travel Destination**

Models of how tourists choose a travel destination to visit (i.e., tourist decision-making models or destination choice models) are usually based on the classical consumer behavior models (e.g., Engel, Kollat, & Blackwell, 1968; Howard & Sheth, 1969) that attempted to illustrate the consumer's decision-making process when choosing a product or service (Gnoth, 1997). These classical models are combinations of behavioral and cognitive approaches that represent the processes which consumers go through, whereby external stimuli (e.g., product or service information from media) influence the consumer's perceptual and learning processes leading them to reach a final choice (Zaltman & Wallendorf, 1976).

Among various consumer behavior models, information-processing models focus on consumers' learning processes for developing effective advertising. These models illustrate how advertising messages are registered and processed by consumers, how the advertised products and services are perceived and how these processes are linked to actual purchase and consumption and/or attitude change. These include a Model for Predictive Measurements of Advertising Effectiveness (Lavidge & Steiner, 1961), Information-Processing Model (McGuire, 1968), the Foote, Cone and Belding (FCB) Grid (Vaughn, 1980) and Elaboration Likelihood Model (Petty & Cacioppo, 1986).

Similarly, other cognitive approach models of consumer decision-making illustrate that once consumers recognize needs or wants (i.e., problem recognition), they search for and evaluate information related to product or service alternatives, choose one

alternative and then evaluate the choice after consumption (Assael, 1998; Engel & Blackwell, 1982).

Models of tourists' choice of destination have been developed within the consumer behavior framework to understand the processes of decision-making and within the economic framework to predict tourists' choice (Pearce, 2005). According to Seddighi and Theocharous (2002), many economic models of destination choice which have been mainly for demand forecasting purposes (e.g., Crouch, 1993; Johnson & Ashworth, 1990; Lim, 1997; Song & Witt, 2000), have been econometric models. The main finding of these studies has been that price is the most important factor in predicting tourist demand or flows.

However, it has been argued that these models are limited in understanding people's choice and in applying the results to management strategies, because characteristics of destinations have not been taken into account (Koppelman, 1980; Morley, 1992; Papatheodorou, 2001; Seddighi & Theocharous, 2002). Hence, Seddighi and Theocharous (2002) have included the effects of people's perceptions (i.e., evaluations and feelings) of destinations to predict their choice, similar to the models of destination image in which cognitive and affective evaluations are examined.

Within the framework of consumer behavior models, the process of choosing a travel destination to visit has been examined in relation to the factors that influence the process. These factors include person-related variables such as personal profiles (i.e., socio-demographic or socio-economic characteristics) and push factors (i.e., inner motives) and external factors such as marketing variables (e.g., advertising, promotion).

Based on the effects of these personal and external factors, once people decide to take a leisure vacation, a logical last step is that they search for relevant information.

During destination selection processes, people go through cognitive and affective evaluations in the form of perceptions towards a destination's characteristics (i.e., destination image) and/or mental categorization of destination alternatives based on evaluations. Models that have focused on mental categorization processes have argued that people have an array of destinations in their minds, which are reduced to a final destination choice (Botha, et al., 1999; Crompton, 1992; Crompton & Ankomah, 1993; Crompton, Botha, & Kim, 1999; Woodside & Sherrel, 1977; Woodside & Lysonski, 1989; van Raaij, 1986). In turn, these mental processes influence people's preference for a certain destination over alternatives, develop intentions to visit and actually visit the destination. Further, some destination choice models (e.g., Baloglu, 2000; Corey, 1996) have incorporated post-visit evaluations and future intentions to re-visit the destination.

Apart from evaluative or conscious mental processes, as argued in destination image models (Koppelman, 1980; Seddighi & Theocharous, 2002; Woodside & Lysonski, 1989), affective associations (i.e., emotions and feelings elicited from objects) have been found to influence preferences, evaluations and decision-making in consumer behavior (Bagozzi, Baumgartner, Pieters, & Zellenberg, 2003; Zajonc, 1980; Zaltman, 1997; 2004).

Thus, the process of destination choice can be used to illustrate personal factors and external factors influence people's information search behavior and the contents of information. Based on this information and cognitive and affective images of alternative destinations are formed. Then, people evaluate and categorize alternative destinations and develop preferences for and intentions to visit certain destinations. Given that situational factors are not constraining the choice of a destination and the conditions to travel, people choose a final destination to visit (Figure 2-3).

Similarly, the effects of unconscious processes have also been found to influence judgment and choice. For example, non-analytic examination (e.g., scenarios and analogies) as opposed to analytic examination (e.g., counterfactual reasoning) has been found to have persistent effects on the judgment of new products (Bolton, 2003).

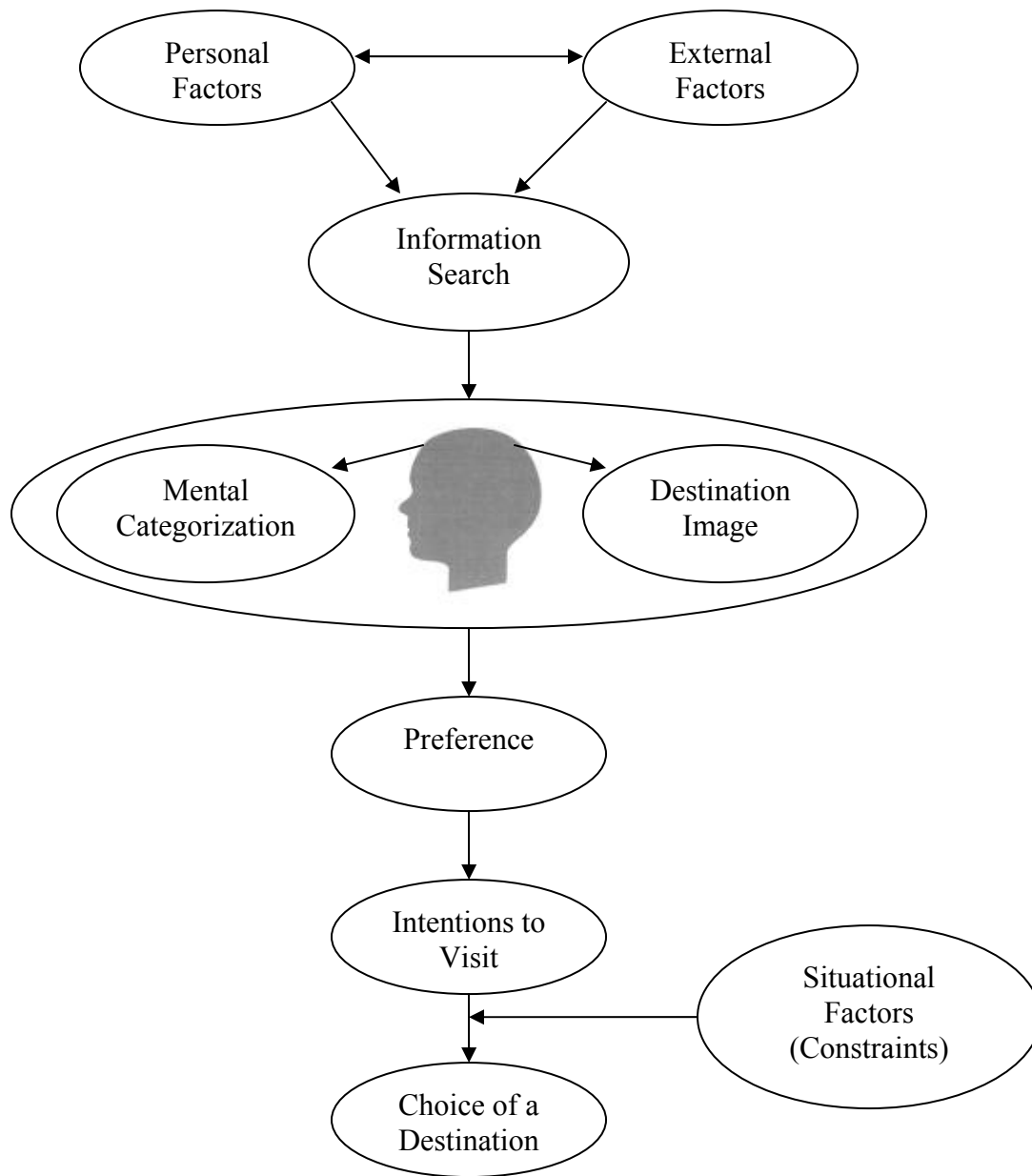


Fig. 2-3. A framework of destination choice process.

The automaticity of attitudes and affects triggered by environmental cues (e.g., music, the presence of other people, events or objects) have also been found to have an effect on consumer choice and behavior, in addition to conventionally presumed systematic information-processing (Bargh & Ferguson, 2000; Chartrand, 2005; Dijksterhuis, Smith, Baaren, & Wigboldus, 2005).

Various motives for travel have been found to be associated with tourists' behavior (e.g., choice of destination and activities) such as seeking novelty (Lee & Crompton, 1992; Jang, 2002; Jeong & Park, 1997; Petrick, 2002) or variety (Richards, 1995; Niininen, Szivas, & Riley, 2004), and knowledge, fun and excitement (Jang, 2002). Further, risk-taking and sensation-seeking (Pizam, Jeong, Reichel, Boemmel, Lusson, Steynberg, State-Costache, Volo, Kroesbacher, Kucerova, & Montmany, 2004) have also been found to influence tourists' behavior. Pizam et al. (2004) found that those who had high risk-taking and sensation-seeking motives participated in the corresponding tourist activities such as adventures or sports.

As for socio-demographic factors, studies have found that people's income (Dadgostar & Isotalo, 1992; Mohsin & Ryan, 2004), religion (Coles & Timothy, 2004; Mansfeld & Ya'acoub, 1995), nationality, country of origin or ethnicity (Caneen, 2003; Chadee & Cutler, 1996; Sheldon & Fox, 1988), family lifecycle and cohort effect (Oppermann, 1995a; Yarnal, Kerstetter, & Yen, 2005) and age (Dadgostar & Isotalo, 1992) have effects on their choice of destination. In studies which have examined the effects of religion, nationality and country of origin, people's behavior has been found to be influenced by their cultural values. Another person-related factor includes familiarity

with the destination, as it has been found that those who are familiar with a destination, either from their own previous visits or exposure to destination-specific information (Mansfeld & Ya'acoub, 1995; Prentice & Andersen, 2000; Woodside & King, 2001; Woodside & Lysonski, 1989), are more likely to intend to or actually revisit the destination.

It has also been found that the importance levels of a variety of destination attributes have an influence on tourists' choice of destination. These attributes include climate (Lise & Tol, 2003), price or cost of travel (Eymann & Ronning, 1997; Morley, 1995), safety (Mok & Armstrong, 1995), amenities such as shopping (Moscardo, 2004), political stability such as terrorism (Seddighi & Theocharous, 2002; Sonmez & Graefe, 1998) and distance from home (Brown & Getz, 2005; Dadgostar & Isotalo, 1992; Eymann & Ronning, 1997; Fesenmaier, 1988). Meanwhile, McKercher (1998) and Mok & Armstrong (1995) found that distance from tourists' home to a destination have no effect on their choice of destination.

These destination attributes have been termed "pull" factors and have been examined as motivating variables for destination choice, parallel to motives (i.e., push factors), not as consequences of motives (Dann, 1977; Klenosky, 2002). However, the argument that push and pull factors should be treated separately has been argued to be logically incorrect (Dann, 1977). For example, Dann (1977) contested that push factors should be examined as antecedents of pull factors. He stated, "...while a specific resort may hold a number of attractions for the potential tourist, his actual decision to visit such a destination is *consequent* on his prior need for travel...by examining what makes

tourists travel, one is looking at a more elementary (and by implication, casually prior) need than a specific reason for choice of resort (of secondary causal nature)” (p. 186).

Similarly, Klenosky (2002) argued that mixing push and pull factors in statistical analysis is misleading, because the importance of pull factors’ bases “would differ considerably,” because “each attribute may drive its importance or meaning from very different sources” (p. 386). Using Gutman’s (1982) means-end chain model, he showed the interrelationships between push factors and pull factors in which the former preceded the latter. Klenosky (2002) concluded, “As Crompton (1979) pointed out, these two sets of factors should not be viewed as operating entirely independent of each other” (p. 394).

Hence, it is important to examine the underlying criteria or standards on which people base their behavior to understand which factors fundamentally “pull” their choice decision. In this respect, values have been regarded as the main driving forces underlying consumer behavior.

### *Personal Values*

The role of values for understanding human behavior has been acknowledged since ancient Greek time (Kahle & Kennedy, 1988). In modern social sciences, the concept of personal values has been found to influence people’s cognitive evaluations, motivations and choice behavior (Becker & Conner, 1981; Crick-Furman & Prentice, 2000; Dichter, 1984; Gnoth, 1997; Kahle, 1983; Rokeach, 1973, 1979). Personal values are defined as “organized sets of preferential standards that are used in making selections of objections and actions, resolving conflicts, invoking social sanctions, and coping with



needs or claims for social and psychological defenses of choice made or proposed” (Rokeach, 1979, p. 20). These “internal standards serve as the basis for regulating one’s conduct and are relatively stable” (Bandura, 1991, p. 276).

It has also been suggested that personal values are useful for segmenting markets (Boote, 1981; Kahle, 1986; Kahle & Kennedy, 1988; Kahle, Liu, & Watkins, 1992; Kamakura & Novak, 1992; Muller, 1991; Pitts & Woodside, 1984). In the tourism and leisure literature, personal values have been examined in relation to destination pull factors (Klenosky, 2002); their effects on the importance of athletic goals and processes (Trail, 2002); and market segmentation and tourist behavior (Hede, Jago and Deery, 2004; McCleary & Choi, 1999; van Veen and Verhallen, 1986).

Nonetheless, the conceptualization and operationalization of personal values has been controversial (Crick-Furman & Prentice, 2000; Shrum, McCarty, & Loeffler, 1990). While it has been argued that values are enduring (Rokeach, 1983; Schultz, 1992; Kahle, 1986), it has been also argued that they are dynamic, conflicting and contextual (Kahle, Beatty, & Homer, 1986; McCarty & Loeffler, 1990; Crick-Furman & Prentice, 2000).

One of the most widely used scales for measuring values is the Rokeach Value Survey (1983) which consists of 18 terminal values pertaining to general goals in life (e.g., a world at peace; family security; freedom) and 18 instrumental values regarding human characteristics (e.g., ambitious, broad-minded, cheerful) . However, this scale has been criticized for the difficulty of rank-ordering of the items when respondents must compare 18 terminal and instrumental values and place them according to each item’s relative importance.

The List-of-Value (LOV) scale is a shortened version of the terminal values in the Rokeach Value Survey and was developed to reduce this difficulty (Kahle & Kennedy, 1988). According to Kahle and Kennedy (1988), the LOV is also based on studies by Feather (1975) and Maslow (1954). It consists of nine items (i.e., sense of belonging; excitement; warm relationships with others; self-fulfillment; being well-respected; fun and enjoyment of life; security; self-respect; and a sense of accomplishment), measured on a nine-point scale ranging from “not at all important” (1) to “very important” (9). According to Kahle, Beatty and Homer (1986), the nine items of L-O-V can be categorized according to Rotter’s (1966) internal (excitement, warm relationships with others, self-fulfillment, fun and enjoyment of life, self-respect and a sense of accomplishment) or external (a sense of belonging, being well-respected and security) locus of control.

However, Kahle, Beatty and Homer (1986) cautioned that “factor structure is contextual” (i.e., depending on the study context), although internal versus external locus of control items would seem to result in two factors. Additionally, the LOV scale has been shown to predict a variety of consumer attitudes and behavior better than the Values and Life Style scale (VALS; Mitchell, 1983) which is based on Maslow’s (1954) hierarchy of needs (Kahle, et al., 1986).

Another scale for measuring personal values is Schwartz Value Scale (SVC; Schwartz, 1992), which consists of 57 value statements (e.g., equal opportunity for all; control over others), measured on a nine-point scale ranging from “not at all important” (1) to “very important (9). However, this might be too long of a list for respondents.

Despite the recognition that personal values are important in people's destination image and choice, this concept has been used mainly for segmenting and describing tourist markets. For cruise current customers and current non-customers, it has yet to be known if the two groups have different personal values, and if so, how they differ. Testing this question may also yield insight into whether there are distinctively dissimilar sub-groups within the customer and non-customer groups. Based on the aforementioned studies on the effects of personal values on attitudes, image and behavior, it was hypothesized for the cruise vacation context that:

**Hypothesis 3: *Personal Values* have a significant effect on *Image of Cruise Vacations*.**

In the context of tourism, for which choice is not made as often as conventional products and services (Crompton, 1992), it has been argued that it is important to take into consideration that people are faced with diverse factors inhibiting their desires and intentions for taking a leisure vacation. Factors inhibiting one's preference for and participation in leisure activities have been a major topic of leisure research, and have been termed "leisure constraints."

### **Constraints to Leisure and Tourism**

Leisure constraints have been discussed for more than a century and are one of the main research themes in leisure research (Jackson, 2000). The initial theoretical framework was formally documented in the late 1980's and early 1990's (Crawford &

Godbey, 1987; Crawford, Jackson, & Godbey, 1991) and has been discussed by many leisure researchers. Constraints or barriers refer to the factors that prevent people from participating in their desired leisure activities. Further, constraints inhibit people from “participating in their desired leisure activities more often” (Jackson, 1988, p. 203). It has been suggested that constraints to leisure activities can be categorized in three dimensions (i.e., intrapersonal, interpersonal and structural), which “hierarchically influence leisure activity preference and participation” (Crawford & Godbey, 1987, p. 122).

Intrapersonal Constraints pertain to “individual psychological states and attributes which interact with leisure preferences” and include “stress, depression, religiosity, kin and non-kin reference group attitudes, prior socialization into specific leisure activities, perceived self-skill and subjective evaluations of the appropriateness and availability of various leisure activities” (Crawford & Godbey, 1987, p. 122; Crawford et al., 1991, p. 311). These have been suggested to interact with people’s preferences rather than intervene with preferences and participation.

However, considering the important role of destination image on choice (e.g., Hunt, 1975; Moutinho, 1984; Woodside & Lysonski, 1989), psychological states pertaining to the image of the leisure activity as part of individuals' predisposition seem to be missing in Intrapersonal Constraints. There have been a few studies that have reported image to be a barrier to visitation and/or participation (LaPage & Cormier, 1976; Prince & Schadla-Hall, 1985; Williams & Fidgeon, 2000)

Further, Intrapersonal Constraints have been purported to be confronted first and are thus the "most powerful" factors to be negotiated. As stated by Crawford et al. (1991), when a person cannot overcome these factors, s/he "would be unlikely to enunciate the desire to participate in a given leisure activity" and "would not reach the stage of encountering higher order constraints (i.e., Interpersonal and Structural Constraints)" (p. 314).

Interpersonal Constraints are the consequences of intrapersonal constraints among individuals who accompany each other for leisure activities (e.g., activity partner or spouse), which affect group preference or decisions. Structural Constraints are situational variables (e.g., family lifecycle stage, availability of time, opportunity or money) that are proposed to mediate the relationship between preference and participation.

According to the leisure constraints model (Crawford, Jackson, & Godbey, 1991), people are constrained first by intrapersonal barriers that influence their preference for leisure activities and then face interpersonal barriers which influence the process between interpersonal coordination and comparability and preference for leisure activities. At last, people face structural constraints, which influence the process between interpersonal coordination and comparability and participation or non-participation (Figure 2-4).

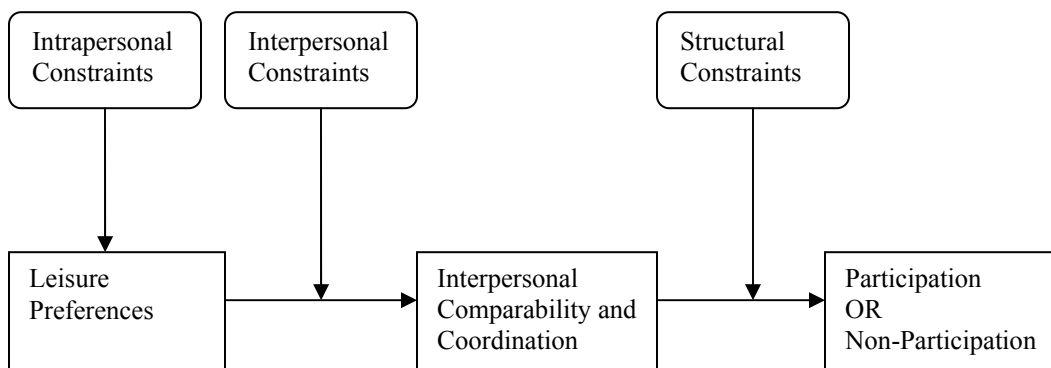


Fig. 2-4. A hierarchical model of leisure constraints (Crawford, Jackson, & Godbey, 1991).

The model of leisure constraints illustrates a negotiation process that people might take in order to participate in their desired leisure activities, taking into consideration that choice of leisure activity is often based on the context of social interactions and not by the individual alone (Crawford & Godbey, 1987). They purport that people would not participate, if they cannot successfully overcome these barriers.

The items used for leisure constraints, however, have varied depending on the study context (Table 2-1). For example, concerns for expenses or costs have been categorized as structural constraints in most studies, but a qualitative examination by Gilbert and Hudson (2000) categorized them as intrapersonal constraints. While “other commitments” was categorized as structural constraints by Raymore, Godbey, Crawford, and von Eye (1993) and Hubbard and Mannell (2001), it was categorized as interpersonal constraints by Gilbert and Hudson (2000). Further, “influence of friends and family” has been categorized as an interpersonal constraint (Pennington-Gray & Kerstetter, 2002) and as an intrapersonal constraint (Raymore, et al., 1993). Among the items, the influence of “lack of skills” has been found to be negligible in understanding participation (Henderson, Stalnaker, & Taylor, 1988; Shaw, Bonen, & McCabe, 1991).

Table 2-1  
Items of the three types of constraints in previous studies

	<b>Intrapersonal Constraints</b>	<b>Interpersonal Constraints</b>	<b>Structural Constraints</b>
Gilbert & Hudson (2000): Constraints to ski in Canada	<ul style="list-style-type: none"> <li>-Anticipation of expense</li> <li>-Afraid of injury</li> <li>-Will get cold and wet</li> <li>-Harder to learn than other sports</li> <li>-It is too dangerous.</li> <li>-I am scared of lifts.</li> <li>-I don't fancy the physical challenge.</li> <li>-Self-conscious or embarrassed of learning.</li> <li>-It would be too stressful.</li> </ul>	<ul style="list-style-type: none"> <li>-Others don't have the money.</li> <li>-Others don't have the time.</li> <li>-I can't find others to go with.</li> <li>-It is an elitist sport.</li> <li>-Partner is not interested.</li> <li>-Too many family commitments.</li> <li>-Others too good to take me to ski.</li> <li>-I will embarrass myself in front of friends.</li> <li>-My family is too young.</li> <li>-Skiing is not chic and glamorous enough.</li> </ul>	<ul style="list-style-type: none"> <li>-Clothing and equipment are too expensive.</li> <li>-Lack of low-cost, all-inclusive holidays.</li> <li>-I don't have enough money.</li> <li>-Slopes are too overcrowded.</li> <li>-Too much hassle buying or renting.</li> <li>-Too much planning involved.</li> <li>-I don't have enough time to go.</li> <li>-I have too many other leisure commitments.</li> </ul>
Hubbard & Mannell (2001): Constraints to participating in a new leisure activity	<ul style="list-style-type: none"> <li>-I am too shy to participate.</li> <li>-I don't have the energy to participate.</li> <li>-I don't feel comfortable changing clothes in front of coworkers.</li> </ul>	<ul style="list-style-type: none"> <li>-I don't have friends or acquaintances with whom to participate.</li> <li>-People with whom I would participate are on different work schedules.</li> <li>-The people I know live or work too far away.</li> </ul>	<ul style="list-style-type: none"> <li>-I don't have the right clothes or equipment to participate.</li> <li>-I won't do another activity if I have other commitments.</li> <li>-I wouldn't do a new activity if I don't have time.</li> </ul>
Nyaupane, Morais, & Graefe (2004): Constraints to water sports and horseback riding	<ul style="list-style-type: none"> <li>-The activity is too physically demanding.</li> <li>-The activity involves too much risk.</li> <li>-I don't like water sports/I am intimidated by horses.</li> <li>-I don't know what to expect.</li> </ul>	<ul style="list-style-type: none"> <li>-I have no one to go with.</li> <li>-My family and friends are not interested in going.</li> </ul>	<ul style="list-style-type: none"> <li>-The activity is too costly.</li> <li>-The expenses of traveling and staying are too great.</li> <li>-I have no information about the outfitters who offer this activity.</li> </ul>



Table 2-1 (Continued)

	<b>Intrapersonal Constraints</b>	<b>Interpersonal Constraints</b>	<b>Structural Constraints</b>
Pennington-Gray & Kerstetter (2002): Constraints to nature-based tourism	-Safety in Michigan’s natural areas. -Skills to participate in outdoor recreation activities -Skill in obtaining travel information about outdoor recreation activities	-Family interest in outdoor recreation activities -Influence of friends -Having a travel companion	-Money to participate in outdoor recreation activities -Time to participate in outdoor recreation activities -Weather conditions in natural areas -Road conditions getting to natural areas -Equipment to participate in outdoor recreation activities
Raymore, Godbey, Crawford, & von Eye (1993): Constraints to a new leisure activity	-I am too shy to start a new leisure activity. -I am more likely to do a new leisure activity that my family would think is alright. -I am unlikely to do a new leisure activity that makes me feel uncomfortable. -I am more likely to do a new leisure activity that my friends thought was alright. -I am more likely to do a new leisure activity that is in keeping with my religious beliefs. -I am more likely to do a new leisure activity that doesn’t make me feel self-conscious. -I am more likely to do a new leisure activity that doesn’t require a lot of skill.	The people I know usually: -live too far away to start a new leisure activity with me. - don’t have time to start a new leisure activity with me. - don’t have enough money to begin a new leisure activity with me. - have too many family obligations to start a new leisure activity with me. - know what new leisure activities they could do with me. -don’t have enough skills to start a new leisure activity with me. -don’t have transportation to get to a new leisure activity with me.	I am more likely to: - do a new leisure activity if the facilities I need to do the activity are not crowded. - do a new leisure activity if I know what is available. -do a new leisure activity if I have money.  I’m unlikely do a new leisure activity if: -I have other commitments. -the facilities I need to do the activity aren’t convenient. -I don’t have time.

These proposed three classifications of leisure constraints have been examined in numerous studies with the use of confirmatory factor analysis. Jackson (1988) argued that classifying constraints to leisure is useful for parsimonious analysis and conceptualization in recognizing the potentially general patterns. Further, this hierarchical structure was verified by Raymore, Godbey, Crawford & von Eye (1993). However, it has been argued that constraints are interrelated and should be examined under dimensions pertinent to the leisure activity that describe relationships between and among similarly perceived constraints (Blazey, 1987; Backman & Crompton, 1990; Henderson & Bialeschki, 1993; Hultsman, 1995; Jackson, 1983; 1993; McCormick, 1991; McGuire, 1984; Nadirova & Jackson, 2000; Scott, 1991).

In these studies, emerging dimensions from the data have been examined without a classification of the three types of constraints suggested by Crawford et al. (1991). For example, McGuire (1984) identified five emergent dimensions which included External Resources, Time, Approval, Abilities/Social and Physical Well-being. Jackson (1993) found a total of six dimensions including: Accessibility, Social Isolation, Personal Reasons, Costs, Time Commitments and Facilities. Hultsman (1995) identified the inter-correlations perceived by respondents and found four out of six dimensions found by Jackson (1993) to be distinctive (i.e., Accessibility, Personal Reasons, Costs and Time Commitments). Another study (Shaw et al., 1991) ranked constraints reported by respondents. Table 2-2 displays some of the most relevant studies which have examined constraints to leisure.

Table 2-2  
Constraints to leisure with or without dimensions

	Dimension					
	1	2	3	4	5	6
McGuire (1984)	External Resources: no knowledge; too much planning required; not enough time to go on trips; no clothing appropriate for travel; no transportation	Time: no time to travel; more important things to do; travel would interrupt the routine; busy with work	Approval: Afraid of being disappointed; travel requires too many decisions to make; disapproval of family and friends; feeling guilty about traveling	Abilities/Social: Spouse's dislike to travel; no travel companion; no friends who travel; not interested in traveling	Physical Well-being: Not enough energy to travel; poor health; afraid of some transportation; preference not to drive during dark; too old to travel; disability	n/a
Jackson (1993)	Accessibility: Cost of transportation; lack of opportunity to participate near home	Social Isolation: lack of knowledge where to participate; difficulty in finding partners	Personal Reasons: lack of necessary skills; requires too much self-discipline; low energy level; lost interest	Costs: Cost of equipment, materials, supplies; admission, rental fees, other charges for rec facilities or programs	Time Commitments: work commitments; family commitments; lack of time due to other leisure activities	Facilities: Overcrowded, poorly maintained
Carroll (1997)	Individual Psychological: Activity makes me tired; too tired for recreation; afraid of getting hurt; health problems; feel not confident; not happy in social situations	Lack of Knowledge: Unaware of where to learn; unaware of where to participate; no one to learn from; not skilled enough; not fit enough	Facilities or Services: Facilities are poorly kept, inadequate, crowded; dislike facilities offered	Accessibility or Financial: No opportunity near home; transportation takes time; not having a car; cannot afford it	Lack of Partners: Friends do not have time; nobody to participate with; friends dislike participation	Time: Work, studies, family

Table 2-2 (Continued)

	Dimension					
	1	2	3	4	5	6
Nadirova & Jackson (2000)	Isolation: No opportunity near home; don't feel safe or secure; recreational facilities are poorly maintained; feel bored; lack of transportation; inappropriate to age or gender	Knowledge: Unaware of where to participate; unaware of where to learn; poor choice of facilities or programs; hard to find activity partners	Skills: No physical abilities; not enough skills; not at ease in social situations; no energy or motivation	Costs: Cost of equipment, material and supplies; admission fees or other charges; cost of transportation	Commitments: Too busy with family; home chores; too busy with work	
Alexandris, Tsorbatzoudis, & Grouios (2002)	Psychological : Exercise makes me feel tired; afraid of getting hurt; tired to exercise; health problems; not fit enough; not feel confident	Time: Time for work or study; time for family; time for social commitment; interrupt daily schedule; timetable doesn't fit	Knowledge: Unaware of where to participate; no one to learn from; unaware of where to learn and participate	Facilities: Poor quality of facilities; dislike the activities offered; facilities are inadequate; facilities are crowded	Accessibility: Transportation takes time; no opportunities near home; not having transportation; cannot afford it	Partners: Friends don't have time; no one to participate with; friends dislike participation
Shaw, Bonen, McCabe (1991)	Single dimension: Reported constraints by all respondents (by order of frequency): -Lack of time because of work -No facilities nearby -Lack of time because of leisure activities -Low energy -Requires too much self-discipline -Costs too much -Injury or handicap -Ill health -Lack of necessary skills -Available facilities are inadequate -No leaders available					

Similarly, Henderson and Bialeschki (1993) reported that various constraints have interaction effects and influence women's preference for as well as participation in leisure activities. Yarnal, Kerstetter and Yen (2005) in their study of constraints to taking cruise vacations concluded that "The reasons given for not cruising overlap and blur in ways that make them challenging to place into a single category" (p. 290).

It has also been argued that social structure (e.g., socio-demographics and family lifecycles) is an important intervening constraint (Shaw et al., 1991; Shogan, 2002; Zimmer, Brayley, & Searle, 1995). For example, family lifecycle has been found to be both antecedents and mediators of participation in activities (Henderson, Stalnaker, & Taylor, 1988; Holdnak, 1999; Howard & Crompton, 1984; Jackson, 1990; Pennington-Gray & Kerstetter, 2001; Searle & Jackson, 1985; Shaw et al., 1991). Namely, family lifecycle can affect people's knowledge about available leisure activities and thus influence their desire for them, while they can also affect people's participation due to unavailability of spouse as a partner and commitments to work and family which can influence the time and money available for leisure. Thus, family lifecycle, although categorized as a structural constraint by Crawford et al. (1991) might also be an intrapersonal or interpersonal constraint.

Some findings related to the relationship between constraints and participation have contradicted the postulated negative correlation. For example, in some cases, it has been found that the higher the level of perceived constraints, the higher the frequency of participation (Aas, 1995; Crompton & Kim, 2004; Kay & Jackson, 1991; Norman, 1995; Pennington-Gray & Kerstetter, 1999; Shaw, Bonen, & McCabe, 1991; Yarnal et al.,

2005). Specifically, it has been argued that the positive relationship between “lack of time” and participation could be “evidence of stressed or rushed lifestyle” (Shaw et al., 1991, p. 298), similar to “the more constraints, the more participation” suggested by Willits and Willits (1986). Similarly, Jackson (1988) and Shaw et al. (1991) contested that lack of time and money may be excuses, but not true barriers to participation. Shaw et al. (1991) found that only poor health and low energy were negatively associated with participation.

Non-participants who perceived a high level of leisure constraints have reported that they would not participate even if those constraints were removed (Raymore, 2002). Further, constraints have been found to function as a driving force for participation (Little, 2002; Samdahl & Jekubovich, 1997; Yarnal et al., 2005). For instance, Yarnal et al. (2005) found that the death of spouse, which has been purported to be an interpersonal barrier (i.e., no companion to go with), motivated a widow to take a cruise vacation. Shogan (2002) has explicated that structural constraints can both restrict and enable participation and argued that “removing constraints is not a solution to improving leisure participation” (p. 36).

These contradicting findings may imply the existence of constraints that respondents did not recognize or relevant constraints were not asked (Shaw et al., 1991). It is also possible that constraints that researchers assert to be barriers to preference and participation might not be perceived to be so by respondents (Little, 2002; Yarnal et al., 2005). In a similar vein, it has also been contested that leisure constraints might not be

as relevant or influential for people's leisure choice as researchers believe (Nadirova & Jackson, 2000).

Criticisms of constraints-based research include the need for examination of the impact of leisure constraints beyond participation or non-participation (behavioral variable) as the only outcomes of leisure constraints (i.e., as dependent variables) (Samdahl & Jekubovich, 1997; Jackson & Scott, 1999). Accordingly, recent studies on constraints have incorporated other relevant constructs such as motivation and negotiation (e.g., Alexandris, Tsorbatzoudis, & Grouios, 2002; Hubbard and Mannell (2001).

For example, Alexandris et al. (2002) tested leisure constraints, motivations and de-motivations within one framework and found that "intrapersonal constraints acted as de-motivating forces for individuals" (p. 233). Hubbard and Mannell (2001) tested four different models consisting of leisure constraints, negotiation, and motivation for their effects on participation using a structural equation modeling technique. They found the most support for a constraints-effects-mitigation model in which motivation was mediated by negotiation of resources and strategies that can be either facilitatory or negotiatory. Then, constraints were mediated by negotiation to influence participation. In this model, intrapersonal constraints were found to have the highest effect (coefficient=0.74, 0.62 and 0.62 for interpersonal, structural and intrapersonal, respectively) on participation.

Further, Hudson and Gilbert (1999) found that intrapersonal constraints were more often reported by non-skiers. While non-skiers reported numerous intrapersonal

constraints, skiers also reported family (i.e., partner is not interested), economic and time constraints. These qualitative findings imply that intrapersonal constraints may encompass perceptions of a given activity that are not usually asked on a questionnaire. Hudson and Gilbert termed these “hidden” intrapersonal constraints (1999, p. 74).

In accordance with the assumption of the leisure constraints model, studies on constraints have focused on those who were unable to participate in a leisure activity “despite their high desire.” Thus, there has been a lack of understanding about those who do not participate and have low desire (Hudson & Gilbert, 1999). It has also been argued that constraints-based studies usually exclude people who express “lack of interest” as a reason for not visiting heritage sites, which may be the real barrier for not visiting (Davies & Prentice, 1995).

The model has also been criticized as being abused because of its prevalence in most leisure study contexts (Samdahl & Jekubovich, 1997). Samdahl and Jekubovich (1997) contested that framing various leisure issues within leisure constraints might limit alternative interpretations of the complex nature of leisure. They further suggested that researchers need to understand the limitations of the leisure constraints model “as a vehicle for studying the broader nature of leisure choices and meanings” (p. 450).

Unlike leisure research, in the context of tourism, constraints or inhibiting factors for choosing destinations, activities or consumption alternatives have not gathered much attention. Table 2-3 displays some of the existing studies which have examined non-visitors and non-participants in the tourism literature using the leisure constraints model as their conceptual framework.



Table 2-3  
 Studies on tourists' reasons for non-participation, non-visitation or non-choice

Author(s)	Study Purpose(s)	Main Findings
LaPage & Cormier (1976)	The role of images of camping as constraints to camping	-Common negative image of camping perceived by potential, temporarily inactive and active campers: crowding and cleanliness -In addition, potential campers' negative images included safety and comfort.
Blazey (1987)	Comparison of participants and non-participants of a senior travel program	-Non-participants' constraints: Lack of money, health, a companion to go with and a reluctance to drive during darkness. -Non-participants were likely to be more males, older, perceive their health to be poorer and to have higher income than participant counterparts.
Norman (1995)	Constraints to summer vacation	Finances, distance to the vacation destination, commitments to friends/family –in a less to more constrained continuum, but those who were highly constrained <i>still</i> participated in activities.
Tian, Crompton, & Witt (1996)	Constraints to museum visit	cost, time, difficulty of access, repetition, product failings, lack of interest
Pennington-Gray & Kerstetter (1999)	Constraints to nature-based tourism among women living in the Midwest	Time, money, friends, family (traditional pattern), but again, who were highly constrained <i>still</i> continued to travel.
Williams & Fidgeon (2000)	Non-skiers' constraints in Canada	Media image of ski; instructional requirements; cost and time commitments, unawareness of ski benefits; emotional perceptual biases
Pennington-Gray & Kerstetter (2002)	Constraints to nature-based tourism	The effect of 'family lifecycle' (as one of the four socio-demographic variables: gender, age, family lifecycle, social economic status =income + education) –actually this is categorized as structural constraint. Found support for the hierarchical model of constraints but different among age groups (thus, family lifecycle); younger people perceived more structural constraints than the retired.

Table 2-3 (Continued)

Author(s)	Study Purpose(s)	Main Findings
CLIA (2002)	Former cruisers' constraints	The most common reason for not cruising was found to be "cost."
TNS/NFO Plog (2004)	Former cruisers' constraints	1) health-related (recent outbreaks of diseases; being old; seasickness); 2) safety (fear of terrorism; feeling unsafe; fear of ships/water); and 3) preference for other vacation types; 4) economic reasons; and 5) previous experience.
Yarnal, Kerstetter, & Yen (2005)	Former cruisers' constraints	The reasons for not cruising varied although they were interested in cruising; most tied to life circumstances (e.g., caring for children, work obligations) or lack of info. Constraints changed throughout the course of life: Time, money → no companions.

The focus of many of these studies has been choice decision (e.g., non-participation or non-visitation) rather than the processes that had led to behavior or future behavior. The results of these studies have also revealed that intrapersonal factors (e.g., poor health), structural (i.e., situational) factors (e.g., lack of time and costs) and interpersonal factors (e.g., family commitments) are constraints to visitation. It seems that structural constraints, especially “a lack of time and money” have been found in virtually all studies (e.g., Tian, Crompton, & Witt, 1996; Pennington-Gray & Kerstetter, 1999, 2002; Williams & Fidgeon, 2000; NFO Plog, 2002; TNS/NFO Plog, 2004; Yarnal et al., 2005).

For example, non-participants in a senior travel program have been found to be constrained by a lack of money, health and a companion to go with (Blazey, 1987). Constraints (on a continuum) to taking a summer vacation have been found to include finances, distance to the vacation destination, and commitments to friends or family (Norman, 1995). Additionally, constraints to visiting a museum have been found to include costs, time, difficulty of access, repetition, product failings and a lack of interest (Tian, Crompton, & Witt, 1996).

In a similar vein, Pennington-Gray and Kerstetter (1999) found that women were constrained to nature-based tourism by a lack of time and money; no friends to go with; and family commitments. Further, they found that younger people perceived more structural constraints than retired people (Pennington-Gray & Kerstetter, 2002). Yet, Norman (1995) and Pennington-Gray and Kerstetter (1999) argued that those who were highly constrained still participated in activities or continued to travel.

Nonetheless, the leisure constraints model has been found to be limited in understanding tourists' non-choice motivation or behavior in a tourism context (Pennington-Gray & Kerstetter, 2002; Yarnal, Kerstetter, & Yen, 2005). For example, Yarnal et al. (2005) argued that the leisure constraints framework seemed to be limited in capturing "many of the dynamic factors that shaped and influenced these people's leisure choices" (Samdahl & Jekubovich, 1997, p. 430) (also cited by Yarnal et al., 2005, p. 290). Their findings suggested that constraints were more interrelated than hierarchical and people perceived them more of "concessions" to be made than "constraints" that prevent them from taking a cruise vacation (p. 291).

As for the “reasons” for not taking a cruise vacation, recent studies have been commissioned by CLIA (2002, 2004) to TNS/NFO Plog. These studies have found five reasons why “former cruisers have lost interest in cruising”: 1) health-related (recent outbreaks of diseases; being old; seasickness); 2) safety (a fear of terrorism; feeling unsafe; a fear of ships/water); and 3) preference for other vacation types; 4) economic reasons; and 5) previous experience.

However, these reasons might be different from why some people do not take a cruise “at all,” while they do take other types of leisure vacations. Further, the reasons are insufficient for understanding reasons why people do not take cruise vacations. The findings seem to also be paradoxical in that a higher percentage of cruisers (14%) than non-cruisers (7%) reported they had lost interest in cruising because of economic reasons (e.g., cruises’ high cost or poor value).

### **Models and Theories for Understanding and Predicting Behavior**

In the late 19<sup>th</sup> century and early 20<sup>th</sup> century, various models and theories of human behavior were developed for understanding and predicting human behavior from a cognitive psychological perspective. For example, gestalt theory or gestalt psychology was formally founded by Wertheimer, Koffka and Köhler in the 1920’s and 1930’s, partly against behavioristic theories by Watson and Pavlov that explained human behavior in terms of stimulus-response patterns (Society for Gestalt Theory and Its Application). In contrast, gestalt theory focused on human perceptions which emphasized dynamic models of human behavior and the active role of organization of

perceptions. One of the gestalt psychologists, Lewin (1936) developed the field theory in which he argued that the whole psychological field (“life space”) within which people behaved had to be examined in order to understand behavior. In this life space, the totality of perceived facts is “mutually interdependent” and much more than the whole (Lewin 1951, p. 240).

During the course of efforts by social sciences to establish scientific status and to build disciplinary knowledge, models for understanding human behavior have been developed with presumed causality, although this might never be able to be shown. Specifically, one of the fundamental models of consumer behavior is expectancy theory (Vroom, 1964) which proffers a formula to estimate the strength of motivation to behave in an organizational setting (e.g., to perform a task, to expend efforts at work). According to this formula, a person’s motivation to work is the function of the product of three types of beliefs: valence (i.e., favorability level of the possible outcome of the behavior); expectancy (i.e., expectations about a given task or the self); and instrumentality (i.e., perceived usefulness of performing a given behavior in order to achieve the expected outcome). Hence, it can be argued that some of the widely tested models in social sciences such as the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1985, 1991) are variations and extensions of expectancy theory.

According to the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), people’s behavior can be predicted by their intention to perform the behavior (i.e., an indicator of one’s inclination to perform) which is affected

by two antecedents. The two antecedents are Attitudes (i.e., positive or negative evaluations) toward the Behavior ( $A_{\text{behavior}}$ ) and Subjective Norm (SN; “the perceived social pressure to perform or not to perform the behavior,” 1991, p. 188). The Theory of Planned Behavior (TPB; Ajzen, 1985, 1991) is an extension of TRA to improve the prediction of behavior by including Perceived Behavioral Control (i.e., PBC; individuals’ perception of their ability to perform the behavior). PBC is also expected to directly influence behavior, moderating the relationship between intention and behavior (Figure 2-5).

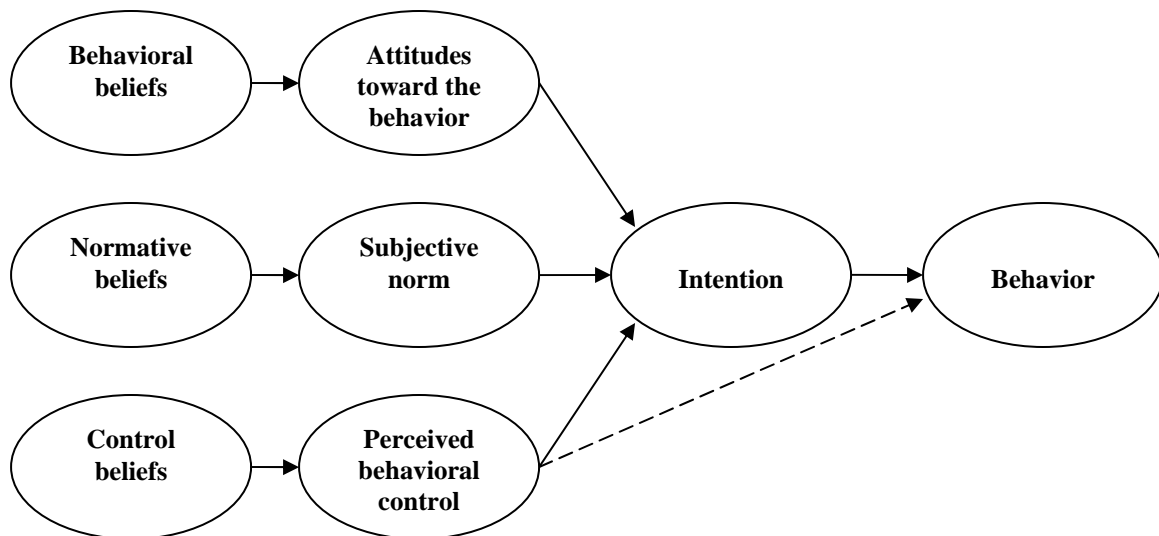


Fig. 2-5. Theory of planned behavior (Ajzen, 1985, 1991).

Based on expectancy-value model formulations, each of the three antecedents was proposed to be outcomes of beliefs. For example, Attitudes are the outcomes of the product of the beliefs about the probability that the behavior will produce a given outcome ( $b_i$ ), which are weighted by the level of value or importance to the individual ( $e_i$ ) (i.e., Attitudes =  $\sum b_i e_i$ ) (Ajzen, 1985, 1991). However, Ajzen (1991) pointed out that “the exact form of these relations is still uncertain” (p. 206).

TPB’s added predictability compared to TRA is specifically applicable when performing a given behavior is not completely under individuals’ control (Ajzen, 1985, 1991). Ajzen (1991) claimed that PBC, as a proxy of actual control over behavior, is equivalent to the concept of Self-Efficacy (SE) or Efficacy Expectation (Bandura, 1977, 1982, 1991; Bandura, Adams, Hardy, & Howells, 1980) which is defined as “people’s beliefs about their capabilities to exercise control over their own level of functioning and over events” to perform a given behavior (Bandura, 1991, p. 257).

However, it has been argued that PBC and SE are two distinct constructs with different effects on intention and behavior (Beale & Manstead, 1991; de Vries, Dijkstra, & Kuhlman, 1988; Terry, 1991, 1993, 1994; Terry & O’Leary, 1995). In these studies, while PBC has been found to affect intention as well as behavior, depending on the context, SE has been found to be an antecedent of intention which affects behavior but not directly affect behavior.

For example, finding a significant relationship between SE and intention, but not between PBC and intention, Terry and O’Leary (1995) argued that “the notions of appraised control [PBC] and self-efficacy are confounded in Ajzen’s (1987, 1991; Ajzen



& Madden, 1986) concept of perceived behavioral control” (p. 204). Similarly, the portion of PBC measuring how easy or difficult individuals perceive the performing of a given behavior has been termed as “perceived difficulty” (Sparks, Guthrie, & Shepherd, 1997; Trafimow, Sheeran, Conner & Finlay, 2002, p. 103). In other words, the perceived level of control over a given behavior (e.g., having the resources to perform a behavior) is not the same as the level of confidence in successfully performing an activity (e.g., how easy or difficulty it is for performing a given activity).

This conceptual discrepancy was also found by Ajzen and Driver (1992) in which the authors stated, “The correlation between [the two PBC scales], though highly significant, were relatively weak; they ranged from .22... to .62...” (p. 215). Thus, it can be argued that  $A_{\text{behavior}}$ , SN and SE may be factors perceived to be internally (i.e., personally) controllable, whereas PBC which pertains to the level of control over the situation (e.g., resources), is perceived to be a factor relatively uncontrollable by individuals who consider a given behavior (i.e., external factors). Some results have shown that the effect of SN on intention is weak or not significant (Ajzen, 1991; Armitage & Conner, 2001; Åstrom & Rise, 2001; Terry & O’Leary, 1995; Perugini & Bagozzi, 2001).

According to PsycINFO (i.e., a database for psychological literature in 2,035 journals of broad disciplines), 765 papers, of which 558 in peer-reviewed journals, 21 in conference proceedings and 32 in book chapters, have tested TPB in a variety of contexts from January 1980 to March, 2006. When these results were filtered through search keywords, “recreation,” “leisure,” and “tourism,” of the 756 papers, 37 papers (32

in peer-reviewed journals) were in the context of or concerned with recreation or leisure (e.g., Ajzen & Driver, 1992; Hrubec, Ajzen, & Daigle, 2001).

However, there were no studies in the context of tourism or travel that directly tested the Theory of Planned Behavior according to PsycINFO and CAB Abstracts (i.e., a database containing over 400 journals in recreation, leisure and tourism) for the same period. This might be because diverse models developed in the tourism literature have been particular to the nature of tourism (i.e., complex amalgamation of products and services and experiences) or models have been constructed in an atheoretical manner. While there have been six meta-analytic studies to test the sufficiency and predictability of TPB across contexts (Armitage & Conner, 2001; Albarracín, Johnson, Fishbein, & Muellerleile, 2001; Hausenblas, Carron, & Mack, 1997; Notani, 1998; Sheeran & Taylor, 1999; Sutton, 1998), such a meta-analysis has not been conducted in the leisure and tourism literature.

Nonetheless, support for the theory in a wide range of contexts has been found, although the theory's predictability for intention and behavior has not been satisfactorily sufficient because of the ambiguous meaning of PBC (as discussed above) and the exclusion of other relevant variables. For instance, in a meta-analysis of 185 studies that tested TPB, Armitage and Conner (2001) found that the three antecedents (i.e.,  $A_{\text{behavior}}$ , SN and PBC) accounted for 39 percent and 27 percent of the variance in Intention and Behavior, respectively. Despite these moderate to large effect sizes, Armitage and Conner (2001) have found discriminant validity for other relevant concepts such as

Desires (Bagozzi, 1992) and have found evidence that Self-Efficacy and Perceived Control over Behavior were different concepts.

Many researchers in various disciplines have proposed modifying the variables and measures or extending TPB by including other relevant variables as predictors of Intention and Behavior (Bagozzi, 1992; Bagozzi & Kimmel, 1995; Bilic, 2005; Conner & Armitage, 1998; Heath & Glifford, 2002; Nejad, Wertheim, Greenwood, 2004; Parker, Manstead, & Stradling, 1995; Perugini & Bagozzi, 2001; Sheeran, Trafimow, & Armitage, 2003; Umeh & Patel, 2004). Variables proposed to be included which have been empirically verified to improve the predictability of TPB include enhanced belief salience measures; past behavior or habit; perceived control over behavior, self efficacy (or perceived difficulty), desires, moral norms, self-identity and affective beliefs. “Perceived control over behavior” refers to the unconfounded portion of PBC, as PBC has been found to contain perceived control over behavior and self efficacy.

Based on accumulated empirical evidence on the support that TPB can be improved by including other relevant variables, Perugini and Bagozzi (2001) argued that TPB is parsimonious and can explicate “reasons for acting,” but not the motivational content for intention to turn into action (p. 83). They have proposed the Model of Goal-Directed Behavior (MGB), which broadens and extends the TPB (Perugini & Bagozzi, 2001) (Figure 2-6).

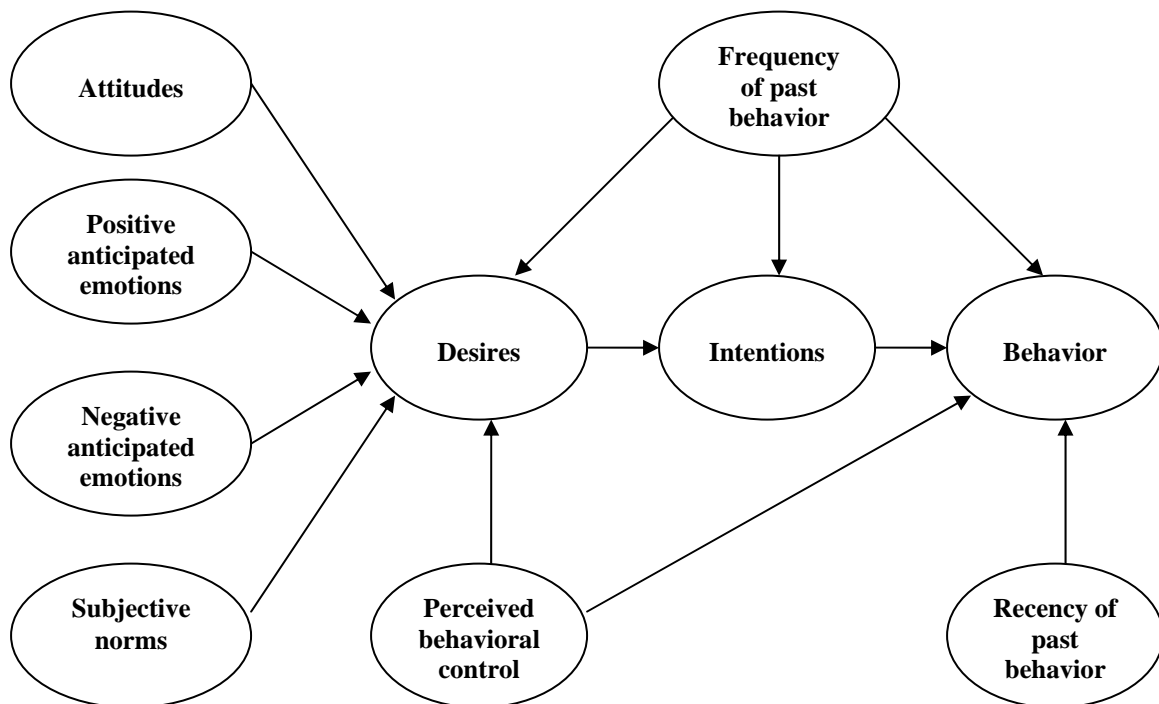


Fig. 2-6. A model of goal-directed behavior (Perugini & Bagozzi, 2001).

According to MGB, there are four antecedents of intentions which include attitudes towards the goal-directed behavior; positive and negative Anticipated Emotions about the goals to be achieved; and Subjective Norms. These influence Intentions through Desires which is “the direct impetus for intentions and transform the motivational content to act embedded” in the four antecedents” (p. 80). Perceived Behavioral Control was posited by Perugini and Bagozzi (2001) to influence Desires and actual Behavior, while Frequency of Past Behavior was posited to influence Desires,

Intentions and Behavior. Recency of Past Behavior was also proposed to influence only actual Behavior.

MGB was broadened from TPB by adding another independent variable (i.e., Anticipated Emotions: positive and negative) along with TPB's predictor variables in order to better explain the variance in the criterion variables. MGB was extended by including a variable (i.e., Desires) to examine the mechanism of antecedents' effects on Intentions (Perugini & Bagozzi, 2001). Further, MGB incorporates past behavior in terms of Frequency which was proposed to affect Desires, Intentions and Behavior and in terms of Recency which was purported to affect Behavior. It has been found in several studies (Leone, Perugini, & Ercolani, 2004; Perugini & Conner, 2000; Perugini & Bagozzi, 2004) that MGB predicts Intentions and Behavior better than TPB. However, MGB does not clarify whether Perceived Behavior Control pertains to Perceived Control over Behavior or Self-Efficacy, despite accumulated evidence that have shown their differences.

### *Desires*

According to MGB (Perugini & Bagozzi, 2001), the concept of "desires provide the direct impetus for intentions and transform the motivational content" in other variables of theory of planned behavior (p. 80). The concept of Desires is defined as "the motivational state of mind wherein appraisals and reasons to act are transformed into a motivation to do so" (Perugini & Bagozzi, 2001, p. 84). This motivational force of Desires stipulates the way attitudes are activated to become an intention to behave, as

positive attitudes by themselves are insufficient for arousing an intention, unlike presupposed in attitude models such as TRA and TPB (Bagozzi, 1992).

Hence, this model is based on “achievement of personal goals” (i.e., goals are ends achieved by instrumental behavior) not behavior itself (i.e., TPB) (Perugini & Bagozzi, 2001, p. 81) and has been found to explain significantly more variance in Intentions and behavior than the Theory of Planned Behavior (Perugini & Bagozzi, 2001, 2004). Additionally, MGB has integrated past behavior in terms of frequency and recency and has enhanced the correlation between Intentions and behavior (Perugini & Bagozzi, 2001).

The concept of Desires has been shown to have discriminant validity when tested within TPB (Armitage & Conner, 2001; Bagozzi & Kimmel, 1995; Bratman, 1987; Leone, Perugini, & Ercolani, 1999; Malle & Knobe, 1997; Mele, 1992; Perugini & Bagozzi, 2004) in that it is specifically distinctive from *Intentions* in terms of “perceived performability, action-connectedness and temporal framing” (Perugini & Bagozzi, 2004, p. 69). That is, compared to Intentions, Desires are related less to performability, connected less to actions and enacted over a longer time frames. Further, the concept of Desires has been found to mediate the effects of TPB’s antecedents (e.g., attitudes, subjective norm) on Intentions and to be a better predictor of Intentions than PBC, while a weaker predictor of behavior. This seems reasonable, as the notion of PBC pertains to constraining factors which would be more related to performing actual behavior than Desires which does not take into account constraints.

Based on studies on constraints to leisure vacations including cruise vacations and studies on *Desires*, the relationships among the concepts in the current study were hypothesized with the assumption that *Image of Cruise Vacations* is analogous to attitudes toward the goal-directed behavior in taking a cruise vacation. Further, studies on leisure constraints have argued that intrapersonal constraints (i.e. image and *Perceived Physical Attributes*) influence people's motivation or preference, which is analogous to *Desires* and *Interpersonal Constraints* influence the relationship between preference and behavior. Therefore, it was hypothesized that:

**Hypothesis 4: *Image of Cruise Vacations* significantly influences *Desires*.**

**Hypothesis 6: *Perceived Physical Attributes* negatively influence *Desires*.**

**Hypothesis 7: *Interpersonal Constraints* negatively influence *Desires*.**

**Hypothesis 10: *Desires* positively influence *Intention*.**

### *Intentions*

“Behavioral Intentions are instructions people give to themselves to behave in certain ways... [and] involve ideas such as ‘I must do X,’ ‘I will do X,’ and ‘I am going to do X’” (Triandis, 1980, p. 203; also cited by Bagozzi, 1992, p. 200). Behavioral Intentions in TRA and TPB “is assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior” (Ajzen, 1999, p. 181).

Behavioral Intentions was conceptualized to be indistinctive from motivation (i.e., *Desires*) by Fishbein and Stasson (1990) who argued, “Since we believe that intentions are motivational in nature, we feel that ... the measure of desire, although not fully satisfactory, will come closer to capturing the meaning of an intention than will a behavioral self-prediction” (also cited by Bagozzi, 1992, p. 184-185). However, it has been argued that Behavioral Intentions does not contain the full motivational forces (Bagozzi, 1992; Perugini & Bagozzi, 2001; 2004).

Behavioral Intentions has been proposed to be a direct predictor of actual behavior (Fishbein & Ajzen, 1975; Ajzen, 1985, 1991), which is also known as Goal Intention in psychology (Gollwitzer, 1999; Greve, 2001). Behavioral Intentions in TPB is based on three antecedents: Attitudes toward the behavior, Subjective Norms and Perceived Behavioral Control (Ajzen, 1985, 1991). The direct relationship between BI and behavior has been supported in studies on TRA and TPB. For example, Armitage and Conner (1995) found a correlation between Behavioral Intentions and behavior to be



close to large (.47) based on Cohen's (1991) definition of effect sizes (.10: small; .30: medium; .50: large), in their meta-analysis of studies that tested TPB.

Nonetheless, findings related to the effect of Behavioral Intentions on actual behavior have not been conclusive. While in some studies, it has been found to predict behavior relatively well, on average, its predictability has ranged from 20 to 30 percent (Gollwitzer, 1999; Greve, 2001). This has been argued to be because it often measures goal intentions instead of implementation intentions (Gollwitzer, 1999; Greve, 2001). While goal intentions pertain to the extent of intentions to behave (e.g., choose, participate, purchase or pursue goals), implementation intentions pertain to specific plans as to when, where, and how to attain goals (Gollwitzer, 1993, 1999; Heckhausen, 1991).

Thus, implementation intentions, "subordinate to goal intentions" (p. 494), contain one's commitment to achieve goals to respond to a certain situation (Gollwitzer, 1999). Many recent studies on the relationship between intentions and behavior have found the usefulness of the concept of implementation intentions (e.g. Bagozzi, 1992; Gollwitzer & Brandstätter, 1997; Sheeran & Silverman, 2003; Rise, Thompson, & Verplanken, 2003; van Hooft, Born, Taris, van der Flier, & Blonk, 2005).

According to studies on destination image, behavioral or goal intentions are influenced by the image that individuals have of a destination (e.g., Baloglu, 2000; Beerli & Martin, 2004). In line with the MGB, it has also been argued in models on destination choice that intentions are influenced by image or perceptions of destinations influence through preference (e.g., Seddighi & Theocharous, 2002; Koppelman, 1980).

However, the role of preference of motivation (i.e., *Desires* in this study) between destination image and intentions has not been shown. As the concept of *Desires* has been found to be a mediator between attitudes and intentions (e.g., Perugini & Bagozzi, 2001), it was hypothesized that:

**Hypothesis 5: *Image of Cruise Vacations* significantly influences *Intention*.**

According to the model of leisure constraints, interpersonal constraints intervene between leisure preference and participation. As per studies on destination image, destination choice and leisure constraints, structural or situational constraints influence intentions and behavior. Thus, it was hypothesized that:

**Hypothesis 8: *Interpersonal Constraints* negatively influence *Intention*.**

**Hypothesis 9: *Structural Constraints* negatively influence *Intention*.**

## Summary of Chapter II

A conceptual model for this study is developed based on various models that can be interconnected via comparable concepts pertaining to choice-decision behavior. They include models of destination image (e.g., Baloglu, 2000; Beerli & Martin, 2004); destination choice (e.g., Botha, Crompton, & Kim, 1999; Woodside & Lysonski, 1989); the leisure constraints model (Crawford, Jackson, & Godbey, 1991); and the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001).

It is hypothesized in the conceptual model that cruise vacation choice is influenced by the following. First, personal factors (i.e., *Personal Values*, *Age* and the level of *Education*) and *Knowledge Sources* (i.e., external stimuli from which people learn about cruise vacations) influence *Image of Cruise Vacations*. *Image of Cruise Vacations* in turn is hypothesized to influence the level of *Desires* for cruise vacations and *Desires* is hypothesized to influence *Intention* to take a cruise vacation in next three years. As constraining factors, *Desires* is affected by *Perceived Physical Attributes* (i.e., intrapersonal constraints is defined to consist of these two constructs in this study) and *Interpersonal Constraints*, while *Intention* is influenced by *Interpersonal Constraints* and *Structural Constraints*.

A total of eleven hypotheses are developed as follows:

- ◆ Hypothesis 1: The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive.
- ◆ Hypothesis 2a: Current customers' *Image of Cruise Vacations* is more positive than that of past-cruisers.

- ◆ Hypothesis 2b: Past-cruisers' *Image of Cruise Vacations* is more positive than that of non-cruisers.
- ◆ Hypothesis 3: *Personal Values* have a significant effect on *Image of Cruise Vacations*.
- ◆ Hypothesis 4: *Image of Cruise Vacations* significantly influences *Desires*.
- ◆ Hypothesis 5: *Image of Cruise Vacations* significantly influences *Intention*.
- ◆ Hypothesis 6: *Perceived Physical Attributes* negatively influence *Desires*.
- ◆ Hypothesis 7: *Interpersonal Constraints* negatively influence *Desires*.
- ◆ Hypothesis 8: *Interpersonal Constraints* negatively influence *Intention*.
- ◆ Hypothesis 9: *Structural Constraints* negatively influence *Intention*.
- ◆ Hypothesis 10: *Desires* positively influence *Intention*.

## **CHAPTER III**

### **METHODOLOGY**

#### **Overview of Chapter III**

In Chapter III, the design and methods utilized for the current study are discussed. Due to the exploratory nature of the study, a multi-method was utilized which consists of both qualitative (in Phase 1) approach and quantitative (in Phase 2) approach. In Phase 1, 22 in-depth guided conversations are conducted and in Phase 2, a survey of the U.S. leisure travelers are conducted. A survey instrument is developed based on the findings of Phase 1 as well as the relevant literature to test this study's conceptual model. Finally, data collection procedures and analysis methods ensue.

#### **Research Design**

As the topic (i.e., understanding why some people do not take a cruise vacation, while they take other types of leisure vacations) and the approach (i.e., an elicitation technique) of this study are relatively new, a “sequential study design,” a type of mixed methodology or multi-method (Creswell, 2003; Tashakkori & Teddlie, 1998, 2003) was utilized. Further, this design is “especially advantageous [for] building a new [survey] instrument” (Creswell, 2003, p. 216), which was necessary for this study. A sequential study design consists of two phases starting with a qualitative method and then a quantitative method based on the findings of the qualitative method for inference purposes (Tashakkori & Teddlie, 1998).

In the first phase, in-depth interviews (“guided conversations” in this study) were conducted with leisure travelers with and without cruise vacation experience to explore their image of cruise vacations, using an elicitation technique. In the second phase, a questionnaire was developed and hypotheses were tested on randomly selected U.S. leisure travelers who are both current customers and current non-customers of the cruise industry.

### *Phase 1: Qualitative Exploration of Image of Cruise Vacations*

In Phase 1, a modified Zaltman Metaphor Elicitation Technique (ZMET) was used (Zaltman, 1997; 2003) to explore the research topic. The ZMET is an interdisciplinary research method developed by Zaltman and his associates based on study findings about the human brain and behavior (e.g., neuroscience, cognitive psychology and clinical psychology) which suggest that 95% of human memory is image-based, and that 80% of our communication is nonverbal (Zaltman, 1997; 2003).

The original ZMET was developed in 1993 and consists of ten steps. However, a modified format of ZMET was used for this study with five steps (excluding a short questionnaire at the end), because: 1) some resources (i.e., expertise and technology for digital imaging) were not available; 2) the artistic exercise (creating a collage or montage) was not deemed necessary for the study purposes (i.e., a focus on interpretation of perceptions and practical recommendations); and 3) “The guided conversation includes a variety of steps, but only a subset of which are used in any particular project” (Zaltman & Coulter, 1995, p. 40). Other studies (e.g., Christensen &

Olson, 2002; Coulter, Zaltman, & Coulter, 2001; Zaltman & Coulter, 1995) have also utilized partial steps of ZMET: three, six and nine steps, respectively.

Two sample groups were recruited using a snowball sampling technique. All participants were screened to be leisure travelers who take leisure vacations for which they pay for three or more nights at least once a year and who met the sample criteria of previous studies by CLIA (2004, 2005) (i.e., over 25 years old and have household income of over \$40,000) with a few inevitable exceptions as stated earlier. Thus, the major difference between the two sample groups was whether or not one had ever taken a cruise vacation.

Participants were asked to collect at least 12 photos or pictures that represent their thoughts and feelings about cruise vacations. Then one-on-one “guided conversations” were conducted such that the participants were asked to freely speak about their perceptions about a cruise vacation with the researcher’s guidance. This was to understand the participants’ perspectives with the stimuli chosen by them, not by the researcher. Further, the validity of participants’ responses was checked within multiple steps of ZMET in which participants were asked to use different mechanisms (described in detail below) to express their thoughts and feelings (Zaltman & Coulter, 1995).

All conversations were tape-recorded with the participants’ consent, and lasted between 90 and 170 minutes. In Step 1 (Story-Telling), following Gutman’s (1982) means-end chain model that uses a laddering technique, participants were asked what each image they represented (i.e., attributes); what those attributes result in (i.e., consequences or benefits from attributes); and what those consequences mean to them

(i.e., values). For instance, one cruiser participant expressed that the picture of colorful and sumptuous food represented attributes of “a lot of and a variety of food” on board. Then she explicated the benefits of having them on a cruise vacation such as “feeling full, well-nourished and satisfied.” These benefits meant “feeling of being special,” which she said was important for her as she seldom experienced this feeling in daily life.

In Step 2 (Missed Images), participants were asked to describe images they wanted to, but could not find, because they might not have been able to find relevant images that came to their mind during the preparation period. One participant, for example, stated that he wanted to find an image that showed a father and a crying baby standing far apart. He expressed that this image represented his feeling of being distressed and uncomfortable if he were to go on a cruise vacation, leaving his baby at home who constantly needed attention and care.

In Step 3 (Construct Elicitation), a repertory grid exercise was conducted. The participants were asked to divide three of their images (selected randomly) into two groups, one consisting of two that were similar and different from the third (the other group). Random triads were repeated until the subject’s constructs reached a saturation point. The repertory grid exercise is based on Kelly’s (1955) Personal Construct Theory which states that we make sense of the world by using mental models. These models are composed of meanings and concepts based on experience and preconceived ideas that guide our understanding of the world and behavior. However, this had to be replaced by a modified exercise from the 12<sup>th</sup> participant (in the order of guided conversations) on, because it was found to be unsuitable. As most images that participants had collected



represented their different perceptions toward cruise vacations, it was very difficult for participants to forcefully group and define them anew. For example, the image of old people represented perceptions of cruise ships being filled with the elderly, implying unattractive features of cruise vacations, while the image of food represented the abundance and a variety of food, implying both positive (e.g., a chance to try new food) and negative (e.g., too much food) perceptions toward cruise vacations.

Hence, the results were not meaningful to participants, which defeated the purpose of doing a repertory grid exercise. From the 12<sup>th</sup> participant on, participants were asked to group their images into themes and describe the themes. For example, one non-cruiser participant clustered her images into five groups: food; family and friends; scenery; water; and activities. Then, she explained what each group of images represented in relation to her thoughts and feelings about cruise vacations. The data from Step 3 were used for internal validity purposes to check if the concepts and themes used by the participant in Step 1 and 2 were consistent with the clustered groups' themes.

In Step 4 (Sensory Images), participants were asked to describe their perceptions in terms of their five senses (i.e., taste, touch, smell, color and sound). For example, when one cruiser participant was asked what tastes were (and were not) associated with his thoughts and feelings toward a cruise vacation, he expressed that he associated cruise vacations with tastes such as “sweet” that represented “enjoyment and romance” and “spicy” that represented “exciting,” while he did not associate cruise vacations with tastes such as “bitter and sour” that represented “unpleasant.”

In Step 5 (Construct Map), the researcher asked participants to write down the constructs that the researcher spelled out for them which had been on the researcher's note during the previous four steps (i.e., from Step 1 to Step 4) on a piece of paper anywhere they wished to place each of them. Then, they were asked to make links among the constructs. Again, this exercise was not found to be comprehensive or reliable, because participants were not provided with the complete list of constructs they used. Thus, the results for the first ten participants were used only to check internal validity, and Step 5 was eliminated for the rest. Finally, participants were asked about their demographics, travel behavior and preferences, and were compensated with a \$15.00 Wal-Mart gift card upon completing the meeting.

The data for Phase I were analyzed using *Atlas.ti 5.0*, software for visual and qualitative data analysis and SPSS 11.0. After each subject's conversation notes were separately entered in *Atlas.ti* as two Hermeneutic Units (HU's) for cruisers vs. non-cruisers, each HU was independently coded and re-coded, using participants' own words ("codes in-vivo") as much as possible to represent their own perspectives, not the researcher's. Then, the codes were repeatedly reduced to obtain main categories and themes (details of this process are described in the summary of each groups' findings).

The purpose of Phase 1 was to explore leisure travelers' thoughts and feelings toward cruise vacations. Specifically, differences and similarities between leisure travelers with and without cruise experience were compared, using an elicitation technique. In addition to the ZMET exercise, a set of 22 closed-ended questions for demographics and open-ended questions for leisure vacation behavior and comments

were also asked at the end of each guided conversation. Questions were intended to gain a brief understanding about cruisers and non-cruisers' differences and to preliminarily evaluate understandability of the questions by participants for questionnaire development. Questions included reasons for liking or disliking cruise vacations; information sources for planning a leisure vacation; the frequency of leisure vacations; leisure activities at home and on vacation; leisure benefits; leisure constraints; and expenditures on leisure vacations. Demographic questions included: gender; marital status; occupation; education level; ethnic background; household income; and age. Participants were also asked to provide comments on the ZMET process.

Research questions examined in Phase 1 were: 1) How do cruisers and non-cruisers think and feel about a cruise vacation?; 2) How do cruisers and non-cruisers differ (if they do) in their thoughts and feelings about a cruise vacation?; 3) How do cruisers and non-cruisers perceive leisure constraints?; and 4) Are cruisers and non-cruisers different in their leisure activities at home? If so, how do they differ?

The cruiser group consisted of eight females (mean age = 39.5) and two males (mean age = 29.5), while the non-cruiser group consisted of five females (mean age = 45.2) and seven males (mean age = 42.9). Most participants were Caucasian (ten cruisers; eight non-cruisers), whilst other non-cruisers consisted of one Asian-American, one Asian, one Hispanic, and one Indian-Caucasian. The education level for the majority of both groups (eight cruisers; eight non-cruisers) was graduate school, and for the rest, it was undergraduate degree.

All participants were very articulate and unique in some cases in expressing their perceptions. In general, the concepts used by non-cruisers varied more than for cruisers. As proposed in neuroscience, most participants mentioned the difficulty of expressing their perceptions in terms of senses, although they do “feel” it. Sensory images that participants associate with a cruise vacation were similar for both groups (Table 3-1): spicy taste (not sour or bitter tastes); soft and smooth touch (not rough or hard); salty (not repugnant smell); blue and sunset colors (not black, grey or brown); and water sound (not city noises). Data were analyzed separately for each group and are illustrated as follows.

Table 3-1  
Sensory Images of cruisers and non-cruisers

	Cruisers		Non-cruisers		
Taste	sweet (3): positive feeling, enjoyable	spicy (2): unconventional, exciting		spicy (3): exciting, romantic, indulgent	food-item-related (5) --soda, cheap ice cream, prepackaged food, overcooked: artificial, not tasty; pineapple: not eaten often and very delicious
Not Taste	bitter (4): unpleasant, not nurturing, opposite of smooth, cool, nice	sour (2): very unpleasant	peanut butter & jelly, macaroni & cheese, Mrs. Blair's bread: everyday taste (5): blend, boring, not interesting	sour (4): boring, uneven, makes you frown, unpleasant, sick	bitter (4): boring, not enjoyable
Touch	smooth (2), soft (5): enjoyable, comforting, warm --including snuggly, nice towel touch			soft, smooth (7) -- overcooked food: unpleasant; bed, warm sand, music, silk: unpleasant, not too intense, calm, being at ease	harsh, rough, hard (4): (e.g. sand paper): in-a-box, irritating, unpleasant, unsure
Not Touch	rough, hard (3): not comforting	pointy, sharp (4): painful, uncomfortable, dangerous (like cactus)		rough, hard (5) -- e.g. concrete: rustic, adventure, active, small personal space, reminds of city	pain (3) --e.g., abrasiveness: unpleasant, uncomfortable

Table 3-1 (Continued)

	Cruisers		Non-cruisers		
Smell	salty (4): feeling of freedom, calm, soothing, relaxing, different, nice	nice food-generated smell (6) --variety of foods, freshly brewed coffee (pleasant), cotton candy (carnival/festival atmosphere), good food (being hungry), steak (exciting), food smell (over-consumption)	ocean, salty (6): reminiscent, fresh, pure, new, different, nice	flower (3): relaxing, fresh, fancy	
Not Smell	pungent, bad smell (3) --rotten eggs, bad car smell, city-related smell: offensive, obnoxious, unattractive	nature smell (4)-- pine trees, flower: natural, land-related smell	garbage (4): repulsive	city-related (2) --e.g., pollution, exhaust: unpleasant, repugnant, busy life	
Color	blue (10)--water, sky: tropical, water color, warm, open, happy, strong, calming, relaxing	orange (4), yellow (4), purple (2): sunset colors, relaxing	blue (10)--e.g., sea, water: bright, lively, calm	yellow (5), red (3), purple (2): sunset, exciting, neutral, happy	
Not Color	black (2), grey (2): evil, dull	brown (2): natural, furniture color	green (2): exciting, appetizing, grass, trees	brown (3): dark, everyday color, not standing out	grey (2), black (3): earth tones, blend, industrial, sleepy, unpleasant

Table 3-1 (Continued)

	Cruisers		Non-cruisers		
Sound	water/waves (4): calming, soothing, steady	sea breeze (3): calming	music --piano, Caribbean (2): melodic, fun; noise -- engine, crowd, loud music (5): stressful, bothersome	water (3)--e.g., lapping of water when a ship moves: peaceful, calming, completely different from normal environment	people (7): calming, pleasant but when not too much
Not Sound	city noises (14) -- car/traffic, screaming, phones: not heard on ship, annoying, unsettling	nature sound (2) -- birds: peaceful, nice		city noise (16)--e.g., cars, people, pets, sirens, honking: irritating, obnoxious	nature sound (3): waterfall, birds, wind: natural, pleasant
Other senses	uncomfortable (3) -- toward poor locals: feeling bad			boring (lack of adventure), tacky (too packed), sad	

*Note:* The number inside the parenthesis indicates the frequency of the word mentioned by participants.

For cruise current customers' data, the initial 81 codes (constructs, terms or names that participants stated) were repeatedly grouped into 60 codes based on the repetitive meanings in the contexts mentioned by participants (e.g., food; people; things to do on cruise vacations; shopping; and sun-tanning), and were further categorized into small "families" in *Atlas.ti*. Cruisers mentioned the benefits of a cruise vacation most frequently (e.g., being calm and relaxed; experiencing new things; being treated well; and being playful and free) when asked to express their thoughts and feelings about cruising. These concepts were often accompanied by the phrase, "the opposite of everyday life," which indicated social and personal inhibitions that cruisers conform to. The photos or pictures used to represent these themes included beautiful nature scenes in bright colors or of sunsets.

Cruisers found the opportunities for being uninhibited important and meaningful to them in order to be recharged and return to everyday life, which non-cruisers did not specifically emphasize. Although these benefits can be obtained from other types of vacations, cruisers seemed to strongly associate them with a cruise vacation. The negative aspects mentioned by cruisers included over-emphasis on food and shopping; ships being crowded; and a lack of educational programs.

For non-cruisers' data, the initial 125 codes were grouped based on their common themes (e.g., positive aspects of a cruise, negative aspects of a cruise, food-related, confinement-related, and reasons to dislike a cruise). Participants identified positive aspects of a cruise vacation such as being with the beloved (family or friends); having various activities that are not or are hardly done in daily life (e.g., swimming,



going to a casino, bar or theater, watching wildlife); and the opportunity to escape from the usual environment (i.e., being away from everyday life –to feel calm, peaceful, relaxed, or solitude). They indicated the sources for this knowledge were TV programs (e.g., *The Love Boat*), advertisements, and what they heard from friends and family who have been on a cruise.

However, in comparison to cruisers, their feelings and thoughts about a cruise vacation expressed with photos or pictures showed more negative aspects of a cruise vacation. These were not limited to the findings of the previous studies as reasons to have “stopped” cruising (i.e., a fear of sickness, safety, confinement; boredom; dislike of ship’s rules). As participants usually mentioned these negative aspects “in comparison to” their preferences for a vacation in general, these could be interpreted as potential reasons for not choosing a cruise over other vacation types.

Negative aspects which were elicited included their dislike of or propensity to avoid: 1) a superficial or artificial experience such as Las Vegas or Disneyland; 2) crowds; 3) over-emphasis on food; 4) being surrounded by the elderly (over the age of 80); 5) confinement (e.g., having no way out; small personal space, which was associated with contagious outbreaks); and 6) a loss of control (vacation experience is controlled by the programs of a cruise). A cruise vacation was perceived as superficial, because people on a ship only “gaze” at nature or things within a short time frame without learning details. A cruise vacation being artificial was expressed as “manufactured experiences” whereby a setting was made for specific experiences predetermined by the cruise companies.

Findings from Phase 1 imply several important aspects. The modified ZMET utilized in this study seemed to be effective in understanding participants' thoughts and feelings in a deep level. Most participants commented that they enjoyed searching for and talking about photos/pictures of their own choice, and that the visual stimuli helped them express their perceptions more deeply and effectively. However, they mentioned that the inevitable downside was the long time commitment. It seemed that research on cruise vacations can benefit from utilizing research methods such as ZMET, especially since tourist motivation is hedonistic in nature.

The findings suggested that the benefits (or positive aspects) of a cruise vacation mentioned by both sample groups were not different and were in accordance with the literature: escaping from everyday environment and seeking new experiences. However, it seems that non-cruisers might choose other vacation types, because they associate a cruise vacation with characteristics they avoid in daily life (e.g., crowds, confinement, and a loss of control). Although some of their perceptions may not be accurate (e.g., a cruise ship being filled with the elderly), their avoidance or aversion toward a cruise being fancy and artificial ("manufactured experience") seemed to be provoked by the advertisements of cruise vacations in the public media that promise an extraordinary experience. MacCannell (1976) suggested, "A basic component of tourist motivation to travel" is the desire for "deeper involvement with society and culture to some degree" (p. 10). He emphasized that modern tourists seek touristic experiences that go beyond the "superficial experiences of other cultures and other places" (p. 10).

Therefore, based on the current findings, it is recommended that the cruise industry offer and market opportunities that are more than superficial “cruising”; namely, “real” vacation experiences which the non-cruisers in the current sample seemed to prefer. For example, instead of offering shopping opportunities at ports-of-calls that both cruisers and non-cruisers perceive as “superficial,” offering opportunities to meet local communities and learn about local cultures explained by local residents would make them feel that their experience is more “real.” It also seems important to offer structured as well as unstructured cruise programs to accommodate leisure travelers’ desires for control of their own vacation experience as well as for being taken care of (choosing to be controlled). For example, passengers who join organized land excursions at ports-of-call can have their own free time at their own pace to explore the local cultures, not circumscribed within the ‘tourist zone’ where they are provided with touristic settings and are urged to go shopping where they might feel that they have not “experienced” the place. These preliminary suggestions are discussed in more detail in the Phase 2 findings of this study.

*Phase 2: Survey of U.S. Leisure Travelers*

Phase 2 was aimed at testing the conceptual model and hypotheses developed based on the results found in Phase 1 as well as the literature. Following the target population criteria of previous studies (CLIA 2002, 2004), the population for this study was those who were over 25 years old with annual household incomes over \$40,000 and take at least one leisure vacation paid for per year for more than three nights (CLIA, 2002). Three screening questions were included in the questionnaire to ensure that respondents met the criteria to substantiate the representativeness of the results.

A “leisure vacation” was defined as a vacation trip for leisure that one pays for, excluding visiting family or friends and staying at their place, but including trips to other destinations while visiting family or friends. For the cruiser group, those who had taken a cruise vacation in the last five years were randomly selected to participate. Five years was utilized, instead of three years (as per TNS/NFO Plog, 2004) to increase the response rate of the mail survey.

The total sample size for the study was 2,500, consisting of both current customers (i.e., those who have taken a cruise vacation in the last five years) and current non-customers (i.e., those who have taken a cruise vacation in lifetime but not in the last five years and those who have never taken a cruise vacation) of the cruise industry. The sample consisted of a total of 1,000 current customers and 1,500 random leisure travelers (without knowledge of whether or not they had taken cruise vacations). Current customers were over-sampled to ensure that enough were in the sample drawn.

First, the total population who met previous studies by CLIA (2004, 2005) (i.e., over 25 years old with household income over \$40,000) was 106 million, of which over 22 million were those who have taken a cruise vacation in the last three years (TNS/NFO Plog, 2004) and over 84 million were those who have never taken a cruise (TNS/NFO Plog, 2004). Second, a sampling error was assumed to be plus or minus five percent with the confidence level of 95 percent. Third, it was assumed that there would be relatively varied population characteristics. Fourth, a 30 percent response rate out of usable surveys was assumed.

According to a reference for sample size determination (Salant & Dillman, 1994, p. 55), it was determined that 384 completed surveys would be needed for the above-mentioned conditions. The sample list was purchased from *Survey Sampling International* for their competitive credentials and history, which was selected from the list of sampling companies compiled by American Marketing Association (AMA) and New York AMA on August 15, 2005.

In order to increase the response rate, two lucky draws for two Target gift cards of \$150 each were offered to potential respondents who had returned the questionnaire by December 10, 2005. The two lucky draws were conducted on December 13<sup>th</sup>, 2005 and letters to the winners were sent on December 15, 2005, for further information on receiving Target gift cards. One card was sent to one winner in San Diego, California on April 5<sup>th</sup>, 2006, after administration matters were taken care of. As a letter to the other winner in Omaha, Nebraska was returned as undeliverable, another draw was conducted on March 15<sup>th</sup>, 2006 and a winning notice was sent to Raleigh, North Carolina March 20<sup>th</sup>, 2006.

### **Model and Hypotheses**

The purposes of this study were to examine and compare profiles of current cruise customers and current non-customers (i.e., non-cruisers and past cruisers) and to test this study's conceptual model ("the Model") based on the literature and the findings of Phase 1. The Model included eleven exogenous variables and three endogenous variables (Figure 3-1) and corresponding hypotheses were developed within the literature review, which are presented here again.

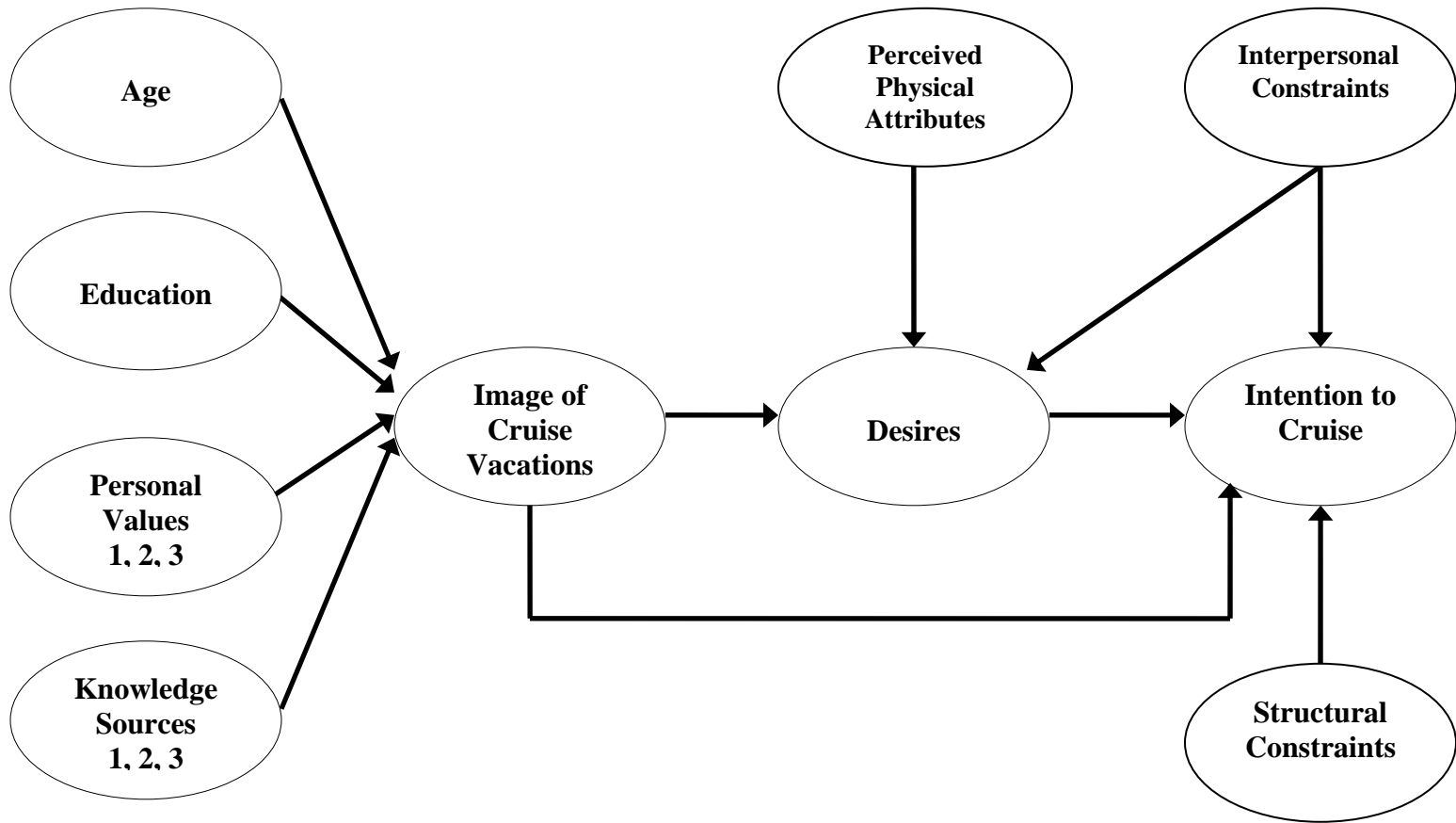


Fig. 3-1. A tested model of cruise vacation choice decision.

Based on the significant effect of previous experience on image toward destination image, although no specific relationships have yet to be examined, it was hypothesized that the number of cruise vacations taken by current customers would have positive relationship with *Image of Cruise Vacations*. In a similar vein, current customers' *Image of Cruise Vacations* was hypothesized to be more positive than that of current non-customers.

**Hypothesis 1: The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive.**

**Hypothesis 2a: Current customers' *Image of Cruise Vacations* is more positive than that of past-cruisers.**

**Hypothesis 2b: Past-cruisers' *Image of Cruise Vacations* is more positive than that of non-cruisers.**



Hypothesis 3 to Hypothesis 10 were developed to be tested with the use of structural equation modeling. Based on studies on destination image and destination choice that *Personal Values* significantly influence people's image of a destination which in turn influence their choice of a destination, it was hypothesized that:

**Hypothesis 3: *Personal Values* have a significant effect on *Image of Cruise Vacations*.**

Following the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001) in which attitudes toward a goal-directed behavior influence the level of *Desires* and *Intention* to perform a given behavior, three hypotheses (i.e., Hypothesis 4, 5 and 10) were developed (the order of hypotheses' numbers is based on the order of variables in this study's model).

**Hypothesis 4: *Image of Cruise Vacations* significantly influences *Desires*.**

**Hypothesis 5: *Image of Cruise Vacations* significantly influences *Intention*.**

**Hypothesis 10: *Desires* positively influence *Intention*.**

Moreover, based on the leisure constraints model's (Crawford et al., 1991) propositions that interpersonal constraints which was divided into two constructs (i.e., Image of Cruise Vacations and Perceived Physical Attributes) influence the level of *Desires*, while *Interpersonal Constraints* influence both *Desires* and participation (i.e., *Intentions* as an indicator of actual behavior in this study) and *Structural Constraints* influence participation, four hypotheses were developed (i.e., Hypothesis 6, 7, 8 and 9) as follows:

**Hypothesis 6: *Perceived Physical Attributes* negatively influence *Desires*.**

**Hypothesis 7: *Interpersonal Constraints* negatively influence *Desires*.**

**Hypothesis 8: *Interpersonal Constraints* negatively influence *Intention*.**

**Hypothesis 9: *Structural Constraints* negatively influence *Intention*.**

### **Development of Survey Instrument**

The questionnaire consisted of three sections (Appendix 1). In Section 1, respondents were asked about their leisure vacations in general. They were asked about: 1) the average number of days spent on leisure vacations per year; 2) the average number of leisure vacations per year; 3) how many months in advance they usually plan a leisure vacation; and 4) their average household expenditure on leisure vacations in 2004.

In Section 2, respondents were asked about their level of agreement with 24 statements of perceptions toward cruise vacations (e.g., cruise vacations provide opportunities for new experiences; cruise ships are too crowded). In Section 3, respondents were asked about demographics (e.g., age, gender, education level) and personal values. All questions were closed-ended except for the last question in which respondents could provide any comments (e.g., overall opinion regarding cruise vacations, likes or dislikes about cruise vacations, or opinions on the survey) (Appendix 1). The constructs or concepts, sources of the measurement scales and the measurement scales utilized on the questionnaire for this study are as follows and are displayed in Table 3-2.

Table 3-2  
 Constructs, sources and measurement scales

Construct/Concept	Sources	Survey Question	Measurement Scales
Leisure Vacation Behavior	Texas Economic Development questionnaire for leisure travel; Cruise Market Report (TNS/NFO Plog, 2004)	Section 1: Q1 is for screening. Q2 Q3 Q4 Q5	<u>Open-ended and ratio measurement</u> -Average number of days spent on leisure vacations per year -Average number of leisure vacations per year -The duration of vacation planning in advance (in months) -Average household expenditure on leisure vacations in 2004
Image of Cruise Vacations: Affective	Phase 1; Three items (enjoyable; exciting; pleasant) overlap with the affective attitude scale used by Perugini & Bagozzi (2001)	Section 2: Q1	5 items (7-point semantic differential scale): 1) Not enjoyable –enjoyable 2) Exciting –Boring (reversed) 3) Uncomforting –comforting 4) Pleasant– Unpleasant (reversed) 5) Annoying –Calming
Image of Cruise Vacations: Cognitive, positive aspects (benefits)	Phase 1; Cruise Market Report (TNS/NFO Plog, 2004)	Section 2: Q2	10 items (7-point agreement scale from Strongly Disagree—Neither disagree/agree—Strongly Agree): 1) Being treated well 2) Much food 3) Variety of food 4) Experience new things 5) Being playful 6) Hassle-free 7) Spend time with family/friends 8) Being calm and relaxed 9) Escape from usual environment 10) Good value-for-money

Table 3-2 (Continued)

Construct/Concept	Sources	Survey Question	Measurement Scales
Image of Cruise Vacations: Cognitive, negative aspects	Phase 1; Cruise Market Report (CLIA, 2002; TNS/NFO Plog, 2004)	Section 2: Q2	14 items(1-5 agreement scale from Strongly Disagree –Strongly Agree): 1) Too crowded 2) Too controlled 3) Uncomfortable being surrounded by strangers 4) Unsafe 5) Regimentation 6) Superficial 7) The dominant presence of the elderly 8) Loss of my control 9) Health-related risk 10) Too confined 11) Boring 12) Too much emphasis on food 13) Too much emphasis on shopping 14) Lack of educational programs
Knowledge Sources for cruise Vacations	Travel information sources: Kerstetter & Cho, 2003  The item, “The internet” is modified to two: 2) and 3).  An additional item, “TV programs” is added.	Section 2: Q3	12 items (1-7 point for the extent of use: Not at all—Somewhat—A lot): 1) My own experience 2) Cruise companies’ websites 3) The Internet sites other than cruise companies’ websites) 4) Friends & Family (modified from family & relatives) 5) Magazines 6) Newspapers 7) Travel guide books 8) <i>TV programs (added)</i> 9) Brochures/pamphlets 10) Travel agencies 11) Travel/auto clubs 12) Convention & Visitors Bureaus

Table 3-2 (Continued)

Construct/Concept	Sources	Survey Question	Measurement Scales
Previous Cruise Experience		Section 2: Q 1 is for screening.	Open-ended and ratio measurement Q2 1) The number of cruise vacations taken in lifetime 2) The number of cruise lines taken in lifetime 3) The year one has taken the first cruise vacation
Desires	The construct is from Perugini & Bagozzi (2001); the original scale is 11-point semantic differential scale (1: False –11: True) with two items: “I want to...” and “I desire to...” However, due to limited space on the questionnaire and to avoid leading, they are incorporated into the question on perceptions (Section 2, Q2).	Section 2: Q2	2 items (1-5 agreement scale from 1: Strongly Disagree –3: Neither disagree/agree; 5: Strongly Agree)  1) I wish to take cruise vacations. 2) Taking cruise vacations is desirable to me.



Table 3-2 (Continued)

Construct/Concept	Sources	Survey Question	Measurement Scales
Goal Intentions	Fishbein & Ajzen (1975); Chandon, Morwitz, & Reinartz, (2005); Perugini & Bagozzi (2001)	Section 2: Q6  Q2	2 items: 1) The likelihood of taking a cruise in the next 3 years (5-point unipolar scale (1: Not at all likely to 5: Very much likely) 2) The probability of taking a cruise in the next 3 years (5-point agreement scale)
Implementation Intentions	Gollwitzer & Brandstätter (1997); Rise, Thompson, & Verplanken (2003)	Section 2: Q7	Nominal: yes/no for WHEN and WHERE. –will be coded as Yes if yes to both.
Personal Values	List-Of-Value scale (Kahle, Beatty, & Homer, 1986)	Section 3: Q1	9 items (1-9 agreement scale from Very unimportant –Very important): 1) Sense of belonging 2) Excitement 3) Warm relationships with others 4) Self-fulfillment 5) Being well-respected 6) Fun and enjoyment of life 7) Security 8) Self-respect 9) A sense of accomplishment
Demographics	Previous cruise surveys	Section 3: Q2 Q3 Q5 Q6 Q7	Nominal scale (Choose one) Education Gender Ethnic background Year of birth Household income



Similar to Kerstetter & Cho (2004), *Knowledge Sources* from which respondents gain knowledge about cruise vacations were measured by the types of and the amount of information sources from which leisure travelers learn about a cruise vacation on a seven-point Likert-type scale, ranging from “Not at all” (1) to “A lot” (7). The twelve information sources obtained from the study of travel information sources by Kerstetter and Cho (2004) were: Own experience; Cruise companies’ websites and “the Internet sites other than cruise company websites (modified from “the Internet” and divided into two for this study’s purpose:); Friends & Family (modified from Family & Relatives); Magazines; Newspapers; Travel guide books; TV programs (added); Brochures/Pamphlets; Travel agencies; Travel/auto clubs; and Convention & Visitors Bureaus. Cruisers’ *Previous Cruise Experience* was measured by the number of cruise vacations they had taken in their lifetime.

*Personal Values* was defined as “organized sets of preferential standards that are used in making selections of objections and actions, resolving conflicts, invoking social sanctions, and coping with needs or claims for social and psychological defenses of choice made or proposed” (Rokeach, 1979, p. 20). *Personal Values* was measured by the List-Of-Values (Kahle, Beatty, & Homer, 1986) on a nine-point scale, ranging from “Not at all important” (1) to “Extremely important” (9) , and included nine items: 1) sense of belonging; 2) excitement; 3) warm relationships with others; 4) self-fulfillment; 5) being well-respected; 6) fun and enjoyment of life; 7) security; 8) self-respect; and 9) a sense of accomplishment.

The concept of *Image of Cruise Vacations* was defined as individual's thoughts and feelings about cruise vacations, and was measured in terms of feelings as well as thoughts. The items were mainly extracted from the findings of Phase 1, as there was no referable study. Feelings toward taking a cruise vacation were measured by five semantic differential items on a seven-point scale: "Not enjoyable–Enjoyable"; "Boring–Exciting"; "Uncomforting–Comforting"; "Unpleasant–Pleasant"; and "Annoying–Calming." These items were drawn from Phase 1 findings and the three items (enjoyable; exciting; pleasant) overlap with the affective attitude scale used by Perugini & Bagozzi (2001). Thoughts about cruise vacations were measured by 24 items which were extracted mainly from Phase 1 and previous studies by CLIA (2002, 2004) on a five-point Likert-type scale, ranging from "Strongly disagree" (1), "Neither disagree nor agree" (3) to "Strongly agree" (5). Respondents were asked to rate how much they agreed with 10 positive aspects (the potential benefits): 1) being treated well; 2) a lot of food; 3) variety of food; 4) experience new things; 5) being playful; 6) hassle-free; 7) spend time with family/friends; 8) being calm and relaxed; 9) escape from usual environment; and 10) good value-for-money.

Respondents were also asked to rate their level of agreement with 14 potentially negative aspects about cruise vacations: 1) too crowded; 2) too controlled; 3) too many strangers; 4) unsafe; 5) too many rules and regulations (i.e., regimentation) ; 6) superficial; 7) the dominant presence of the elderly; 8) low control over one's own vacation experience; 9) health-related risks; 10) confined and small personal space; 11)

boring; 12) over-emphasis on food; 13) over-emphasis on shopping; and 14) lack of educational programs.

The concept of *Desires* was defined as “the motivational state-of-mind wherein appraisals and reasons to act are transformed into a motivation to do so” (Perugini & Bagozzi, 2001, p. 84). Two items were used to measure *Desires* on a five-point scale, ranging from “Strongly disagree” (1), “Neither disagree nor agree” (3) to “Strongly agree” (5). The items were stated, “I wish to take cruise vacations” and “Taking cruise vacations is desirable to me.” The original scale for this construct was developed by Perugini & Bagozzi (2001) and is an 11-point semantic differential scale (1: False –11: True) with two items: “I want to...” and “I desire to...” However, due to limited space on the questionnaire and to avoid leading, these were placed within the question on perceptions (Section 2, Q2) on a five-point scale, ranging from “Strongly disagree” (1), “Neither disagree nor agree” (3) to “Strongly agree” (5).

*Perceived Physical Attributes, Interpersonal and Structural Constraints* were extracted mainly from Phase 1 and the literature on leisure constraints (e.g., Crawford & Godbey, 1987; Crawford et al., 1991; Yarnal et al., 2005; Pennington-Gray & Kerstetter, 2002; Nyaupane et al., 2004) and measured on a five-point Likert-type scale, ranging from “Strongly disagree” (1), “Neither disagree nor agree” (3) to “Strongly agree” (5). The items for constraints were drawn from the findings of Phase 1 and the literature (Crawford & Godbey, 1987; Crawford, Jackson, & Godbey, 1991; Yarnal, Kerstetter, & Yen, 2005); Pennington-Gray & Kerstetter, 2002); Nyaupane, Morais, & Graefe, 2004).

*Perceived Physical Attributes* included seven items extracted from Phase 1 findings and previous studies by CLIA (2002, 2004): 1) sea-sickness or motion-sickness; 2) fear of sea water or ocean; 3) a physical disability; 4) no knowledge about cruise vacations; 5) claustrophobia; 6) no knowledge about how to book a cruise vacation; and 7) poor health. *Interpersonal Constraints* consisted of three items, which were poor health of and spouse's or partner's non-preference toward cruise vacations of and having no companion to go on a cruise vacation with. *Structural Constraints* consisted of six items: 1) no time; 2) no opportunity; 3) family commitments; 4) work responsibilities; 5) too costly; 6) family lifecycle; and 7) Natural disasters such as hurricanes. The last item, "natural disasters such as hurricanes" was included to examine the effects of recent hurricanes (i.e., hurricane Katrina and Rita) on people's *Desires* and *Goal Intentions*.

*Family Lifecycle* was measured on a nominal scale (i.e., choosing one answer) with nine choices which were extracted from Backman and Malinovsky's study (1995): 1) single adult living alone or with other single adults; 2) married couple without children; 3) family with one or more infants (Oldest child is 24 months or younger); 4) family with preschoolers (Oldest child is 2 to 6 years old); 5) family with young children (Oldest child is 7 to 12 years old); 6) family with teenagers (Oldest child is 13 to 20 years old); 7) family with at least one child having grown up and left home; 8) all children have grown up and left home, but parents have not retired; and 9) at least one spouse is retired.

*Goal Intentions* was measured by two items pertaining to the probability and the likelihood of taking a cruise vacation in the next three years, based on previous studies

(e.g., Fishbein & Ajzen, 1975; Chandon, Morwitz, & Reinartz, 2005; Perugini & Bagozzi, 2001). Three years was selected in order to be comparable to TNS/NFO Plog (2004).

The first item about the probability was stated as “The probability that I will take a cruise vacation in the next three years is high” was measured on a five-point Likert-type scale, ranging from “Strongly disagree” (1), “Neither disagree nor agree” (3) to “Strongly agree” (5). The likelihood was measured on a five-point scale, ranging from “Not at all” (1), “Somewhat” (3) to “Very much” (5).

*Implementation Intentions* was measured with a nominal scale (i.e., Yes/No) based on previous studies (e.g., Gollwitzer & Brandstätter, 1997; Rise et al., 2003). Respondents who reported their likelihood of taking a cruise vacation in the next three years was 3, 4 or 5 on a five-point scale, were asked if they had planned and when and where to take their next cruise vacation (Gollwitzer & Brandstätter, 1997). In addition, question 4 in Section 2 was used for screening purposes to identify: 1) cruisers and non-cruisers; and 2) cruisers’ lifetime cruise vacation experience (i.e., the number of cruise vacations taken and the number of cruise lines taken; the year of the first cruise vacation).

### *Pre-tests*

The purposes of the pre-tests were: to examine the questions' clarity; to obtain suggestions for improving the items and wording; to test the reliability of the measures for the study concepts such as *Image of Cruise Vacations*, *Desires*, *Intentions* and *Constraints*; and to examine the latent dimensions of a new concept for this study, *Image of Cruise Vacations*.

Two pre-tests were conducted with the first on August 10<sup>th</sup>, 2005 at the Asia Pacific Tourism Research conference in Honolulu, Hawaii and with the second (using the second version revised for clarity) September 9<sup>th</sup>, 2005 in College Station, Texas. For the first pre-test, the participants were twelve faculty members and graduate students of tourism and hospitality from various schools in the U.S. as well as Asia Pacific region. The most common suggestion regarded the limited choice options for questions related to leisure behavior, which were initially measured with ranges (i.e., 3 to 4 days; 1-2 times). These questions included: How many days do you usually spend for a leisure vacation?; How many times do you usually take a leisure vacation per year?; and How far in advance do you usually plan your leisure vacation?). Accordingly, these questions were revised to be open-ended for which respondents can write in their own numbers.

For the second revised questionnaire, the participants were 81 faculty members and undergraduate students at the Department of Recreation, Park and Tourism Sciences of Texas A&M University. Suggestions included the organization of the questionnaire, as the questionnaire consisted of two packets of questionnaires for those who have taken a cruise vs. those who have never taken a cruise. Participants were asked to read the

instructions and respond to only one packet, but they commented that they missed reading the instructions and had to re-start on a new questionnaire after finding many irrelevant questions (e.g., for non-cruisers, they were not asked about past cruise experiences). Thus, the questionnaire was revised to be incorporated into one for all respondents with clear instructions that were easy to notice with black and white color contrast. The second comments commonly suggested regarded the small font size and the overall structure, which could be improved to make it easy to read and follow. Accordingly, the questionnaire was revised using a bigger font size and grey coloring to make the separation of the questions clearer.

The Cronbach's alpha for the initial 22 items of *Image of Cruise Vacations* was 0.83, for two items of *Desires* was 0.65; for two items of *Intentions* was 0.71; for seven items of *Perceived Physical Attributes* was .78; for three items for Interpersonal Constraints was .63; and for five items of *Structural Constraints* was 0.80. Hence, all alpha coefficients were deemed acceptable.

Considering these pre-tests results, the study purposes and the timing of the actual survey (i.e., the hurricane season), two additional items were added on the final questionnaire. They were one item (i.e., "A cruise vacation is good value-for-money.") to *Image of Cruise Vacations* and another item (i.e., "Natural disasters such as the recent hurricanes of Katrina and Rita prevent me from going on a cruise vacation.") for *Structural Constraints*. The former item was used in the previous studies by CLIA, of which inclusion would allow comparison of the final results and the latter item was indicated to be an important situational variable in the studies on destination choice.

The latent dimensions of the concept, *Image of Cruise Vacations* were examined using principal component analysis with oblique rotation, which allowed items to be loaded on multiple components, considering items' inter-correlations. According to the structure matrix, there were seven possible components, of which the first component consisted of items regarding positive images of cruise vacations and the second component were regarding negative images.

However, the rest of the components could not be meaningfully interpreted, although items for the same valence (i.e., positive or negative) converged together except for the sixth component which had one positive and the other negative image items. Nonetheless, it was decided that all items should be retained for the final survey of the U.S. leisure travelers, as these results seemed to be because 93.8 percent of the second pre-test participants were undergraduate students who were under 25 years old who might not be aware of or familiar with cruise vacations. This finding was helpful in that most items of *Image of Cruise Vacations* were grouped together based on valence as presumed.



### **Data Collection Procedures**

The questionnaire was distributed to a randomly selected sample of 2,474 U.S. households. Twenty six households in Louisiana (e.g., New Orleans, Baton Rouge) were excluded from the initial total sample of 2,500, as those regions were devastated by the hurricane Katrina and Rita at the time of survey. The sample for both current customers and current non-customers of the cruise industry was selected from a list of U.S. residents who were over 25 years old with annual household income over \$40,000 and take a leisure vacation for more than three nights at least once a year (CLIA, 2002). Three questions pertaining to these criteria were included in the questionnaire for screening, and the analyses were based on the responses from those who met all of them.

Using a modified Dilman's (2000) Total Design Method, survey was conducted in three stages. First, a total of 2,474 questionnaires were sent out in mid October, 2005. After a week or so, postcards were sent out to all of 2,474 potential respondents for reminder of responding to the questionnaire. Finally, one week after postcard reminders, the second mail-out was sent to those who had not responded in the first mail-out. The returned surveys were accepted until December 31<sup>st</sup>, 2005. To encourage responses, two lucky draws of \$150 gift card each were provided.

### **Data Analysis Methods**

The data were analyzed in five steps (Table 3-3). First, the two groups, current customers (n = 252) and current non-customers (n = 200) of the cruise industry, were compared based on demographic profiles, leisure vacation behavior in 2004 and their images of cruise vacations. In addition, current non-customers were further sub-grouped as “non-cruisers” (n = 78; those who had never cruised) and “past-cruisers” (n = 128; those who had not taken a cruise in the last five years but have taken a cruise in their lifetime). These sub-groups were also compared with the customer group. In this step, descriptive statistics (e.g., mean, standard deviation), t-test and ANOVA in SPSS 11.0 were used and Hypotheses 1 and 2 were tested.

Second, dimensionalities of the measures of this study were examined using principal component analysis (PCA) and Cronbach’s alpha in SPSS 11.0. PCA was used to explore the latent components or composites that are linear combinations of manifest variables by maximizing total variance. The levels of reliability for the measures of each construct were assessed by examining shared correlations among items measuring each construct ( $\alpha = N \times \bar{r} / [1 + (N-1) \times \bar{r}]$  where N is the number of items and  $\bar{r}$  is the average inter-item correlation among items).

Table 3-3  
Data analysis steps, purposes and analysis methods

Data analysis steps	Purposes	Analysis methods
<p><i>Step 1</i> Group comparisons on descriptive data: -Demographic profiles -Leisure vacation behavior in 2004 -Knowledge sources and affects</p>	<p>-To describe and compare the customer and non-customer groups -To test Hypothesis 1 and 2</p>	<p>Descriptive statistics, t-test and ANOVA in SPSS 11.0</p>
<p><i>Step 2</i> Principal component analysis (PCA)</p>	<p>-To examine the dimensionality of constructs -To preliminarily examine reliability of measures -To compare groups based on latent components</p>	<p>PCA and Cronbach's <math>\alpha</math> in SPSS 11.0</p>
<p><i>Step 3</i> Preparation for CFA, SEM</p>	<p>-To test model assumptions -To impute missing data to avoid a potential bias in the analysis</p>	<p>-Univariate and multivariate normality test in CFA using LISREL 8.72 -Multiple imputation in LISREL 8.72</p>
<p><i>Step 4</i> Confirmatory factor analysis (measurement models)</p>	<p>To test reliability of measures  To test validity of measures  To decide items to exclude from structural equation modeling</p>	<p>Reliability <math>\rho</math> coefficient (compared with Cronbach's <math>\alpha</math>)  Convergent and discriminant validity Consideration of: -Theories; -Reliability coefficients; -Inter-item correlations; -Item-factor loadings; -Chi-square contributions to CFA model fit -Practical implications</p>
<p><i>Step 5</i> Structural equation modeling</p>	<p>-To obtain the structural model for the total sample -To test Hypotheses 3 to 10</p>	<p>LISREL 8.72</p>

Third, the data were treated for missing values for further analyses. To avoid a potential bias in the results by deleting cases listwise for missing values, multiple imputation method in LISREL 8.72 was employed which uses “the EM algorithm and the method of generating random draws from probability distributions via Markov chains” (du Toit & du Toit, 1993, p. 387). Various assumptions of PCA, factor analysis and structural equation modeling were tested in the corresponding step prior to analyzing the data.

Fourth, measurement models were examined using confirmatory factor analysis (CFA) in LISREL 8.72 (Jöreskog & Sörbom, 2005). CFA was also used to examine the degree of convergent and discriminant validity of the measures as well as the levels of composite reliabilities of the measures. Similar to the methods used by Perugini and Bagozzi (2001), convergent validity was assessed by evaluating the measures’ factor loading sizes to each corresponding construct and discriminant validity among constructs was assessed by examining if correlations ( $\Phi_{ij}$ ) between constructs were smaller than 1.00.

Decisions to exclude items from structural equation modeling were guided by the literature on which this study's model was based: destination image (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Beerli & Martin, 2004), destination choice (e.g., Botha, et al., 1999; Woodside & Lysonski, 1989), the leisure constraints model (Crawford et al., 1999) and the Model of Goal-directed Behavior (Perugini & Bagozzi, 2001).

Results of factor loadings in CFA and their effects on construct reliability coefficient  $\rho$  (i.e., composite reliability) were also used to examine the items. In addition, the practical relationships among the items and constructs were taken into consideration for a few items. For example, when decisions had to be made to solve potential multicollinearity problems, which made statistical results un-interpretable, considerations were given to the item which was relatively within the cruise industry's management control for marketing strategies.

Fifth, the parameters among constructs were examined using structural equation models for the total sample as well as the two sample groups (i.e., current customers and current non-customers). The group differences for the parameters were tested against null hypotheses that assumed no differences in the parameters. Further, eight hypotheses (i.e., Hypotheses 3 to 10) were tested in this final step.

### Summary of Chapter III

Using a sequential study design, this study consisted of two phases. In Phase 1, 22 guided conversations (i.e., 10 cruisers and 12 non-cruisers) were conducted using a modified Zaltman Metaphor Elicitation Technique to explore people's image of cruise vacations. These findings were the basis for Phase 2 and were utilized for the construct's (*Image of Cruise Vacations*) items in developing a questionnaire in Phase 2. In Phase 2, a conceptual model, eleven hypotheses and a questionnaire were developed, and a survey of the U.S. leisure travelers was conducted to test the Model.

The data were analyzed in five steps starting from descriptive analyses for the total sample (n = 452) and current customers (n = 252) vs. past-cruisers (n = 128) vs. non-cruisers (n = 72) (past-cruisers and non-cruisers comprise current non-customers) when applicable. Descriptive statistics included demographic profile; leisure behavior; *Knowledge Sources*; and *Affect* toward taking cruise vacations. Hypothesis 1, 2a, 2b were tested in this step. Next, principal component analysis was used to examine the dimensionality of the constructs. After testing for modeling assumptions, confirmatory factor analysis was used to test the reliability and validity of measures and decisions were made about the measures to exclude based on the results. Finally, structural equation modeling was conducted to test Hypothesis 3 to 10 and to compare the SEM's of current non-customers and current customers.

## CHAPTER IV

### FINDINGS

#### Overview of Chapter IV

In Chapter IV, the survey results are discussed. As a goal of this study is to examine the “overlapping commonalities across non-customers” (Kim & Mauborgne, 2005, p. 114) of the cruise industry, descriptive statistics results are presented to compare current customers (n = 252) and current non-customers (n = 200). Current non-customers consisted of past-cruisers (n = 128) and non-cruisers (n = 78). When feasible, customers are also compared with the two sub-groups of current non-customers (i.e., past-cruisers and non-cruisers).

Descriptive statistics included demographic profile (i.e., gender; age; household income; educational level; ethnic background; and family lifecycle); leisure vacation behavior (i.e., the number of leisure vacations they usually take; the average number of days usually spent on leisure vacations; the total amount of expenditure on leisure vacations in 2004; and the average number of months in advance they usually plan leisure vacations); knowledge sources for cruise vacations and affect (i.e., feelings) toward taking cruise vacations.

Further, as Hypothesis 1 (i.e., the relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers) and Hypothesis 2 (i.e., 2a: Current customers’ *Image of Cruise Vacations* is more positive than that of past-cruisers; 2b: Past-cruisers’ *Image of Cruise Vacations* is more positive

than that of non-cruisers.) were about descriptive statistics, the results are presented in this chapter.

The results of modeling assumptions are presented to examine if the data were appropriate for factor analysis and structural equation modeling, followed by the results of measurement models. In addition, the examination of the reliability and validity of the measures are followed by structural equation models for the total sample and the two sub-groups (i.e., current customers vs. current non-customers).

### **Descriptive Statistics and Group Comparisons**

A total of 645 questionnaires were returned, of which 580 were from the first mail-out and 65 from the second mail-out. Out of 645 respondents, 334 had taken a cruise in the last five years (i.e., current customers), 193 had not taken a cruise vacation in the last five years, but had taken at least one before then (i.e., past-cruisers) and 109 had never taken a cruise vacation in their lifetime (i.e., non-cruisers). Thus, the sample size for current non-customers for the cruise industry was 302. The response rate was approximately 33.1 percent, after excluding 523 non-deliverable surveys for incorrect addresses and refused surveys.

After screening for this study's sample criteria (i.e., over 25 years old with \$40,000 household income and take a leisure vacation for more than three nights at least once a year), the data from 452 respondents, consisting of 250 current customers and 272 current non-customers (i.e., 200 past-cruisers and 72 non-cruisers) were used for analyses (Table 4-1).



Although more responses were anticipated, the two detrimental hurricanes (i.e., Katrina and Rita) in the U.S. history had damaged many areas around the survey period (October to December 2005). This might have discouraged potential respondents in other unscathed areas from responding to questions regarding cruise vacations that remind them of the frightening ocean water they witnessed via public media. Nonetheless, this was more than the required 384 completed surveys for this study, given a 106 million total study population size with a sampling error of plus or minus five percent and a 95 percent confidence level (Salant & Dillman, 1994).

Table 4-1  
Composition of survey respondents (Total n = 452)

	Current customers of the cruise industry (n = 252; 55.8%)	Current non-customers of the cruise industry (n = 200; 44.2%)
Had taken a cruise in the last 5 years and before then	Cruisers (n = 252; 55.8%)	
Had not taken a cruise in the last 5 years, but have taken one before then		Past-cruisers (n = 128; 28.3%)
Had never taken one		Non-cruisers (n = 72; 15.9%)
Total respondents	n = 452 (100%)	

### *Demographic Profile*

Demographic profiles were examined for total respondents ( $n = 452$ ) and the two sub-samples of current customers ( $n = 252$ ) and current non-customers ( $n = 200$ ) in terms of age; gender; ethnic background; household income; educational level (Table 4-2). Further, current customers and current non-customers were compared in terms of age; gender; ethnic background; household income; educational level; and family lifecycle (Tables 4-3, 4-4, 4-5). Mann-Whitney U-statistic and Wilcoxon W-statistic were examined for examining the group differences for categorically measured variables (i.e., gender; household income; ethnic background; and family lifecycle) and t-test was conducted for numerically measured variables (i.e., age and educational level). If the results of Mann-Whitney U-statistic and Wilcoxon W-statistic are significant (i.e.,  $p < 0.05$ ), the two groups are said to be statistically different.

Almost three thirds of total respondents (71.8%) were females. On average, total respondents were 53.1 years old (standard deviation = 11.96). Almost two thirds (65.5%) of total respondents had household incomes between \$40,000 and \$99,999, while the rest (34.5%) of the respondents had household income over \$100,000. They had 15.11 years of education on average (standard deviation = 2.43).

Eighteen percent of the respondents had between 9 and 12 of years of education (i.e., high school); 57.6 percent had 13 to 16 years (i.e., undergraduate); and 24.4 percent had 17 years or more of education. The majority of respondents' (90.5%) ethnic background was Caucasian, while other ethnicities included African-American (3.9%); Native American (2.5%); Asian (1.1%); and Hispanic (1.8%).

When the two sub-samples of current customers (n = 252) and current non-customers (n = 200) were compared, they were not found to be different in terms of gender; educational level; household income; or ethnic background. For both groups, more than two thirds were females (71.8% for current non-customers and 70.7% for current customers); the average educational level was undergraduate school (current non-customers' mean = 15.12; current customers' mean = 15.10); household incomes were approximately between \$75,000 and \$99,000; and the majority were Caucasian (92.7% for current non-customers and 91.5% for current customers) (Table 4-2).

However, current non-customers and current customers were found to be different on age and family lifecycle. On average, current non-customers (mean = 50.58; standard deviation = 11.30) were 4.5 years younger than current customers (mean = 55.04; standard deviation = 12.12) (Table 4-3).

Table 4-2  
Demographic profiles (total respondents, current non-customers and current customers)

	Total respondents	Current non- customers	Current customers
Characteristics	Number of cases (%)	Number of cases (%)	Number of cases (%)
<i>Gender</i>			
Female	313 (71.8%)	142 (73.2%)	171 (70.7%)
Male	123 (28.2%)	52 (26.8%)	71 (29.3%)
Total	436 (100.0%)	194 (100.0%)	242 (100.0%)
<i>Ethnic background</i>			
African-American	17 (3.9%)	5 (4.0%)	8 (3.3%)
Native American	11 (2.5%)	2 (1.6%)	7 (2.8%)
Asian	5 (1.1%)	0 (0.0%)	4 (1.6%)
Caucasian	399 (90.5%)	115 (92.7%)	225 (91.5%)
Hispanic	8 (1.8%)	2 (1.6%)	2 (0.8%)
Other	1 (0.2%)	0 (0.0%)	0 (0.0%)
Total	441 (100.0%)	124 (100.0%)	246 (100.0%)
<i>Household income</i>			
\$40,000-\$49,999	60 (13.3%)	27 (13.5%)	33 (13.1%)
\$50,000-\$74,999	128 (28.3%)	66 (33.0%)	62 (24.6%)
\$75,000-\$99,999	108 (23.9%)	45 (22.5%)	63 (25.0%)
\$100,000-\$124,999	77 (17.0%)	34 (17.0%)	43 (17.1%)
\$125,000-\$149,999	36 (8.0%)	15 (7.5%)	21 (8.3%)
Higher than \$150,000	43 (9.5%)	13 (6.5%)	30 (11.9%)
Total	452 (100.0%)	200 (100.0%)	252 (100.0%)
<i>Education level</i>			
High school	81 (18.0%)	33 (16.6%)	48 (19.1%)
Undergraduate	259 (57.6%)	118 (59.3%)	141 (56.2%)
Graduate	110 (24.4%)	48 (24.1%)	62 (24.7%)
Total	450 (100.0%)	199 (100.0%)	251 (100.0%)

Note: Percentages are based on valid cases.

Table 4-3  
 Age and educational level: current non-customers vs. current customers

	Levene's test for equality of variances		t-test for equality of means					95% Confidence Interval of the difference		Group mean (Standard deviation)	
	F	Sig.	t	Degree- of- freedom	Sig. (2- tailed)	Mean difference	Std. error difference	Lower	Upper	Current non- customers	Current customers
Education level	0.00	0.95	-0.09	448	0.93	-0.02	0.23	-0.47	0.43	15.12 (2.45)	15.10 (2.41)
Age	2.11	0.15	3.93	434	0.00	4.46	1.14	2.23	6.69	50.58 (11.30)	55.04 (12.12)

As reflected in the lower mean age of current non-customers, they were also found to be statistically different from current customers regarding family lifecycle but not different regarding gender, household income and ethnic background (Table 4-4).

Table 4-4  
Gender, household income, ethnicity and family lifecycle: current non-customers vs. current customers

	Gender	Household income	Ethnic background	Family lifecycle
Mann –Whitney U	22,879	22,719	23,274	21,250
Wilcoxon W	52,282	42,819	53,655	41,350
Z-statistic	-0.58	-1.84	-1.05	-2.91
Significance (2-tailed)	0.56	0.07	0.29	0.00

*Notes:* Current non-customers = 200; current customers = 252

As family lifecycle was different for current non-customers and current customers, the number of current non-customers and current customers for each family lifecycle category were examined. There were more families with infants, preschoolers or young children for current non-customers (33.5%) than current customers (18.7%). More than a half (61.9%) of current customers were families whose at least child had grown up and left home; all children had left home with non-retired parents; or at least one spouse had retired (Table 4-5).

Table 4-5  
 Family lifecycle: current non-customers vs. current customers

	Current non-customers		Current customers	
	Number of cases	Percent	Number of cases	Percent
<i>Family lifecycle</i>				
Single	18	9.0%	25	9.9%
Married without children	19	9.5%	24	9.5%
One or more infants (oldest child is 24 months or younger)	5	2.5%	1	0.4%
Preschoolers (oldest child is 2 to 6 years old)	13	6.5%	10	4.0%
Young children (oldest child is 7 to 12 years old)	25	12.5%	12	4.8%
Teenagers (oldest child is 13 to 20 years old)	24	12.0%	24	9.5%
At least one child is grown up and left home	24	12.0%	29	11.5%
All children have left home but parents are not retired	35	17.5%	47	18.7%
At least one spouse is retired	37	18.5%	80	31.7%
Total	200	100.0%	252	100.0%

*Note:* Percentages are based on valid cases.

*Leisure Vacation Behavior*

Current customers and current non-customers were also compared in terms of the average number of days usually spent on leisure vacations; the number of leisure vacations they usually take per year; the average number of months in advance they usually plan leisure vacations; and the total amount of household expenditures on leisure vacations in 2004.

Levene's (1960) test of equality for variances indicated that the two groups did not have equal variances for total expenditures on leisure vacations and the average number of days spent on leisure vacations in 2004. For other variables that the two groups could be compared statistically (i.e., the number of leisure vacations taken; the average number of months in advance they usually plan leisure vacations in 2004), it was found that they differed only on the average number of months in advance they usually plan leisure vacations. Current customers (mean = 5.04; standard deviation = 2.68) usually plan their leisure vacations 0.90 months more in advance than the non-customer group (mean = 4.14; standard deviation = 2.47). The number of leisure vacations taken in 2004 was not found to be statistically ( $p > 0.05$ ) different for current non-customers (mean = 2.27; standard deviation = 2.07) and current customers (mean = 2.43; standard deviation = 1.61) (Table 4-6).



Table 4-6  
 Leisure behavior: current non-customers vs. current customers

		Average days spent on leisure vacations per year	Average number of leisure vacations per year	Average number of months in advance leisure vacations are usually planned	Total household expenditures on leisure vacations in 2004
Levene's test for equality of variances	F	8.63	0.16	0.19	4.53
	Sig.	0.00	0.69	0.66	0.03
t-test for equality of means	t	2.85	0.89	3.68	2.19
	df	448.00	449.00	447.00	432.00
	Sig. (2-tailed)	0.00	0.38	0.00	0.03
	Mean difference*	-4.05	-0.15	-0.90	-3132.70
	Std. error difference	1.42	0.17	0.25	1433.09
95% Confidence Interval of the difference	Lower	-6.84	-0.49	-1.39	-5949.39
	Upper	-1.25	0.19	-0.42	-316.01
Group mean (SD)	Current non- customers	13.31 (9.00)	2.65 (3.04)	4.14 (2.47)**	\$3,752 (\$3,186)
	Current customers	17.24 (18.04)	2.43 (1.61)	5.04 (2.68)**	\$6,785 (\$19,881)

Note: All variables were measured on numeric (open-ended questions); \* Non-customer group score minus customer group score; \*\* significantly different

*Knowledge Sources and Affect toward Taking a Cruise Vacation*

According to the consumer decision-making literature (Engel, Blackwell, & Miniard, 1995), consumers search for information about products and services internally (i.e., memory) and externally (i.e., from the environment). Similarly, Schiffman and Kanuk's (1991) categorized information sources as interpersonal and impersonal or mass communication. Adopting Schiffman and Kanuk's (1991) categorization, Hsieh and O'Leary (1993) categorized three information sources as formal interpersonal (i.e., communication between a person and a travel professional such as travel agents, tour operators, CVB); informal interpersonal (i.e., from social interactions; word-of-mouth); and impersonal sources (i.e., mass communication: TV, radio, newspapers, print media).

In this study, twelve sources for knowledge about cruise vacations extracted from the literature (i.e., own experience; friends & family; brochures/pamphlets; travel agencies; cruise companies' websites; travel guide books; magazines; Internet sites other than cruise companies'; TV programs; travel/auto clubs; newspapers; and convention & visitors' bureaus) were compared for differences between current non-customers and current customers. Then, the twelve sources were examined for emergent components using principal component analysis (PCA). The results of latent components were also used for the basis of CFA and SEM.

When current non-customers and current customers were compared based on the twelve knowledge sources, it was found that current non-customers were different from current customers on five knowledge sources of which their means were higher than those of current customers on two sources (i.e., magazines and TV programs) and lower on three sources (i.e., cruise companies' websites; Internet sites other than cruise companies' websites; and travel agencies). That is, current non-customers' knowledge about cruise vacations was based on magazines (mean = 3.70) and TV programs (mean = 3.59) more than that of current customers (mean = 3.25 for magazines and mean = 2.82 for TV programs).

Meanwhile, current customers' knowledge about cruise vacations were based on cruise companies' websites (mean = 3.58); Internet sites other than cruise companies' websites (mean = 3.10); and travel agencies (mean = 3.96) more than that of current non-customers (mean = 2.80; 2.72; 3.54, respectively) (Table 4-7).

Table 4-7  
 Knowledge sources for cruise vacations: current non-customers vs. current customers

	Levene's test for equality of variances		t-test for equality of means			Group mean (SD)			
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference*	Std. Error difference	Current non-customers	Current customers
My own experience	432.47	0.00	-11.78	434	0.00	-2.06	0.17	4.42 (2.52)	6.48 (0.93)
Cruise companies' websites	0.43	0.51	-4.25	431	0.00	-0.78	0.18	2.80 (1.82)	3.58 (1.95)
Internet sites (other than cruise companies')	1.50	0.22	-2.13	440	0.03	-0.38	0.18	2.72 (1.79)	3.10 (1.95)
Friends & family	1.87	0.17	1.18	440	0.24	0.19	0.16	4.87 (1.65)	4.68 (1.72)
Magazines	1.60	0.21	2.76	444	0.01	0.45	0.16	3.70 (1.68)	3.25 (1.72)
Newspapers**	4.34	0.04	2.88	438	0.00	0.47	0.16	3.06 (1.80)	2.59 (1.61)
Travel guide books	0.03	0.85	1.23	442	0.22	0.21	0.17	3.56 (1.84)	3.34 (1.80)
TV programs	0.09	0.77	4.72	442	0.00	0.77	0.16	3.59 (1.77)	2.82 (1.66)
Brochures/pamphlets	0.00	0.95	-0.25	444	0.80	-0.04	0.18	4.15 (1.83)	4.19 (1.84)
Travel agencies	0.97	0.33	-2.07	444	0.04	-0.42	0.20	3.54 (2.12)	3.96 (2.09)
Travel/auto clubs	0.03	0.86	1.40	443	0.16	0.26	0.18	2.99 (1.93)	2.74 (1.93)
CVB's**	9.83	0.00	2.35	441	0.02	0.35	0.15	2.32 (1.64)	1.98 (1.45)

Notes: \* Non-customer group minus customer group; \*\* Unequal variances between groups. Items were measured on a 7-point scale where 1 means "Not at all" and 7 means "A lot."

Next, emergent dimensions of knowledge sources were examined using PCA. Excluding one item, “My own experience” which was not applicable for those who had never taken a cruise, the eleven knowledge sources emerged into three dimensions. The first dimension (Formal sources; Cronbach’s  $\alpha = 0.80$ ; 25.2% variance explained) consisted of five items (i.e., travel agencies; travel/auto clubs; brochures/pamphlets; travel guide books; and conventions & visitors bureaus). When items emerge into fewer than four components and the sample size is larger than 300, items with factor loadings less than 0.40 can be interpreted (Guadagnol & Velicer, 1988). Since the eleven knowledge sources emerged into three components and the total sample size was 452, the item, “Conventions & Visitors Bureaus” with relatively low factor loading ( $r = 0.41$ ) was retained.

The second dimension (Informal Sources; Cronbach’s  $\alpha = 0.70$ ; 18.71% variance explained) consisted of four items (i.e., newspapers; magazines; TV programs; and friends & family), while the third dimension (The Internet; Cronbach’s  $\alpha = 0.87$ ; 16.9% variance explained) consisted of two items (i.e., cruise companies’ websites and other Internet sites other than cruise companies’) (Table 4-8).

Table 4-8  
Dimensions of knowledge sources (total sample)

	Factor loading	Eigenvalue	% of variance	Cronbach's $\alpha$
<i>Formal sources</i>		3.019	25.15	0.800
Travel agencies	0.825			
Travel/auto clubs	0.762			
Brochures/pamphlets	0.699			
Travel guide books	0.660			
Convention & Visitors Bureaus	0.409			
<i>Information sources</i>		2.246	18.71	0.701
Newspapers	0.776			
Magazines	0.741			
TV programs	0.720			
Friends & family	0.509			
<i>The Internet</i>		2.026	16.88	0.865
Cruise companies' websites	0.916			
Internet sites (other than cruise companies')	0.885			

Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 4 iterations.

There were five semantic differential scales to measure feelings (i.e., affect) toward taking a cruise vacation: Not enjoyable – Enjoyable; Boring – Exciting; Uncomforting – Comforting; Unpleasant – Pleasant; and Annoying – Calming. These items were measured on a seven-point scale where 1 means negative affect (i.e., Not enjoyable; Boring; Uncomforting; Unpleasant; and Annoying) and 7 means positive affect.

Regardless of groups, the results for all five affect items were found to be skewed to the right with the means ranging from 5.67 to 6.15, indicating the respondents had generally positive feelings toward taking a cruise vacation. This result is similar to that of Phase 1 where 21 of 22 participants reported generally positive feelings toward taking a cruise vacation regardless of their previous cruise vacation experience.

Current non-customers were different from current customers on two items. Current non-customers felt more negative (mean = 5.92; standard deviation = 1.33) than current customers (mean = 6.33; standard deviation = 1.11) that taking a cruise vacation evoked the feeling of enjoyableness. They also felt more negative (mean = 5.55; standard deviation = 1.46) than current customers (mean = 5.88; standard deviation = 1.34) that taking a cruise vacation evoked the feeling of excitement (Table 4-9).

Table 4-9  
Affect toward taking a cruise vacation

	Levene's test for equality of variances		t-test for equality of means			Group mean (SD)			
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference*	Std. Error difference	Current non-customers	Current customers
Not enjoyable (1) – enjoyable (7)	3.19	0.07	-3.62	448	0.00**	-0.42	0.12	5.92 (1.33)	6.33 (1.11)
Boring (1) – exciting (7)	3.80	0.05	-2.53	446	0.01**	-0.34	0.13	5.55 (1.46)	5.88 (1.34)
Uncomforting (1) – comforting (7)	14.96	0.00	-4.21	445	0.00	-0.59	0.14	5.34 (1.62)	5.92 (1.33)
Unpleasant (1) – pleasant (7)	5.97	0.01	-3.11	447	0.00	-0.41	0.13	5.79 (1.52)	6.20 (1.28)
Annoying (1) – calming (7)	8.53	0.00	-3.67	447	0.00	-0.50	0.14	5.51 (1.54)	6.01 (1.37)

Note: \* Non-customer group scores minus customer group scores. \*\* Significantly different



*Hypothesis 1 and Hypothesis 2*

In accordance with the argument that images of a travel destination are a mixture of both positive and negative perceptions (Chen & Kerstetter, 1999; McLellan & Foushee, 1983; Milman & Pizam, 1995), 24 items which were extracted from Phase 1 were included in this study. Of these, 10 items pertained to positive images and 14 items to negative images. As items of image of cruise vacations have yet to be studied for latent dimensions, principal component analysis (PCA) was used to examine the data-driven emergent components. This procedure also made the multiple items more manageable for testing Hypothesis 1 and 2 and further model testing.

To evaluate if the factor analytic solution was an adequate method for these data, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1970) was assessed and the result was satisfactory (KMO = 0.92). Bartlett's (Bartlett, 1950) test of sphericity was used to evaluate if the variables were inter-correlated, and the results were all significant ( $p < 0.05$ ), indicating that the data were appropriate for factor analysis.

The negative image items were then reversely coded, as the questions were stated in negative terms to make them comparable to the positive image items. For example, the respondents were asked about the level of their agreement with the statement “A cruise vacation is boring” on a five-point scale where 1 means “Strongly disagree” and 5 means “Strongly agree.” Accordingly, the responses were reversely coded in which 1 was coded as 5; 2 as 4; 3 as 3; 4 as 2; and 5 as 1.

A Varimax rotation method was selected after detecting no difference in items’ convergence when an oblique rotation method was used to allow items to load on multiple dimensions. In the initial PCA, it was found that one item “Cruise ships are too crowded” did not load on any dimension (factor loading = 0.71), so it was excluded from the second PCA. Nonetheless, the exclusion of the item did not alter the initial dimensions. A total of 23 items emerged to four latent dimensions which accounted for 49.3 percent of the variance explained. The cut-off point of 0.45 for item-factor loading was used. Guadagnoli and Velicer (1988) recommended that factor loadings around 0.40 are reliable and can be interpreted only when the sample size is larger than 150. Cronbach’s (1951) alpha coefficients of the dimensions were evaluated for reliability of scales. The total scale reliability for *Image of Cruise Vacations* was 0.90.

The first dimension (Positive image about cruise benefits; Cronbach’s  $\alpha = 0.80$ ; 16.2% variance explained) consisted of seven items (i.e., escape from the usual environment; a chance to be calm and relaxed; good value-for-money; a chance for new experience; a chance to be playful; a chance for being treated well; and hassle-free). The second dimension (Negative image about cruise offerings; Cronbach’s  $\alpha = 0.84$ ; 14.9%

variance explained) consisted of nine items (i.e., over-emphasis on shopping; insufficient education programs; over-emphasis on food; superficial; filled with the elderly; low control over my own vacation experience; too many rules and regulations; boring; and too controlled).

The third dimension (Negative image about cruise conditions Cronbach's  $\alpha = 0.69$ ; 11.0 % variance explained) consisted of five items (i.e., unsafe; health-related concerns; too many strangers; confining personal space. The fourth dimension (Positive image about food and close people; Cronbach's  $\alpha = 0.54$ ; 7.4% variance explained) consisted of three items (i.e., a lot of food; a variety of food; a chance to be with family and friends) (Table 4-5). The fourth dimension was excluded from SEM, as its Cronbach's alpha was low ( $\alpha = 0.54$ ) and the two items' factor loadings in CFA were found to be lower than 0.60 ("A lot of food" = 0.48; "Spending time with family and friends" = 0.55) (Bagozzi & Yi, 1988). This is also discussed within the measurement models. Table 4-10 displays the results of image dimensions for the total sample ( $n = 452$ ).

To test **Hypothesis 1** which states "**The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive,**" current customers' past cruise experiences were examined. It was found that on average, current cruise current customers had taken 4.58 cruise vacations (standard deviation = 7.16) in the past. More than one half (56.5%) of them had taken one, two or three cruise vacations, while over 80 percent (81.7%) had taken six cruise vacations or fewer (Table 4-11).

Table 4-10  
Dimensions of image of cruise vacations (total sample)

	Factor loading	Eigenvalue	% of variance	Cronbach's $\alpha$
<i>Positive image: benefits</i>				
Escape from the usual environment	.694	3.719	16.171	0.800
Chance to be calm and relaxed	.689			
Good value-for-money	.648			
New experience	.636			
Chance to be playful	.564			
Being treated well	.538			
Hassle-free	.495			
<i>Negative image: cruise offerings</i>				
Over-emphasis on shopping	.764	3.420	14.870	0.839
Insufficient education programs	.686			
Over-emphasis on food	.609			
Superficial	.607			
Filled with the elderly	.580			
Little control over my own vacation experience	.556			
Too many rules and regulations	.438			
Boring	.436			
Things are controlled	.434			
<i>Negative image: cruise conditions</i>				
Unsafe	0.708	2.516	10.938	0.687
Health-related concerns	0.652			
Uncomfortable being surrounded by strangers	0.639			
Confining and small personal space	0.521			
<i>Positive image: food &amp; close people</i>				
A lot of food	0.788	1.693	7.362	0.538*
A variety of food	0.633			
Spend time with family and friends	0.491			
Total scale reliability	0.899			

Notes: n = 452; Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations; Items were measures on a 5-point scale where 1 means "Strongly disagree" and 5 means "Strongly agree." \* Excluded from SEM.

Table 4-11  
Current customers' total number of cruises taken in lifetime (n=251)

Number of cruises taken in lifetime	Frequency	Percent	Cumulative percent
1	37	14.7%	
2	56	22.3%	37.0%
3	49	19.5%	56.5%
4	31	12.4%	68.9%
5	20	8.0%	76.9%
6	12	4.8%	81.7%
7	8	3.2%	84.9%
8	7	2.8%	87.7%
9	5	2.0%	89.7%
10	8	3.2%	92.9%
11	1	0.4%	93.3%
12	3	1.2%	94.5%
13	1	0.4%	94.9%
14	1	0.4%	95.3%
15	3	1.2%	96.5%
16	1	0.4%	96.9%
18	1	0.4%	97.3%
19	1	0.4%	97.7%
20	1	0.4%	98.1%
21	1	0.4%	98.5%
25	2	0.8%	99.3%
30	1	0.4%	99.7%
95	1	0.4%	100.1%*
Total	251	100.0%	
Mean	4.58		
Median	3.00		
Standard deviation	7.16		

Note: \* over 100% due to rounding; Items were measures on a 5-point scale where 1 means "Strongly disagree" and 5 means "Strongly agree."

Next, Pearson's correlation analysis between the number of cruise vacations taken in the past and the factor scores of the five dimensions of *Image of Cruise Vacations* was conducted. Result indicated that Hypothesis 1 was partially supported. While the number of cruise vacations taken by cruise current customers was positively but weakly correlated with positive image in terms of perceived benefits of cruise vacations ( $r = 0.17$ ), it was negatively correlated with another dimension of positive image concerning food and family ( $r = -0.11$ ), albeit not statistically significant (Table 4-12). That is, the more current customers have taken cruise vacations, the more they perceived that cruise vacations offer them a chance to be calm and relaxed; are good value-for-money; treat them well; are escape from the usual environment; and provide new experiences.

Yet, no relationship exists between the number of cruise vacations taken and the negative perceptions of cruise offerings (i.e., over-emphasis on shopping; insufficient education programs; over-emphasis on food; superficial; filled with the elderly; low control over my own vacation experience); control (i.e., too many rules and regulations; boring; too many strangers; and too controlled); conditions (i.e., unsafe; confined and small personal space; and health-related concerns) and food and family (i.e., a lot of food; a variety of food; and an opportunity to spend time with family and friends).

Table 4-12  
Correlation between the number of cruises taken and image dimensions for current customers

Variables	1	2	3	4	5	6
1. Number of cruises	1	0.03	0.17*	0.09	0.10	-0.11
2. Negative image: offerings	0.03	1	0.00	0.00	0.00	0.00
3. Positive image: benefits	0.17*	0.00	1	0.00	0.00	0.00
4. Negative image: control	0.09	0.00	0.00	1	0.00	0.00
5. Negative image: conditions	0.10	0.00	0.00	0.00	1	0.00
6. Positive image: food & family	-0.11	0.00	0.00	0.00	0.00	1
Mean	4.85	**	**	**	**	**
Standard deviation	7.17	***	***	***	***	***

Notes: \* Correlation is significant at the 0.05 level (2-tailed).

\*\* are all zero, the mean for standardized image factor scores.

\*\*\* are all one, the standard deviation for standardized image factor scores.

**Hypothesis 2** which stated “**2a: Current customers’ *Image of Cruise Vacations* is more positive than that of past-cruisers”** and “**2b: Past-cruisers’ *Image of Cruise Vacations* is more positive than that of non-cruisers”** were partially supported. The items for *Image of Cruise Vacations* were examined for positive (10 items) as well as negative (14 items) images. When image was compared among current customers and the two sub-groups of current non-customers (i.e., past-cruisers and non-cruisers) using Chi-square statistic, current customers’ image was significantly more positive (and less negative) than non-cruisers on most items. Meanwhile, current customers’ image was significantly more positive (and less negative) than past-cruisers only on certain items.

To examine how the three groups (i.e., current customers, past-cruisers and non-cruisers) differed on the ten items pertaining to positive image of cruise vacations, post-hoc analysis using Least Square Difference (LSD) was conducted. Of the eight of ten items on which the three groups had equal variances, results showed that differences existed on seven items (i.e., a variety of food; a chance for new experiences; hassle-free; a chance to spend time with family and friends; a chance to be calm and relaxed; a chance to escape from usual environment; and good value-for-money) (Table 4-13).



Table 4-13

Positive image of cruise vacations: current customers vs. past-cruisers vs. non-cruisers

Positive image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Being treated well	G1	G3	-0.47	0.10	0.00	-0.66	-0.28
		G2	-0.36	0.11	0.00	-0.57	-0.15
	G3	G1	0.47	0.10	0.00	0.28	0.66
		G2	0.11	0.08	0.15	-0.04	0.27
	G2	G1	0.36	0.11	0.00	0.15	0.57
		G3	-0.11	0.08	0.15	-0.27	0.04
A lot of food	G1	G3	-0.20	0.11	0.07	-0.41	0.02
		G2	-0.12	0.12	0.31	-0.35	0.11
	G3	G1	0.20	0.11	0.07	-0.02	0.41
		G2	0.08	0.09	0.37	-0.09	0.25
	G2	G1	0.12	0.12	0.31	-0.11	0.35
		G3	-0.08	0.09	0.37	-0.25	0.09
A variety of food	G1	G3	-0.20	0.09	0.03	-0.38	-0.01
		G2	-0.17	0.10	0.10	-0.37	0.03
	G3	G1	0.20*	0.09	0.03	0.01	0.38
		G2	0.03	0.08	0.73	-0.12	0.17
	G2	G1	0.17	0.10	0.10	-0.03	0.37
		G3	-0.03	0.08	0.73	-0.17	0.12

Table 4-13 (Continued)

Positive image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
New experience	G1	G3	-0.38	0.11	0.00	-0.59	-0.16
		G2	-0.22	0.12	0.07	-0.46	0.02
	G3	G1	0.38*	0.11	0.00	0.16	0.59
		G2	0.16	0.09	0.08	-0.02	0.33
	G2	G1	0.22	0.12	0.07	-0.02	0.46
Chance to be playful	G1	G3	-0.21	0.11	0.07	-0.44	0.01
		G2	-0.10	0.13	0.43	-0.35	0.15
	G3	G1	0.21	0.11	0.07	-0.01	0.44
		G2	0.11	0.09	0.23	-0.07	0.30
	G2	G1	0.10	0.13	0.43	-0.15	0.35
Hassle-free	G1	G3	-0.38	0.14	0.01	-0.65	-0.11
		G2	-0.22	0.15	0.14	-0.52	0.07
	G3	G1	0.38*	0.14	0.01	0.11	0.65
		G2	0.16	0.11	0.16	-0.06	0.38
	G2	G1	0.22	0.15	0.14	-0.07	0.52
Spend time with family and friends	G1	G3	-0.16	0.11	0.16	-0.38	0.06
		G3	-0.30	0.12	0.01	-0.55	-0.06
		G2	-0.13	0.14	0.34	-0.40	0.14

Table 4-13 (Continued)

Positive image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Chance to be calm and relaxed	G3	G1	0.30*	0.12	0.01	0.06	0.55
		G2	0.17	0.10	0.09	-0.03	0.37
	G2	G1	0.13	0.14	0.34	-0.14	0.40
		G3	-0.17	0.10	0.09	-0.37	0.03
	G1	G3	-0.49	0.11	0.00	-0.71	-0.28
		G2	-0.19	0.12	0.12	-0.43	0.05
Escape from the usual environment	G3	G1	0.49*	0.11	0.00	0.28	0.71
		G2	0.30*	0.09	0.00	0.13	0.48
	G2	G1	0.19	0.12	0.12	-0.05	0.43
		G3	-0.30	0.09	0.00	-0.48	-0.13
	G1	G3	-0.28	0.12	0.02	-0.52	-0.05
		G2	-0.13	0.13	0.32	-0.40	0.13
Good value-for-money	G3	G1	0.28*	0.12	0.02	0.05	0.52
		G2	0.15	0.10	0.13	-0.04	0.34
	G2	G1	0.13	0.13	0.32	-0.13	0.40
		G3	-0.15	0.10	0.13	-0.34	0.04
	G1	G3	-0.79	0.12	0.00	-1.03	-0.54
		G2	-0.47	0.14	0.00	-0.74	-0.20
G3	G1	0.79*	0.12	0.00	0.54	1.03	
	G2	0.32*	0.10	0.00	0.12	0.51	
G2	G1	0.47*	0.14	0.00	0.20	0.74	
	G3	-0.32	0.10	0.00	-0.51	-0.12	

Note: G1 = Non-cruisers; G2 = Past-cruisers; G3 = Customers; \* significant at  $p < 0.05$ . Items were measures on a 5-point scale where 1 means “Strongly disagree” and 5 means “Strongly agree.”

While the mean scores for both of the two sub-groups of current non-customers (i.e., past-cruisers and non-cruisers) were lower than those of current customers on seven items, the mean differences were higher between current customers and non-cruisers than those between current customers and past-cruisers. In addition, of those seven items, non-cruisers' mean scores were significantly lower than those of current customers on five items (i.e., a variety of food; a chance for new experiences; a chance to spend time with family and friends; a chance to escape from usual environment; and hassle-free). Although past-cruisers' mean scores on those five items were lower than those of current customers, the differences were not found to be statistically significant, indicating current customers' perceptions were significantly positive than those of current non-customers, but not those of past-cruisers on those five items.

On the other hand, current customers were found to be different from both past-cruisers and non-cruisers on one item (i.e., a chance to be calm and relaxed), whereby the mean differences were higher between current customers and non-cruisers (mean difference = 0.49) than between current customers and past-cruisers (mean difference = 0.30). The mean differences between past-cruisers and non-cruisers were not significantly different, indicating that current customers' perception that cruise vacations provide chances to be calm and relaxed were more positive than current non-customers.

The three groups significantly differed on one item (i.e., good value-for-money). Current customers' mean scores were significantly higher than those of past-cruisers (mean difference = 0.32) and non-cruisers (mean difference = 0.79). Further, the mean scores of past-cruisers were significantly higher than those of non-cruisers (mean difference = 0.47). Namely, people with cruise experiences had more positive perception that cruise vacations are good value-for-money than people with no cruise experience.

On negative image of cruise vacations for which respondents were asked about their level of agreement for each of the 14 statements about cruise vacations negatively expressed (e.g., cruise ships are too crowded), current non-customers' agreement levels were found to be higher than those of current customers. That is, current non-customers' perceptions were more negative than those of current customers. Group differences were found on all eight of the 14 items on which the three groups had equal variances (i.e., too many strangers; unsafe; too many rules and regulations; superficial; low control over one's own vacation experience; health-related concerns; confined and small personal spaces; and boring) (Table 4-14).

Table 4-14

Negative image of cruise vacations: current customers vs. past-cruisers vs. non-cruisers

Negative image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Crowded	G1	G3	0.37	0.16	0.02	0.07	0.68
		G2	0.21	0.17	0.23	-0.13	0.54
	G3	G1	-0.37	0.16	0.02	-0.68	-0.07
		G2	-0.17	0.12	0.18	-0.41	0.08
	G2	G1	-0.21	0.17	0.23	-0.54	0.13
		G3	0.17	0.12	0.18	-0.08	0.41
Too controlled	G1	G3	0.78	0.14	0.00	0.49	1.06
		G2	0.21	0.16	0.18	-0.10	0.53
	G3	G1	-0.78	0.14	0.00	-1.06	-0.49
		G2	-0.56	0.12	0.00	-0.79	-0.33
	G2	G1	-0.21	0.16	0.18	-0.53	0.10
		G3	0.56	0.12	0.00	0.33	0.79
Too many strangers	G1	G3	0.79	0.15	0.00	0.50	1.09
		G2	0.30	0.17	0.07	-0.02	0.63
	G3	G1	-0.79*	0.15	0.00	-1.09	-0.50
		G2	-0.49*	0.12	0.00	-0.73	-0.25
	G2	G1	-0.30	0.17	0.07	-0.63	0.02
		G3	0.49	0.12	0.00	0.25	0.73

Table 4-14 (Continued)

Negative image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Unsafe	G1	G3	0.63	0.13	0.00	0.38	0.89
		G2	0.25	0.15	0.09	-0.04	0.53
	G3	G1	-0.63*	0.13	0.00	-0.89	-0.38
		G2	-0.39*	0.11	0.00	-0.59	-0.18
	G2	G1	-0.25	0.15	0.09	-0.53	0.04
		G3	0.39	0.11	0.00	0.18	0.59
Too many rules and regulations	G1	G3	0.78	0.13	0.00	0.53	1.03
		G2	0.43	0.14	0.00	0.15	0.71
	G3	G1	-0.78*	0.13	0.00	-1.03	-0.53
		G2	-0.35*	0.10	0.00	-0.55	-0.15
	G2	G1	-0.43*	0.14	0.00	-0.71	-0.15
		G3	0.35	0.10	0.00	0.15	0.55
Superficial	G1	G3	0.63	0.13	0.00	0.37	0.89
		G2	0.29	0.14	0.05	0.00	0.57
	G3	G1	-0.63	0.13	0.00	-0.89	-0.37
		G2	-0.34	0.11	0.00	-0.55	-0.13
	G2	G1	-0.29	0.14	0.05	-0.57	0.00
		G3	0.34	0.11	0.00	0.13	0.55
Filled with the elderly	G1	G3	0.63	0.13	0.00	0.38	0.89
		G2	0.25	0.15	0.09	-0.04	0.53
	G3	G1	-0.63*	0.13	0.00	-0.89	-0.38
		G2	-0.39*	0.11	0.00	-0.59	-0.18
	G2	G1	-0.25*	0.15	0.09	-0.53	0.04
		G3	0.39	0.11	0.00	0.18	0.59

Table 4-14 (Continued)

Negative image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Over-emphasis on food	G1	G3	0.61	0.14	0.00	0.33	0.89
		G2	0.27	0.16	0.09	-0.04	0.57
	G3	G1	-0.61	0.14	0.00	-0.89	-0.33
		G2	-0.34	0.12	0.00	-0.57	-0.11
	G2	G1	-0.27	0.16	0.09	-0.57	0.04
		G3	0.34	0.12	0.00	0.11	0.57
Low control over my own vacation experience	G1	G3	0.57	0.14	0.00	0.29	0.85
		G2	0.34	0.16	0.03	0.03	0.64
	G3	G1	-0.57*	0.14	0.00	-0.85	-0.29
		G2	-0.23*	0.11	0.05	-0.46	0.00
	G2	G1	-0.34*	0.16	0.03	-0.64	-0.03
		G3	0.23	0.11	0.05	0.00	0.46
Health-related concerns	G1	G3	0.76	0.16	0.00	0.45	1.07
		G2	0.19	0.17	0.27	-0.15	0.53
	G3	G1	-0.76*	0.16	0.00	-1.07	-0.45
		G2	-0.57*	0.13	0.00	-0.82	-0.32
	G2	G1	-0.19	0.17	0.27	-0.53	0.15
		G3	0.57	0.13	0.00	0.32	0.82
Confined and small personal space	G1	G3	0.61	0.15	0.00	0.31	0.90
		G2	0.06	0.17	0.71	-0.27	0.39
	G3	G1	-0.61*	0.15	0.00	-0.90	-0.31
		G2	-0.54*	0.12	0.00	-0.78	-0.30
	G2	G1	-0.06	0.17	0.71	-0.39	0.27
		G3	0.54	0.12	0.00	0.30	0.78



Table 4-14 (Continued)

Negative image item	(I) Group	(J) Group	Mean (I – J)	Standard error	Significance	95% Confidence Interval	
						Lower bound	Upper bound
Boring	G1	G3	0.65	0.13	0.00	0.38	0.91
		G2	0.44	0.15	0.00	0.16	0.73
	G3	G1	-0.65*	0.13	0.00	-0.91	-0.38
		G2	-0.20*	0.11	0.06	-0.41	0.01
	G2	G1	-0.44*	0.15	0.00	-0.73	-0.16
		G3	0.20	0.11	0.06	-0.01	0.41
Over-emphasis on shopping	G1	G3	0.30	0.15	0.04	0.01	0.59
		G2	0.17	0.16	0.28	-0.15	0.49
	G3	G1	-0.30	0.15	0.04	-0.59	-0.01
		G2	-0.12	0.12	0.30	-0.36	0.11
	G2	G1	-0.17	0.16	0.28	-0.49	0.15
		G3	0.12	0.12	0.30	-0.11	0.36
Insufficient educational programs	G1	G3	0.22	0.13	0.08	-0.03	0.48
		G2	0.09	0.14	0.53	-0.19	0.37
	G3	G1	-0.22	0.13	0.08	-0.48	0.03
		G2	-0.13	0.10	0.20	-0.34	0.07
	G2	G1	-0.09	0.14	0.53	-0.37	0.19
		G3	0.13	0.10	0.20	-0.07	0.34

Note: G1 = Non-cruisers; G2 = Past-cruisers; G3 = Customers; \* significant at  $p < 0.05$ . Items were measures on a 5-point scale where 1 means “Strongly disagree” and 5 means “Strongly agree.”

Of those eight items, current customers had significantly less negative perceptions than both past-cruisers and non-cruisers, while the mean differences between past-cruisers and non-cruisers were not significant on four items (i.e., too many strangers; unsafe; health-related concerns; and confined and small personal spaces). The mean differences were higher between current customers and non-cruisers (-0.79; -0.63; -0.76; and -0.61, respectively) than between current customers and past-cruisers (-0.49; -0.39; -0.57; and -0.54, respectively).

On the other four items, current customers had significantly less negative perceptions than non-cruisers on four items (i.e., too many rules and regulations; superficial; low control over one's own vacation experience; and boring). The mean differences between current customers and current non-customers were -0.78, -0.63, -0.57, and -0.65, respectively. Further, past-cruisers had significantly less negative perceptions on those four items than non-cruisers (-0.43; -0.29; -0.34; and -0.44, respectively).

In sum, on the items pertaining to positive image of cruise vacations, although current customers were found to perceive more positively than past-cruisers and non-cruisers, their perceptions were significantly more positive than non-cruisers on seven items, but significantly more positive than past-cruisers on one item. On the items pertaining to negative image of cruise vacations, although current customers were found to perceive less negatively (i.e., more positively) than past-cruisers and non-cruisers, their perceptions were significantly less negative (i.e., more positive) than non-cruisers on eight items, but significantly more positive than past-cruisers on four items.

Expressed differently, it was found that both past-cruisers and non-cruisers (i.e., current non-customers) had more negative perceptions than current customers that cruise vacations provide chances to be calm and relaxed and agreed more than current customers that cruise vacations have too many strangers; health-related issues; and confined and small personal spaces; and are unsafe.

### **Test of Modeling Assumptions**

Prior to testing Hypotheses 3 to 10, pertaining to the relationships among *Personal Values, Image of Cruise Vacations, Desires, Perceived Physical Attributes, Interpersonal Constraints, Structural Constraints* and *Intention*, the assumptions were checked to examine the appropriateness of the data for factor analysis and structural equation modeling.

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1970) was examined to evaluate if the sample size was appropriate for factor analysis. The results for variables ranged from 0.85 to 0.91, which indicates better than “meritorious (0.80’s)” and close to “marvelous (0.90’s)” adequacy in Kaiser’s definition (Kaiser, 1970).

Bartlett’s test of sphericity (Bartlett, 1950) was used to evaluate if the variables were inter-correlated, and the results were significant ( $p = 0.00$ ) (i.e., rejected the null hypothesis that the variables were not inter-correlated), indicating that the data were appropriate for factor analysis.

Univariate and multivariate normal distributions of variables were tested using PRELIS 2 by checking p-values of skewness and kurtosis statistics. The results showed

significant p-values ( $p < 0.05$ ) for all variables except for one variable (i.e., age) of which p value was 0.06, close to 0.05. This indicates the data set is appropriate for the maximum likelihood estimation method. The p-value for multivariate skewness and kurtosis statistics was larger than 0.05, indicating that linear combinations of variables were also normally distributed (Mardia, 1970; Stevens, 2002).

Residuals' homoscedasticity (i.e., homogeneity of error variance) was examined by evaluating the distributions of standardized residuals in Q-plot (Hayduk, 1987; Tabachnick & Fidell, 2000) in LISREL 8.72, and the results showed the residual points were placed along a 45 degree line, indicating that error variances were normally distributed. Therefore, it was concluded that the data for this study were suitable for analyses methods such as confirmatory factor analysis (CFA) and structural equation modeling (SEM). Multicollinearity was examined using LISREL 8.72 and the results are discussed along with the results of reliabilities.

Various model indices have been developed to examine how well the implied model fits the data set (Kline, 2005; Stevens, 2002), although “the state of knowledge on model fit indices is continuously changing” (Kline, 2005, p. 133). The Chi-square statistic ( $\chi^2$ ) tests if the implied model fits the data and the result should not be significant in order to fail to reject the null hypothesis that assumes fit. However, Chi-square is “very sensitive to sample size” and when sample size is “large enough, almost any hypothesis will be rejected” (Stevens, 2002, p. 426). Then, the ratio of Chi-square to degree-of-freedom (Jöreskog, 1969) has been also used but has been criticized for having no guidelines for an acceptable ratio (Hayduk, 1987; Kline, 2005). However,

Hoelter (1983) argued that the focus should be on the sample size required for estimating parameters rather than on degrees-of-freedom and suggested Critical N (CN).

According to Kline (2005), these model indices can be categorized as predictive, absolute and incremental fit indices. Predictive fit indices measure model fit in “hypothetical replication samples of the same size and randomly drawn from the same population” as the tested sample (p. 142) which include Akaike Information Criterion (AIC; Akaike, 1987).

Thus, predictive fit indices are used when selecting the best model among competing models. Absolute model indices assess the ratio of explained sample covariance matrix relative to the implied covariance matrix (Kline, 2005; Mueller, 1996; Stevens, 2002; Tanaka, 1993), which include Jöreskog and Sörbom’s (1981) Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI) and Mulaik, James, van Alstine, Bennett, Lind and Stillwell’s (1989) Parsimony Goodness-of-Fit Index (PGFI) (Kline, 2005). However, GFI has been found to be sensitive to sample size (Anderson & Gerbing, 1984).

Incremental fit indices evaluate “the relative improvement in fit” of the implied model compared with the null model which assumes zero population covariance matrix, excluding Bentler’s (1990) Comparative Fit Index (CFI) that assumes perfect fit of the implied model (Kline, 2005, p. 140).

Incremental fit indices include Bentler and Bonnett’s (1980) Normed Fit Index (NFI) and Non-Normed Fit Index (NNFI) (similar to Tucker-Lewis’s (1973) Index (TLI) except that TLI is for exploratory factor analysis); and Bentler’s (1990) and Comparative

Fit Index (CFI). Hence, NFI, NNFI and CFI represent the increment in fit by comparing the null hypothesis (i.e., the variables are completely uncorrelated) and the research hypothesis (i.e., the relationships among variables exist) in terms of Chi-square (Bentler, 1990; Bentler & Bonnett, 1980; Stevens, 2002) and it is said to be a good fit when these indices result in higher than 0.90 (Bentler, 1990; Stevens, 2002).

On the other hand, other model indices that measure the lack of fit of the implied model to the population (Browne & Cudeck, 1993; Stevens, 2002) include Steiger's (1990) Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR). Thus, these indices are "badness-of-fit" (Kline, 2005, p. 135) and the results of RMSEA should be less than 0.05 to be a good fit and can be up to 0.08 to be a reasonable fit (Browne & Cudeck, 1993), while the results of "SRMR less than 0.10 are generally favorable" (Kline, 2005, p. 141). In this study, model fit indices of Chi-square, NF, NNFI and GFI and as suggested by Kline (2005), CFI, RMSEA and SRMR were examined.

### Measurement Models

The degrees of reliability of the measures for this study's constructs (i.e., *Personal Values*; *Knowledge Sources*; *Image of Cruise Vacations*; *Desires*) were assessed using "reliability coefficient  $\rho$ " (i.e., composite reliability) based on the CFA results (Bollen, 1989; Kano & Azuma, 2003; Raykov, 1997). The degrees of convergent and discriminant validity were evaluated using CFA in which measurement models for each construct were simultaneously analyzed. As one of the twelve *Knowledge Sources* "My own experience" was only applicable to the respondents with previous cruise experience, this item was excluded in CFA.

Since each construct consisted of several dimensions, first-order CFA was used in which each dimension of each construct was hypothesized to be one dependent variable. This was done because each dimension of constructs such as *Personal Values* and *Knowledge Sources* had meaningful latent variables and interpreting those constructs to be have "one" meaning was meaningless. For example, *Personal Values* had three dimensions such as values pertaining to self (*Values1*); interrelationships with others (*Values2*); and excitement, fun and enjoyment (*Values3*). Thus, saying that the mean *Personal Values* of current customers is 5 out of 7-point scale would not be interpretable or meaningful.

Accordingly, *Personal Values* were hypothesized to have three latent variables. First, *Values1* (Self-directed) consisted of five items: self-fulfillment; being well-respected; security; self-respect; a sense of accomplishment. Second, *Values2* (Social Relationships) consisted of two items: a sense of belonging; warm relationships with

others. Third, *Values3* (Excitement, Fun and Enjoyment) consisted of two items: excitement and fun and enjoyment of life.

*Knowledge Sources* were hypothesized to have three latent variables. First, *Sources1* (Formal Sources) consisted of five items: travel guide books; brochures/pamphlets; travel agencies; travel/auto clubs; and convention and visitors bureaus. Second, *Sources2* (Informal Sources) consisted of four items: friends & family; magazines; newspapers; and TV programs. Third, *Sources3* (Internet) consisted of two items such as cruise companies' websites and internet sites other than cruise companies'.

*Image of Cruise Vacations* was hypothesized to have four latent variables. First, *Image1* (Positive Image about Benefits) consisted of seven items: being treated well; a chance to be playful; hassle-free; a chance to be calm and relaxed; escape from the usual environment; and good value-for-money. Second, *Image2* (Negative Image about Cruise Offerings) consisted of nine items: too controlled; too many rules and regulations; superficial; filled with the elderly; over-emphasis on food; little control over making one's own vacation experience; boring; over-emphasis on shopping; and insufficient education programs. Third, *Image3* (Negative Image about Cruise Conditions) consisted of four items: filled with strangers; unsafe; health-related concerns; and confined personal space. Fourth, *Image4* (Food and Family & Friends) consisted of three items: a lot of food; a variety of food; and being with family and friends.

Other constructs (i.e., *Perceived Physical Attributes*, *Interpersonal Constraints* and *Desires*) had one dimension each, consisting of seven, three and two items,



respectively. The level of reliability of each item was evaluated based on factor loading size and some of them were excluded from further analysis as discussed in the following.

### **Reliability and Validity of Measures**

To examine the extent to which the manifest variables (i.e., measures or indicators) employed to measure the latent variables (i.e., constructs) were related to each other, a reliability test was conducted. Cronbach's (1951) coefficient alpha ( $\alpha$ ) is a widely used method and the size of coefficient alpha represents the internal consistency of the items (i.e., average correlation size among items for a dimension). The standardized alpha takes into consideration the total number of items and the average inter-item correlation among the items. While Cronbach's alpha assumes equal weight to each item, another method, reliability coefficient  $\rho$  (i.e., composite reliability) takes into account the actual factor loadings (Bagozzi & Kimmel, 1995; Bollen, 1989; Leone, Perugini, & Ercolani, 1999; Perugini & Bagozzi, 2001; Raykov, 1997).

Thus, in this study, "reliability coefficient  $\rho$ 's" or "composite reliability" (Hatcher, 1996, p. 326) were obtained by calculating  $\rho = (\sum \lambda_i)^2 / ((\sum \lambda_i)^2 + \sum \theta_i)$ , where  $\lambda_i$  is the  $i^{\text{th}}$  factor loading and  $\theta_i$  is the  $i^{\text{th}}$  error variance. The results of reliabilities and factor loadings for all constructs (i.e., *Personal Values*; *Knowledge Sources*; *Image of Cruise Vacations*; *Perceived Physical Attributes*; *Interpersonal Constraints*; *Structural Constraints*; *Desires*; and *Intentions*) are presented in Table 4-13. To re-check unidimensionality of these constructs, principal component analysis was used for each construct (Santos, 1999) and the results were satisfactory.

Items were examined based on the models (i.e., theoretical guidelines) in which this study's model was developed (i.e., models of destination image and destination choice; the leisure constraints model; and the Model of Goal-Directed Behavior). However, the items particular to this study were further scrutinized. These included: 1) the items for the construct, *Image of Cruise Vacations* that have been developed for this study which have been based mainly on Phase 1 findings and previous studies by CLIA (2002, 2004); and 2) the items that have been developed in the relevant literature (e.g., consumer behavior: information-seeking behavior and choice decisions) and found to be important in understanding leisure travelers' behavior (as discussed in literature view). However, these latter items (e.g., personal values, knowledge sources and structural constraints) have yet to be tested along with other variables related to choice or non-choice behavior (e.g., image and intention).

Based on these theoretical guidelines, decisions to exclude some items were also based on the general guideline for acceptable item-factor loading of 0.60 (Bagozzi & Yi, 1988). Although some excluded items were significant, their exclusion was deemed appropriate for "the interest of parsimony" of CFA and SEM (Byrne, 1998, p. 104) and a lack of definitive criteria for inclusion or exclusion of items in the context of cruise vacations.

The excluded items are as follows: 1) two items of *Knowledge Sources*: convention & visitors bureaus ( $r = 0.54$ ) and friends & family ( $r = 0.31$ ); 2) eight items of *Image of Cruise Vacations*: being treated well ( $r = 0.55$ ); hassle-free ( $r = 0.47$ ); filled with the elderly ( $r = 0.51$ ); insufficient educational programs ( $r = 0.43$ ); confined personal space ( $r = 0.44$ ); A lot of food = 0.48; spending time with family and friends = 0.55); 3) two items of *Perceived Physical Attributes*: sea-sickness or motion-sickness ( $r = 0.52$ ) and no knowledge of how to book a cruise vacation ( $r = 0.55$ ); 4) one item of *Structural Constraints*: the recent hurricanes (i.e., Katrina and Rita) ( $r = 0.44$ ); and 5) one dimension of *Personal Values, Values2* (Social relationships) which consisted of two items such as a sense of belonging” ( $r = 0.98$ ) and “warm relationship with others” ( $r = 0.20$ ).

It was decided that one item of *Structural Constraints*, “Cruise vacations are too costly” ( $r = 0.56$ ) should not be excluded, although the factor loading was lower than 0.60. The reason was that this item has been found to be an important structural constraint for those who have stopped taking cruise vacations in previous studies (CLIA, 2002, 2004).

In addition, “cost” has been found to be the main factor for not visiting a destination or participating in tourism activities in most studies on constraints to tourism (e.g., Blazey, 1987; Norman, 1995; Tian, et al., 1996; Pennington-Gray & Kerstetter, 1999, 2002; Yarnal, et al., 2005).

The issue of concerns about “cost” was also of practical interest in this study. In other words, this study was exploratory in nature that the theoretical guidance and practical interests were sustained for those items to examine their influences and relationships with other variables in the context of cruise vacations. The implications from these findings would be useful for evaluating current and planning future marketing strategies of the cruise industry.

Table 4-15 displays all the retained items, which were statistically significant ( $p < 0.05$ ). The measurement model was found to fit the data relatively well, although GFI was not satisfactorily high (i.e., lower than 0.90): RMSEA = 0.049; 90% Confidence Interval for RMSEA = 0.046; 0.051; SRMR = 0.059; NFI = 0.89; NNFI = 0.93; CFI = 0.94; GFI = 0.80.

Table 4-15  
 Factor loadings and reliabilities of items to be retained

	Factor loading	Reliability coefficient $\rho$
<i>Personal Values 1: Self-related</i>		
Self-fulfillment	0.74	0.867
Being well-respected	0.74	
Security	0.68	
Self-respect	0.82	
A sense of accomplishment	0.78	
<i>Personal Values 3: Excitement, fun</i>		
Excitement	0.65	0.665
Fun and enjoyment of life	0.76	
<i>Sources 1: Formal Sources</i>		
Travel guide books	0.73	0.789
Brochures/pamphlets	0.73	
Travel agencies	0.66	
Travel/auto clubs	0.66	
<i>Sources 2: Informal Sources</i>		
TV programs	0.83	0.774
Magazines	0.76	
Newspapers	0.59	
<i>Sources 3: Internet</i>		
Cruise companies' websites	0.85	0.868
Internet sites (other than cruise companies')	0.90	

Table 4-15 (Continued)

	Factor loading	Reliability coefficient p
<i>Image 1: Positive image about benefits</i>		0.867
New experience	0.60	
Chance to be playful	0.60	
Chance to be calm and relaxed	0.78	
Escape from the usual environment	0.66	
Good value-for-money	0.64	
<i>Image 2: Negative image about offerings</i>		0.835
Things are controlled	0.68	
Too many rules and regulations	0.68	
Superficial	0.63	
Over-emphasis on food	0.62	
Little control over my own vacation experience	0.69	
Boring	0.63	
Over-emphasis on shopping	0.60	
<i>Image 3: Negative image about conditions</i>		0.691
Uncomfortable being surrounded by strangers	0.62	
Unsafe	0.69	
Health-related concerns	0.65	
<i>Perceived physical attributes</i>		0.834
I have a fear of sea water/ocean.	0.70	
I have a physical disability.	0.66	
I don't have knowledge about cruise vacations.	0.60	
I have claustrophobia.	0.73	
I have poor health (illness).	0.84	

Table 4-15 (Continued)

	Factor loading	Reliability coefficient $\rho$
<i>Interpersonal constraints</i>		0.774
My spouse/partner has poor health	0.76	
My spouse/partner doesn't like taking a cruise vacation	0.70	
I don't have a companion to go with on a cruise vacation	0.73	
<i>Structural constraints</i>		
I don't have enough time to go on a cruise vacation	0.62	
I don't have the opportunity to take a cruise vacation	0.70	
My commitment to family prevents me from going on a cruise vacation	0.66	
My work responsibilities prevent me from going on a cruise vacation	0.72	
<i>Desires</i>		0.884
Taking a cruise vacation is desirable to me	0.89	
I wish to take a cruise vacation in the next 3 years	0.89	
<i>Intentions</i>		0.895
The probability that I will take a cruise vacation in the next 3 years	0.90	
The likelihood to take a cruise vacation in the next 3 years	0.90	

Note: 1.  $\rho = (\sum \lambda_i)^2 / [(\sum \lambda_i)^2 + \sum \theta_i]$  where  $\lambda_i$  is the  $i^{\text{th}}$  factor loading and  $\theta_i$  is the  $i^{\text{th}}$  error variance; 2. Measurement models' RMSEA = 0.049; 90% Confidence Interval for RMSEA = 0.046; 0.051; SRMR = 0.059; NFI = 0.89; NNFI = 0.93; CFI = 0.94; GFI = 0.80.

The validity of measures refers to the extent to which the items measured what they were designed to measure. In the current study, the degrees of predictive validity among measures were examined by testing corresponding Hypotheses 1, 4 and 5 using Pearson's correlation coefficient and the validity of the current study's instrument was assessed by using CFA in which item-factor loadings and correlations among latent variables were examined.

Criterion-related or predictive validity pertains to the extent to which the abstract measure is reflected in a logically coherent and observable way (Babbie, 2001; Mueller, 1996). This issue was addressed in the current study by testing Hypothesis 1 which stated "The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive." To test Hypothesis 1, the correlation coefficient (i.e., validity coefficient; Mueller, 1996) between the number of cruise vacations taken in the past and *Image of Cruise Vacations* was assessed. Hypothesis 1 was supported based on Pearson's correlation coefficient results (Table 4-11), indicating a positive relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations*.

Further, positive *Image of Cruise Vacations* should lead to high *Desires* (Hypothesis 4) and high *Desires* should lead to high *Intention* (Hypothesis 10) to take cruise vacations in the future, consistent with the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001). Hypothesis 4 and 10 were supported, indicating a positive relationship between *Image of Cruise Vacations* and *Desires* and *Desires* and *Intention*.



CFA was used to examine observed as well as latent variables, which is limited when only the observed variables are used for validity tests (Mueller, 1996). As suggested by Bollen (1989) and Mueller (1996), the validity of this study's instrument was examined by two methods. First, the items' factor loadings to each corresponding construct were examined. Table 4-15 displays the results of factor loadings, which ranged between 0.60 and 0.90.

Second, the validity of latent variables was examined by examining items' correlation coefficients. The validity of latent variables (i.e., constructs) was addressed by examining correlations among independent latent variables (i.e.,  $\Phi$  matrix) (Table 4-16). This was also used for examining the potential multicollinearity among latent variables. The results showed no multicollinearity among variables except for relatively high correlations between *Image1* and *Desires* ( $r = 0.86$ ); *Sources1* and *Sources2* ( $r = 0.71$ ); *Image1* and *Image2* ( $r = 0.75$ ); and *Image2* and *Image3* ( $r = 0.80$ ) (Table 4-16).

Table 4-16  
Correlation matrix for independent latent variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	1.00												
2. Education level	-0.01	1.00											
3. Personal Values 1: Self-related	-0.18	-0.06	1.00										
4. Personal Values 3: Excitement, fun	-0.24	-0.15	0.61	1.00									
5. Knowledge sources1: Formal	0.15	-0.11	0.07	0.14	1.00								
6. Knowledge sources:2 Informal	-0.02	-0.04	0.05	0.10	0.71	1.00							
7. Knowledge sources3: Internet	-0.09	0.03	0.08	0.13	0.44	0.35	1.00						
8. Image1: Positive benefits	-0.01	-0.15	0.16	0.20	0.21	0.05	0.23	1.00					
9. Image:2 Negative about offerings	-0.11	-0.15	0.14	0.19	0.01	-0.11	0.16	0.75	1.00				
10. Image3: Negative about conditions	0.07	-0.08	-0.05	0.02	0.04	-0.12	0.10	0.69	0.80	1.00			
11. Interpersonal constraints	0.17	-0.05	0.00	-0.06	0.05	-0.04	-0.01	-0.03	-0.09	-0.19	1.00		
12. Structural constraints	-0.28	0.02	0.06	0.06	-0.10	-0.05	-0.01	-0.15	-0.17	-0.32	0.55	1.00	
13. Desires	-0.03	-0.03	0.15	0.20	0.25	-0.01	0.28	0.86	0.65	0.58	-0.02	-0.03	1.00

The high correlations among these constructs seemed to be mainly due to “the common self-report procedure” and the juxtaposed measures on the questionnaire as argued by Bagozzi and Kimmel (1995, p. 448). The measures for these constructs were placed within the same questions on the questionnaire because of limited space and to avoid making the respondent feel they had to answer repetitive questions.

Nonetheless, it was decided that these measures should be included in testing the Model for theoretical and practical purposes. As the concept of *Desires* has not been tested in the context of tourism with the concept of *Image of Cruise Vacations*, these constructs were included in this study’s SEM to examine their effects and relationships with other variables. Similarly, *Image of Cruise Vacations* and *Knowledge Sources* have yet to be examined in relation to other variables relevant to leisure travelers’ decision-making.

Moreover, it should be noted that “little is known about the effects of multicollinearity” among Ksi or exogenous variables and “how to deal with” it in CFA or SEM (Grewal, Cote, & Baumgartner, 2004, p. 520).

Using Monte Carlo simulation experiments, Grewal et al. (2004) suggested that the problem of Type II error (i.e., the failure to reject the false null hypothesis; namely, although there exists true effects, the results fail to render support for research hypothesis) caused by multicollinearity became “negligible [below 5%] when reliability is higher than 0.80, explained variance ( $R^2$ ) is close to 0.75 and sample size is relatively large” (p. 519).

In this study, reliabilities of constructs were acceptable or relatively high with  $\rho$  coefficients ranging from 0.67 to 0.90. The ratio between the number of observations to the number of parameters estimated was 3.7:1 (452: 124). Unfortunately, this study’s limitation was that the sample size was not as ideally large as Grewal et al. (2004) recommended for detecting the true effects (i.e., ideal ratio of 6:1). Although a much larger sample size would have been ideal, Hoelter’s (1983a) Critical-N (CN) sizes of CFA (CN = 234.33) and SEM (CN = 215.51) were larger than 200 (Hoelter, 1983a), indicating that this study’s sample size was sufficiently large enough for an adequate model fit for a Chi-square test (Hu & Bentler, 1995), given that specifications were correct (Byrne, 1998).

### Structural Equation Models and Hypotheses 3 to 10

Structural equation modeling was used to examine the relationships among all variables in the Model at once. The structural equation models consisted of five Eta or endogenous variables (i.e.,  $\eta_1 = \text{Image1}$ ;  $\eta_2 = \text{Image2}$ ;  $\eta_3 = \text{Image3}$ ;  $\eta_4 = \text{Desires}$ ; and  $\eta_5 = \text{Intentions}$ ) and nine Ksi or exogenous variables (i.e.,  $\zeta_1 = \text{Age}$ ;  $\zeta_2 = \text{Education level}$ ;  $\zeta_3 = \text{Values1}$ ;  $\zeta_4 = \text{Values3}$ ;  $\zeta_5 = \text{Sources1}$ ;  $\zeta_6 = \text{Sources2}$ ;  $\zeta_7 = \text{Sources3}$ ;  $\zeta_8 = \text{Interpersonal Constraints}$ ; and  $\zeta_9 = \text{Structural Constraints}$ ). *Desires* ( $\eta_4$ ) and *Intentions* ( $\eta_5$ ) had two Y variables, while *Image1* ( $\eta_1$ ) had five; *Image2* ( $\eta_2$ ) had seven; and *Image3* ( $\eta_3$ ) had three Y variables. Two latent factors with single indicators for each (i.e.,  $\zeta_1 = \text{Age}$  and  $\zeta_2 = \text{Education level}$ ) were treated by fixing the factor loadings to 1 and by fixing error variances to 0, as used in previous studies (e.g., Bagozzi & Yi, 1989; Hayduk, 1996; Kolloway, 1998; Perugini & Bagozzi, 2001).

It was found that implied structural model for the total sample (n=452) had a good fit, evaluated by acceptable fit indices ( $\chi^2_{,880} = 1908$ ; NFI = 0.91; NNFI = 0.91; CFI = 0.95; GFI = 0.85; RMSEA = 0.05 with 90 % Confidence Interval of 0.047 and 0.053; and SRMR = 0.089). This implies that the overall hypothesized relationships among variables based on theories did fit the data.

However, the two latent variables of *Knowledge Sources1* and *Knowledge Sources2* were found to be highly correlated ( $r = 0.71$ ), yet were included in testing the Model for theoretical and practical interests as discussed earlier. Further, the initial SEM results showed problematic path coefficients (i.e., larger than |1|), indicating that multicollinearity was a problem for obtaining path coefficients when the third latent

variable (e.g., *Image3*) was regressed on those similar variables concurrently. In contrast, this result was not found for other highly correlated variables such as *Image1* and *Desires* ( $r = 0.86$ ).

Nonetheless, SEM is known to be limited in computing separate path coefficients from highly correlated variables (Garson, 2006) and the appropriate treatment of multicollinearity problems have yet to be known (Grewal et al., 2004). Garson (2001) recommended that a method to avoid multicollinearity problem is to exclude some of the variables that cause multicollinearity.

Hence, it was decided that *Knowledge Sources2 (Informal—Friends & Family)*, *Perceived Physical Attributes* and *Image3* should be excluded from the initial structural Model. These constructs were excluded one at a time and the Model was re-tested. The exclusion of *Sources2* was also based on previous findings that one of the most referred sources for cruise vacations was travel agents, one of the formal sources (CLIA, 2002; TNS/NFO Plog, 2004). *Perceived Physical Attributes* was excluded, as it was highly correlated with *Interpersonal Constraints* ( $\phi = 0.99$ ) in the presence of other variables and excluding *Perceived Physical Attributes* rather than *Interpersonal Constraints* showed fewer paths coefficients larger than  $|1|$ .

However, results without *Sources2* and *Perceived Physical Attributes* showed the path coefficients directed to *Image1*, *Image2* and *Image3* larger than |1|, indicating more problems of multicollinearity. This seemed to be due to high correlations found among *Image* dimensions (*Image1*, *Image2* and *Image3*) in CFA.

Hence, SEM was re-analyzed without *Sources2*, *Perceived Physical Attributes* and *Image3* (Figure 4-1; Table 4-17; 4-18; 4-19). The results of model fit indices showed that the initial model and the revised model were similar, although those of the latter were slightly lower ( $\chi^2_{,656} = 1562$ ; NFI = 0.90; NNFI = 0.90; CFI = 0.94; RMSEA = 0.054).

A Chi-square difference test (difference in  $\chi^2 = 346$ ; difference in degrees-of-freedom = 224) showed that the difference was statistically significant ( $p < 0.05$ ). Nonetheless, considering that some path coefficients of the initial model were not interpretable because of potential multicollinearity, the revised model (as the final model) was subjected to examining Hypotheses 3 to 10, not in the order of number but of the corresponding results.

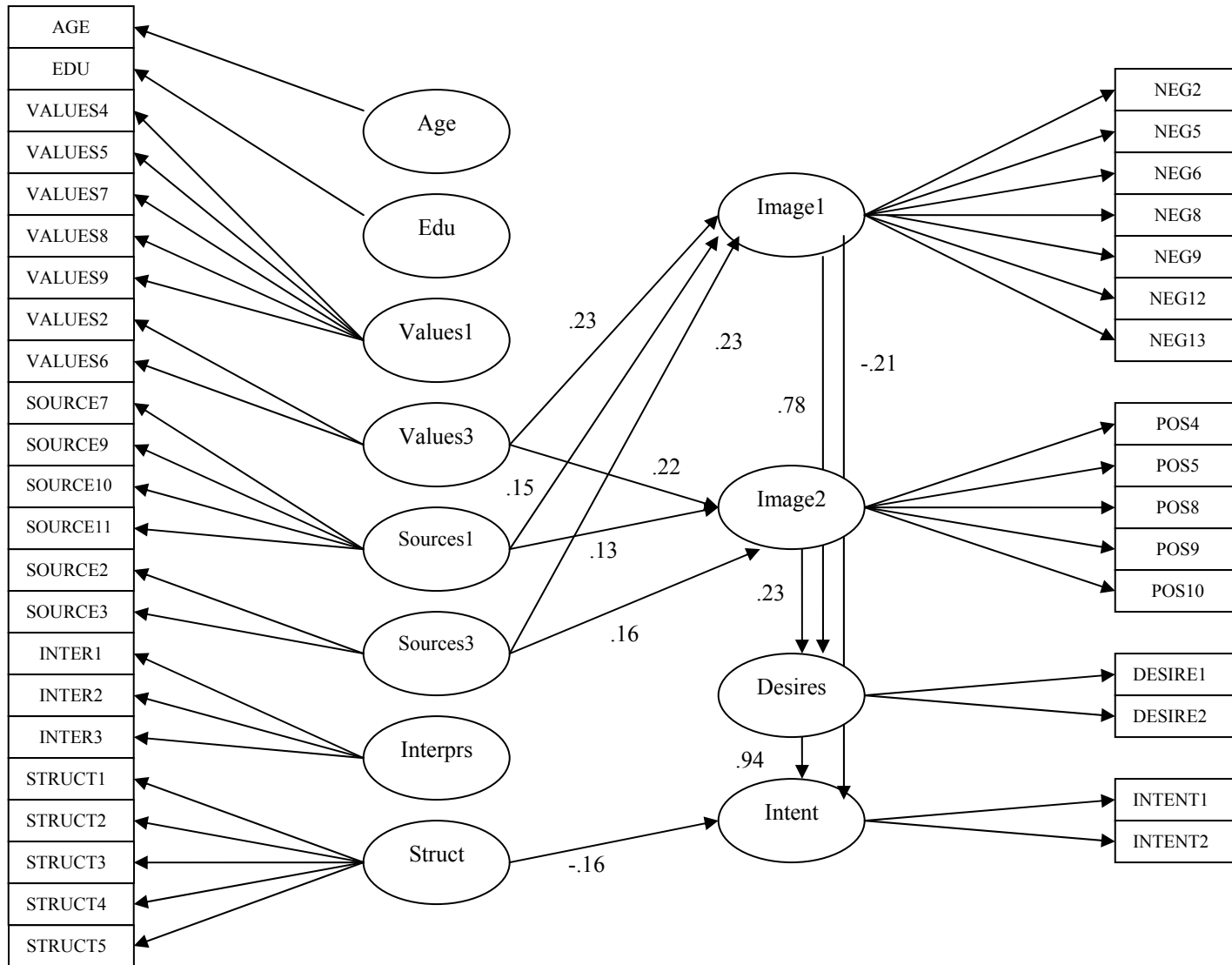


Fig. 4-1. Results for the revised model of cruise vacation choice decision (Total sample, n=452).

Notes: Only significant betas and gammas are shown; NFI = 0.90; NNFI = 0.93; CFI = 0.94; RMSEA = 0.054; 90% Confidence Interval (0.051, 0.058).



**Codes used in Figure 4-1:**

- ◆ SOURCES1 = Formal (travel agencies; travel/auto clubs; brochures/pamphlets; travel guide books; CVB's)
- ◆ SOURCES3 = Internet (cruise company websites; other Internet sites)
- ◆ VALUES1 = Self-focused (self-respect, a sense of accomplishment; being well-respected; self-fulfillment; security)
- ◆ VALUES3 = Excitement and fun
- ◆ INTET1 = Partner's poor health
- ◆ INTER2 = Partner's dislike of cruises
- ◆ INTER3 = No companion to go with
- ◆ STRUCT1 = No time
- ◆ STRUCT2 = No opportunity
- ◆ STRUCT3 = Commitment to family
- ◆ STRUCT4 = Commitment to work
- ◆ STRUCT5 = Cruises are too costly
- ◆ Interprs = Interpersonal Constraints
- ◆ Struct = Structural Constraints
- ◆ IMAGE1 = Positive image about the benefits from cruise (escape from the usual environment;  
chance to be calm, relaxed; good value-for-money; new experience; chance to be playful; being treated well; hassle-free)
- ◆ IMAGE2 = Negative image about cruise offerings (over-emphasis on shopping and food; superficiality;  
too many elderly; doesn't allow to make my own vacation experience; too many rules; boring; too controlled)

Fig. 4-1. Continued

Table 4-17  
SEM path coefficients in Figure 4-1

X variable → Exogenous variable	Lambda X	Gamma	Beta	Lambda Y
Values1 → VALUE4	0.74*			
Values1 → VALUE5	0.73*			
Values1 → VALUE7	0.68*			
Values1 → VALUE8	0.83*			
Values1 → VALUE9	0.79*			
Values3 → VALUE2	0.65*			
Values3 → VALUE6	0.74*			
Sources1 → SOURCE7	0.65*			
Sources1 → SOURCE8	0.77*			
Sources1 → SOURCE10	0.75*			
Sources1 → SOURCE11	0.62*			
Sources3 → SOURCE2	0.91*			
Sources3 → SOURCE3	0.84*			
Interpersonal → INTER1	0.71*			
Interpersonal → INTER2	0.74*			
Interpersonal → INTER3	0.73*			
Structural → STRUCT1	0.65*			
Structural → STRUCT2	0.70*			
Structural → STRUCT3	0.66*			
Structural → STRUCT4	0.75*			
Structural → STRUCT5	0.53*			
Age → Image1		0.04		
Age → Image2		-0.07		
Edu → Image1		-0.06		
Edu → Image2		-0.08		
Values1 → Image1		-0.01		
Values1 → Image2		-0.04		
Values3 → Image1		0.23*		

Table 4-17 (Continued)

X variable → Exogenous variable	Lambda X	Gamma	Beta	Lambda Y
Values3 → Image2		0.22*		
Sources1 → Image1		0.15*		
Sources1 → Image2		0.13*		
Sources3 → Image1		0.23*		
Sources3 → Image2		0.16*		
Image1 → Desires			0.78*	
Image1 → Intent			-0.21*	
Image2 → Desires			0.23*	
Image2 → Intent			0.00	
Desires → Intent			0.94*	
Interpersonal → Desires			0.00	
Interpersonal → Intent			0.02	
Structural → Intent			-0.16*	
Image1 → POS4				0.59*
Image1 → POS5				0.58*
Image1 → POS8				0.79*
Image1 → POS9				0.67*
Image1 → POS10				0.61*
Image2 → NEG2				0.69*
Image2 → NEG5				0.65*
Image2 → NEG6				0.63*
Image2 → NEG8				0.61*
Image2 → NEG9				0.69*
Image2 → NEG12				0.62*
Image2 → NEG13				0.60*
Desires → DESIRE1				0.88*
Desires → DESIRE2				0.88*
Intent → INTENT1				0.90*
Intent → INTENT2				0.88*

Note: \* significant at  $p < 0.05$ .

According to the results of the revised model, respondents' age has a positive but not significant influence on positive image of cruise vacations (*Image1*;  $\gamma = 0.04$ ) and a negative but not significant influence on negative image of cruise vacations (*Image2*,  $\gamma = -0.07$ ). Further, respondents' education level had a negative but not significant effect on both *Image1* ( $\gamma = -0.06$ ) and *Image2* ( $\gamma = -0.08$ ). While respondents' *Personal Values* pertaining to self such as self-fulfillment and self respect (*Values1*) had a negative but not significant effect on both *Image1* ( $\gamma = -0.04$ ) and *Image2* ( $\gamma = -0.04$ ), *Values* pertaining to enjoyment and fun (*Values3*) had a positive and statistically significant effect on both *Image1* ( $\gamma = 0.23$ ) and *Image2* ( $\gamma = 0.22$ ).

*Knowledge Sources* that are formally obtained (e.g., travel agencies; travel/auto clubs or travel guide books; *Sources1*) had positive effects on *Image1* ( $\gamma = 0.15$ ) and *Image2* ( $\gamma = 0.13$ ), while the Internet (*Sources3*) had positive and significant effects both on *Image1* ( $\gamma = 0.23$ ) and *Image2* ( $\gamma = 0.16$ ). *Interpersonal Constraints* had a positive but not significant effect on *Intention* ( $\gamma = 0.02$ ) and had no effect on *Desires*.

The effect of *Image1* on *Desires* was positive and significant ( $\gamma = 0.78$ ) and negative and significant on *Intention* ( $\gamma = -0.21$ ), while the effect of *Image2* on *Desires* was positive and significant ( $\gamma = 0.23$ ) but there was no effect of *Image2* on *Desires*. The direct effect of *Desires* on *Intention* was positive and significant ( $\gamma = 0.94$ ).

Thus, in the revised Model, the statistically significant path coefficients of the paths from exogenous variables to endogenous variables (i.e.,  $\Gamma$ ) were: *Values3* to *Image1* ( $\gamma = 0.23$ ) and to *Image2* ( $\gamma = 0.22$ ); *Sources1* to *Image1* ( $\gamma = 0.15$ ); *Sources3* to

*Image1* ( $\gamma = 0.23$ ) and *Image2* ( $\gamma = 0.16$ ); and *Structural Constraints to Intentions* ( $\gamma = -0.16$ ) (Table 4-18).

Table 4-18  
Path coefficients from exogenous variables to endogenous variables

Exogenous variable	Endogenous variable			
	Image1	Image2	Desires	Intention
Age	0.04	-0.07	n/a	n/a
Education	-0.06	-0.08	n/a	n/a
Values1	-0.01	-0.04	n/a	n/a
Values3	0.23*	0.22*	n/a	n/a
Sources1	0.15*	0.13	n/a	n/a
Sources3	0.23*	0.16*	n/a	n/a
Interpersonal Constraints	n/a	n/a	0.00	0.02
Structural Constraints	n/a	n/a	n/a	-0.16*

Note: \* significant at  $p < 0.05$  or better.

*Personal Values* pertaining to fun, enjoyment and excitement (*Values3*) were found to influence the respondents' *Image of Cruise Vacations* (*Image1* and *Image2*) positively and were statistically significantly ( $\gamma = 0.23$ ;  $\gamma = 0.22$ , respectively), but *Personal Values* pertaining to self such as self-fulfillment (*Values1*); being well-respected; security; self-respect; and a sense of accomplishment were not significant, which were found to negatively influence *Image* (and were not statistically significant). The significant influence of *Personal Values* pertaining to fun, enjoyment and excitement (*Values3*) is possibly because cruise vacations are leisure vacations (i.e., for

pleasure). Therefore, **Hypothesis 3** which stated “*Personal Values significantly influence Image of Cruise Vacations*” was only partially supported.

The effects of formally obtained sources of knowledge about cruise vacations (e.g., travel agencies; travel/auto clubs; brochures/pamphlets; travel guide books; *Sources1*) were positive and statistically significant on *Image1* ( $\gamma = 0.15$ ). The Internet (either cruise companies’ or other websites) as a *Knowledge Sources* (*Sources3*) had positive and statistically significant effects on both *Image1* ( $\gamma = 0.23$ ) and *Image2* ( $\gamma = 0.16$ ).

Similar to the findings of studies on destination image (e.g., Um & Crompton, 1990) and destination choice (e.g., Prentice & Andersen, 2000; Um, 1993; Woodside & Lysonski, 1989), *Structural Constraints* had a negative effect on *Intention* to take cruise vacations in the next three years and was statistically significant. Therefore, **Hypothesis 9** which stated “*Structural Constraints negatively influence Intentions*” was supported. Thus, the higher the respondent perceived the constraining effects of time, money and opportunity availabilities and commitment to family and work, the less likely they were to take a cruise vacation.

*Interpersonal Constraints* were not found to have a significant or negative effect on *Desires* ( $\gamma = 0.00$ ) or *Intention* ( $\gamma = 0.02$ ). This result does not support the proposition of the leisure constraints model that people’s desires for leisure activities are influenced by the availability of a companion or the companion’s health and preference (e.g., Crawford et al., 1991; Hubbard & Mannell, 2001; Nyaupane, Morais, & Graefe, 2004). Therefore, **Hypothesis 7** which stated “*Interpersonal Constraints negatively*

**influence *Desires***” and **Hypothesis 8** which stated “***Interpersonal Constraints*** **negatively influence *Intentions***” were not supported. However, it might be possible that the factors influencing people’s decision processes for cruise vacations are different from those for leisure activities (e.g., tennis) that sometimes “require” partners who have the same predilection.

Similar to studies on destination image (e.g., Baloglu & McCleary, 1999; Beerli & Martin, 2004), *Age* and *Education* were found to negatively influence *Image*, except for the effect of *Age* on *Image1* (i.e., positive image or the benefits of cruise vacations). The positive effect of *Age* on *Image* was also found by Beerli and Martin (2004), albeit only one dimension of image pertaining to natural and social environment. Thus, the results of the current study suggest that the older and the more educated people are, the more negative perceptions they have toward cruise vacations.

As for the path coefficients between endogenous variables (i.e., B), statistically significant paths included the paths from *Image1* to *Desires* ( $\gamma = 0.78$ ) and to *Intention* ( $\gamma = -0.21$ ); *Image2* to *Desires* ( $\gamma = 0.23$ ); and *Desires* to *Intention* ( $\gamma = 0.94$ ). The explained variance for *Desires* was 0.72 and for *Intention* was 0.63 (Table 4-19).

Table 4-19  
Path coefficients from endogenous variable to endogenous variable

Endogenous variable	Endogenous variable	
	Desires	Intention
Image1	0.78*	-0.21*
Image2	0.23*	0.00
Desires	n/a	0.94*

Note: \* significant at  $p < 0.05$  or better;  $R^2$  for *Desires* = 0.72 and *Intention* = 0.63

Therefore, **Hypothesis 4** which stated “***Image of Cruise Vacations significantly influences Desires***” was supported. Both positive and negative dimensions of *Image* (*Image1* and *Image2*) significantly influenced the level of *Desires* to take a cruise vacation in the next three years ( $\gamma = 0.78$  and  $\gamma = 0.23$ , respectively).

**Hypothesis 5** which stated “***Image of Cruise Vacations significantly influences Intention***” was partially supported as the effect of *Image1* on *Intentions* was statistically significant ( $\gamma = -0.21$ ), but there was no effect of *Image2* on *Intention* ( $\gamma < 0.01$ ). However, this negative direct effect of positive image (*Image1*) on intention seemed to be because the effect of *Image1* was examined as one construct which might have contained different effects of sub-dimensions pertaining to various aspects of cruise vacations (e.g., foods, activities and values).



Thus, when these effects were combined and directly examined in relation to future intention, negative effect in one or more sub-dimensions could have resulted in total mean negative effects of *Image1* on intention. Results of Hypothesis 4 and 5 imply that the effect of positive image of cruise vacations does not necessarily influence one's intention positively, even if its effect on desires is positive.

In other words, although a leisure traveler can perceive positively about the benefits and attributes of cruise vacations and can have desires to take a cruise vacation in the future, her/his positive perception may not directly lead to intention (i.e., the likelihood and probability) to take one in the future. This seems to support Perugini and Bagozzi's (2001) argument that intention can be better predicted via desires in which the effect of attitudes (i.e., perceptions) is mediated.

Further, **Hypothesis 10** which stated "***Desires positively influence Intention***" was supported. The higher the respondent's desires for taking a cruise vacations, the more they intended to take a cruise vacation in the next three years. **Hypothesis 6** which stated "***Perceived Physical Attributes negatively influence Desires***" could not be tested as it was excluded in the revised model to avoid multicollinearity problems.

### **Group Comparison Tests (Current Customers vs. Current Non-Customers)**

As the purpose of this study was to compare current non-customers of the cruise industry (i.e., the invisible market) to current customers, additional tests for group comparison were conducted with the use of SEM. The main purposes of group comparison tests were to examine: if the total sample's SEM reported in the above was different for the two sub-sample groups (i.e., current non-customers and current customers of the cruise industry; "two groups" henceforth); and if the two groups' SEM's were different from each other and if so, how they were different. Thus, a series of hierarchical multi-group comparison tests were conducted (Bollen, 1989; Hoelter, 1983b; Kettinger & Lee, 1997; Smith, Tisak, Bauman, & Green, 1991).

Examining the SEM's differences requires two issues of testing. First, the two sample groups' measurement models were tested against the null hypothesis that assumed the same factor patterns for the two groups' measurement models. Two measurement models were tested separately for invariance of  $\Lambda_x$  and  $\Lambda_y$ . If and only when the factor patterns for the two groups were found to be variant, the next step was to test for the invariance of factor loadings (i.e.,  $\Gamma$ : Gammas) (Hoelter, 1983; Kettinger & Lee, 1997; Smith, Tisak, Bauman, & Green, 1991). Thus, the invariance of factor loading was tested against the null hypothesis that assumed no differences between the two groups. The decision to reject the null hypotheses was made based on Chi-square difference tests in which Chi-square, degrees-of-freedom and p-values are compared between the null and alternative hypotheses.

The summary of the null hypotheses and conclusions based on the results are in Table 4-20. The Chi-square difference test was used to examine whether the null hypotheses could be rejected or not. In the first group comparison tests for invariance of factor patterns in two sets of measurement models (i.e.,  $\Lambda_x$ ), it was found that the two groups had different factor patterns. Hence, the next hypothesis was tested for invariance of factor loadings in the two groups. The results showed that the two groups' factor loadings in SEM were different. As it was found that the structural models of the two groups were different, the two groups' structural models were separately obtained to examine the differences.

Table 4-20  
Results of group comparison tests: current non-customers vs. current customers

Null hypothesis	Difference in $\chi^2$	Difference in d.o.f*	Difference in p-value	Decision; conclusion
Ho-1: $\Lambda_x$ are the same for the two groups**	81.08	26	0.000	Reject Ho-1; Two groups' $\Lambda_x$ are different.
Ho-2: Factor loadings are the same for the two groups**	193.55	60	0.000	Reject Ho-3; Two groups' factor loadings are different.

*Note:* \* degrees-of-freedom; \*\*Two groups denote the group of current non-customers and current customers of the cruise industry.

It should be noted, however, that the results of the two groups' structural models are only for exploratory examination purposes. Small sample sizes for each sample (i.e., current customers = 252; current non-customers = 200) cannot be said to render reliable results to avoid Type II errors and corresponding interpretations. The main purpose of this exercise was to compare the path coefficients and to examine possible ways to tap the invisible market (i.e., current non-customers). Hence, it is important to subject this study's model to much larger samples in future studies, before actual marketing strategies can be executed.

Model fit indices of current non-customers' SEM was: NFI = 0.87, NNFI = 0.94, CFI = 0.94, GFI = 0.80 and RMSEA = 0.047 (90% Confidence Interval: 0.040, 0.053), and for current customers' SEM was: NFI = 0.86, NNFI = 0.92, CFI = 0.93, GFI = 0.81 and RMSEA = 0.054 (90% Confidence Interval: 0.049, 0.060) (Table 4-22).

The interpretable results for the SEM of the two groups were compared. In the model of current non-customers, some of the path coefficients resulted in sizes larger than  $|1|$ , indicating multicollinearity or other undetected problems. This result could have been due to small sample size of current non-customers ( $n = 200$ ).

*Age* was also found to negatively influence *Image1* for current non-customers ( $\gamma = -0.79$ ) and *Image2* for current customers ( $\gamma = -0.07$ ). Ages of current non-customers had more negative effects on the perceptions toward cruise vacations' conditions than those of current customers. That is, the older the non-customer, the more they perceived that cruise vacations are: boring; emphasize shopping too much; superficial; too controlled; and prevent them from having control over their own vacation experience.

Level of education was found to have a negative effect on *Image1* (i.e., the benefits of cruise vacations) for both current non-customers ( $\gamma = -0.44$ ; not significant) and current customers ( $\gamma = -0.14$ ; significant). Namely, the higher educated the respondent, the more negatively they perceived the benefits of cruise vacations.

The effect of *Knowledge Sources1* (i.e., sources that are obtained formally) was positive and significant on *Image1* for both current non-customers ( $\gamma = 0.98$ ) and current customers ( $\gamma = 0.08$ ). Compared to current customers, the more current non-customers reported that their knowledge about cruise vacations were obtained from formal sources such as travel guide books, brochure/pamphlets, travel agencies and travel/auto clubs, the more positive their perceptions toward the benefits of cruise vacations.

The effect of *Structural Constraints* on *Intention* was negative for both current non-customers and current customers, but the effect was significant and more negative for current customers ( $\gamma = -0.19$ ) than current non-customers ( $\gamma = -0.05$ ; not significant). *Desires* had significant and positive effects on *Intention* for current non-customers ( $\beta = 0.95$ ) and both current customers ( $\beta = 0.93$ ) (Table 4-21).

Table 4-21  
Comparison of SEM results of current non-customers vs. current customers

Direct path	Γ loadings**	
	Current non-customers	Current customers
Age → Image1	-0.79*	0.02
Age → Image2	****	-0.07*
Education → Image1	-0.44	-0.14*
Education → Image2	****	-0.18
Personal Values1 → Image1	****	0.10
Personal Values1 → Image2	****	0.05
Personal Values3 → Image1	****	0.03
Personal Values3 → Image2	****	0.12
Knowledge Sources1 → Image1	0.98*	0.08*
Knowledge Sources1 → Image2	****	0.10
Knowledge Sources3 → Image1	0.06	0.25
Knowledge Sources3 → Image2	0.09	0.08
Interpersonal Constraints → Desires	0.00	-0.01
Interpersonal Constraints → Intention	-0.05	0.07
Structural Constraints → Intention	-0.05	-0.19*

Direct path	B loadings***	
	Current non-customers	Current customers
Image1 → Desires	0.76*	0.83*
Image2 → Desires	0.11	0.17*
Image1 → Intention	-0.21	-0.19
Image2 → Intention	-0.05	0.00
Desires → Intention	0.95*	0.93*
$\chi^2$ (degrees-of-freedom)	1013.99 (656)	1234.90 (656)
RMSEA (90% confidence interval)	0.047 (0.040, 0.053)	0.054 (0.049, 0.060)
NFI	0.87	0.86
NNFI	0.94	0.92
CFI	0.95	0.93
GFI	0.80	0.81

Notes: \* significant at  $p < 0.05$  or better; \*\*  $\Gamma$  loadings are path coefficients from Ksi variables to Eta variables; \*\*\* B loadings are path coefficients from Eta variables to Eta variables; \*\*\*\* The size of coefficients were larger than | 1 |, indicating multicollinearity or other problems. This result seems to be due to small sample size of current non-customers. Accordingly, indirect effects could not be calculated.

### **Summary of Chapter IV**

In Chapter IV, the findings of data analyses are presented. The results of descriptive statistics are presented for the total sample ( $n = 452$ ) as well as the two sub-samples (i.e., current customers = 252 and current non-customers = 200) on demographic profile (i.e., age; gender; ethnic background; family lifecycle; household income) and leisure vacation behavior (i.e., the average number of days usually spent on leisure vacations; the number of leisure vacations they usually take per year; the average number of months in advance they usually plan leisure vacations; and the total amount of household expenditures on leisure vacations in 2004).

Further, tests of modeling assumptions and reliabilities and validities of measures were ensued by SEM for the total sample and the two sub-samples. The following Table 4-22 displays the results of hypothesis tests:

Table 4-22  
Results of hypothesis tests

		Test result
Hypothesis 1	<i>The relationship between the number of cruise vacations taken in the past and Image of Cruise Vacations for current customers is positive.</i>	Supported
Hypothesis 2	<i>2a: Current customers' Image of Cruise Vacations is more positive than that of past-cruisers.</i>	Partially supported
	<i>2b: Past-cruisers' Image of Cruise Vacations is more positive than that of non-cruisers.</i>	
Hypothesis 3	<i>Personal Values have a significant effect on Image of Cruise Vacations.</i>	Partially supported
Hypothesis 4	<i>Image of Cruise Vacations significantly influences Desires.</i>	Supported
Hypothesis 5	<i>Image of Cruise Vacations significantly influences Intention.</i>	Partially supported
Hypothesis 6	<i>Perceived Physical Attributes negatively influence Desires.</i>	Couldn't be tested as it was excluded from the revised Model due to multicollinearity problems
Hypothesis 7	<i>Interpersonal Constraints negatively influence Desires.</i>	Not supported
Hypothesis 8	<i>Interpersonal Constraints negatively influence Intention.</i>	Not supported
Hypothesis 9	<i>Structural Constraints negatively influence Intention.</i>	Supported
Hypothesis 10	<i>Desires positively influence Intention.</i>	Supported



## **CHAPTER V**

### **SUMMARY AND CONCLUSIONS**

#### **Summary of the Study**

In the current study, it was argued that tourism businesses need to explore the current non-customer market, referred to as “the invisible market,” instead of fiercely competing for larger market share in the current customer market. This is especially important for tourism businesses, because one of the basic motives for leisure travel is to seek new or different experiences (e.g., Crompton, 1979; Iso-Ahola, 1982). This implies that current customers for one type of tourism business can switch to another type, leaving tourism businesses with products and services designed to meet the wants and needs of current customers, which might not meet those of current non-customers.

The cruise industry was selected as a case to demonstrate this point, because its current customer base is small to which many cruise lines offer price discounts, while increasing their capacity (CLIA, 2002, 2004). However, Hobson (1993) has warned the potential similarity of these phenomena to the airlines industry’s severe price wars, which has resulted in self-destructive effects (e.g., bankruptcy and out-of-business).

The purposes of this study were to: 1) enhance the understanding of current non-customers of the cruise industry (i.e., leisure travelers who have not taken a cruise vacation in the last five years or have never taken a cruise vacation and choose other leisure vacation types); and 2) propose practical approaches for the cruise industry to utilize to tap potential markets. This was achieved by examining and comparing current

non-customers' image of cruise vacations with those of current customers; developing and testing a model of cruise vacation choice decision; and by providing practical implications of the study findings.

A conceptual model was developed based on various models and theories that could be synthesized via interconnecting concepts. These included models of destination image (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Beerli & Martin, 2004) and destination choice (e.g., Moutinho, 1984; Woodside & Lysonski, 1989); the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001); and the leisure constraints model (Crawford et al., 1991).

It was hypothesized that cruise vacation choice would be influenced by the following. First, personal factors (i.e., *Personal Values* and Socio-demographic characteristics such as *Age* and the level of *Education*) and external stimuli (i.e., *Knowledge Sources* from which people learn about cruise vacations) influence *Image of Cruise Vacations*. *Image of Cruise Vacations* in turn affect the level of *Desires* for cruise vacations and *Desires* influence *Intentions* to take a cruise vacation in the future. As constraining factors, *Desires* are affected by *Perceived Physical Attributes* and *Interpersonal Constraints*, while *Intentions* are affected by *Interpersonal Constraints* and *Structural Constraints*.

Eleven hypotheses were developed within the literature review as follows:

- ◆ Hypothesis 1: The relationship between the number of cruise vacations taken in the past and *Image of Cruise Vacations* for current customers is positive.

- ◆ Hypothesis 2a: Current customers' *Image of Cruise Vacations* is more positive than that of past-cruisers.
- ◆ Hypothesis 2b: Past-cruisers' *Image of Cruise Vacations* is more positive than that of non-cruisers.
- ◆ Hypothesis 3: *Personal Values* have a significant effect on *Image of Cruise Vacations*.
- ◆ Hypothesis 4: *Image of Cruise Vacations* significantly influences *Desires*.
- ◆ Hypothesis 5: *Image of Cruise Vacations* significantly influences *Intention*.
- ◆ Hypothesis 6: *Perceived Physical Attributes* negatively influence *Desires*.
- ◆ Hypothesis 7: *Interpersonal Constraints* negatively influence *Desires*.
- ◆ Hypothesis 8: *Interpersonal Constraints* negatively influence *Intention*.
- ◆ Hypothesis 9: *Structural Constraints* negatively influence *Intention*.
- ◆ Hypothesis 10: *Desires* positively influence *Intention*.

Using a sequential study design, one of the multi-methods, there were two phases in the current study. In Phase 1, 22 guided conversations (i.e., 10 cruisers and 12 non-cruisers) were conducted using a modified Zaltman Metaphor Elicitation Technique to explore people's image of cruise vacations. These findings were the basis for Phase 2 and were utilized to generate information and items for the proposed construct (i.e., *Image of Cruise Vacations*) to aid in developing a questionnaire in Phase 2. In Phase 2, a conceptual model, hypotheses and a questionnaire were developed, and a survey of the U.S. leisure travelers was conducted to test the Model.

The data were analyzed in five steps using SPSS 11.0 and LISREL 8.72. In step one, descriptive analyses were conducted for the total sample (n = 452) as well as the two sub-samples (i.e., current non-customers = 200; current customers = 252) in terms of demographic profile; leisure behavior; *Knowledge Sources*; and *Affect* toward taking a cruise vacation. Hypothesis 1 and 2 were tested in step one.

In step two, the dimensionality of the constructs; preliminary reliability of measures; and a comparison of the two sub-samples (i.e., current non-customers and current customers) based on latent dimensions were examined using principal component analysis. In step three, the data were tested for modeling assumptions and were treated for missing values. In step four, the degree of reliability and validity of measures were tested using confirmatory factor analysis, and decisions were made about the measures to exclude based on the results.

In step five, hypothesis 3 to 10 were tested using structural equation modeling and hypotheses and the difference between the SEM's of current non-customers and current customers were examined. Hypothesis 1, 4, 9, 10 were supported; Hypothesis 2, 3, 5 were partially supported; and Hypothesis 7 and 8 were not supported. Thus, the effect of *Interpersonal Constraints* on *Desires* and *Intention*, which were hypothesized based on the leisure constraints model were not supported.

### **Theoretical Implications**

In this study, a first attempt was made to examine current non-customers of the cruise industry in comparison to current customers in two ways, using a sequential design. First, the study began with a qualitative exploration about perceptions toward cruise vacations of leisure travelers both of those with and without cruise experiences. Second, based on these findings and a review of relevant literature, a conceptual model was developed to examine the relationships among variables that influence future intention of current non-customers and current customers to take a cruise vacation.

Various models and theories in tourism, marketing, psychology and leisure were synthesized to develop and test a Model of Cruise Vacation Choice Decision. The synthesized models and theories were destination image models (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Beerli & Martin, 2004); destination choice models (e.g., Moutinho, 1984; Woodside & Lysonski, 1989); the leisure constraints model (Crawford, Jackson, & Godbey, 1999); and the Model of Goal-direct Behavior (Perugini & Bagozzi, 2001) which was extended from Theory of Planned Behavior (Ajzen, 1991).

As endeavored in this study, it seemed that the understanding of tourist behavior and the theoretical development in tourism can be enhanced by integrating theories in related fields of studies that have the same aim of understanding human behavior (e.g., choice or non-choice decision-making). For example, the concept of “desires” was newly incorporated in this study’s conceptual model for the context of tourism to examine the underlying impetus of tourists’ decision-making.

Similar to studies on destination image (e.g., Baloglu, 2000; Baloglu & McCleary, 1999; Beerli & Martin, 2004; Husbands, 1989), leisure travelers' age and educational level were found to negatively influence their images of cruise vacations. However, current customers' age was found to positively influence images that cruise vacations offer a variety of benefits, while current non-customers' age was found to negatively affect images about the benefits of cruise vacations (e.g., escape from the usual environment; a chance to be calm and relaxed; and a chance for new experiences) . For both current customers and non-customers, educational level was found to negatively influence their images of cruise vacations.

Personal values pertaining to fun and excitement were found to positively influence images about the benefits of cruise vacations, while those pertaining to self-fulfillment (e.g., being well-respected; security; self-respect; and a sense of accomplishment) were found to negatively influence images (both positive and negative) of cruise vacations.

Both formally obtained sources (e.g., travel agents, brochures/pamphlets) and the Internet were found to positively influence both positive and negative images of cruise vacations. Especially, the more leisure travelers learned about cruise vacations from formally obtained sources, the more positive their perceptions about cruise vacations' benefits. This effect was higher for current non-customers than current customers.

In accordance with the Model of Goal-directed Behavior (Perugini & Bagozzi, 2001), the effect of image of cruise vacations on desires to take a cruise vacation was

positive. In turn, the effect of desires was positive on intention to take a cruise vacation in the next three years, as found in studies on destination image (e.g., Baloglu, 2000).

Results indicated that the commonly reported constraints or reasons for not choosing a particular type of leisure vacation pertaining to structural constraints (e.g., a lack of time and money; commitment to work and family; and a lack of opportunities) or interpersonal constraints (e.g., no companion to go with), might not be the actual bases for non-choice.

In this study, it was found that the effects of structural constraints on intention was found to be more negative for current customers than current non-customers. Further, no effect of interpersonal constraints was found to significantly influence desires or intention for both current customers and current non-customers. Therefore, as argued by Crawford, Jackson and Godbey (1991), intrapersonal constraints, especially, the way an individual thinks or feels about taking a cruise vacation (i.e., images), seemed to be more influential to desires and intention to take a cruise vacation than interpersonal or structural constraints of current non-customers of the cruise industry.

Current non-customers were not different from current customers in positively perceiving that cruise vacations could offer many benefits. In addition, current non-customers were not found to be different from current customers in demographic profile or leisure behavior, except that they were found to be 4.4 years younger than current customers and usually plan leisure vacations 0.90 months later than current customers.

The results of this study also seem to imply that understanding the factors that influence non-choice might be different from those that influence choice-decision. In this sense, hygiene theory (Herzberg, Mausner, & Snyderman, 1959) might be applicable.

That is, just like the factors influencing people's satisfaction levels are different from those of dissatisfaction, factors related to motivation might be disparate from de-motivation of current non-customers, especially non-cruisers who have never taken a cruise vacation, although they take other leisure vacations.

For example, an individual might not be more satisfied with her/his experience at a restaurant if the factors influencing dissatisfaction (e.g., untidy toilet) were removed (Crompton, 2003). Accordingly, current non-customers might not be more motivated if the factors purported to influence de-motivation are removed (e.g., a lack of time and money).

Similarly, being aware of the benefits of a cruise vacation (i.e., the positive outcomes or benefits of taking a cruise vacation) may be a necessary, but an insufficient factor for motivating current non-customers. Those function as motivators that cruisers strongly associate with a cruise vacation, which are goals that they strive to achieve. Therefore, other relevant theories and models should be incorporated and tested for understanding current non-customers in the context of tourism.



Further, as argued by Yarnal et al. (2005), choosing a type of leisure vacation (e.g., a cruise vacation) might encompass not only personal factors (e.g., socio-demographics) but also complex and dynamic social factors that leisure travelers compromise as their priorities evolve throughout lifecycle. In this sense, leisure travelers' perceived constraints that hinder choosing a particular leisure vacation type can change depending on circumstances that are not usually asked on questionnaires.

This implies that more in-depth analysis of personal perceptions (e.g., perceptions toward cruise vacations and symbolic meaning of taking a cruise vacation; perceptions toward oneself about being on a cruise ship, other cruise passengers or travel partners) and social dynamics (e.g., relative influence of family members and leisure activities pursued at home on vacation decisions about types and the corresponding consumptions) should be examined. When these factors are examined in a more holistic way, understanding of leisure travelers' choice or non-choice decisions can be advanced.

### **Practical Implications for the Invisible Market**

The results of this study could be interpreted into several practical implications for the cruise industry to utilize for tapping the invisible market (i.e., current non-customers). The demographic profile of current non-customers was found to be comparable to that of current customers' age in the 50's with household income more than \$40,000 and high school or undergraduate educational level. As current non-customers' age was found to negatively influence the image of cruise vacations, which indirectly influence their desires and intention to take a cruise vacation in the next three years, the cruise industry might want to explore current non-customers who are younger than 50's.

However, more non-customer families were found to have younger children than current customers. Thus, development of more programs for children is recommended. When the programs are educational, they might not only alleviate parenting responsibilities but also gain parents' credibility about the programs during cruise vacations. Programs can include a "floating children camp" from which children can learn about sea creatures, history of cruise ships; songs and movies about the ocean; and local cultures and handcrafting of ports-of-call. More importantly, dissemination of the availability of these programs should be widely done through various media (i.e., travel agencies; travel/auto clubs; brochures/pamphlets; travel guide books) which were found to influence current non-customers' image of cruise vacations.

As images tend to be stable over time (Crompton & Lamb, 1986; Fakeye & Crompton, 1991) and images that current non-customers have of cruise vacations were

found to influence the level of desires and intentions to take a cruise vacation in the future, the cruise industry should focus more on improving image of cruise vacations and keep monitoring current non-customers' images of cruise vacations. This can be indirectly done by achieving high level of satisfaction from current customers, which was found to be one of the main sources of word-of-mouth from which non-cruisers base their knowledge about cruise experiences.

Further, an effort to improve image of cruise vacations can be done through soft marketing mechanisms that emphasize the actual characteristics of cruise vacations. For example, more information about cruise vacations' offerings and choices should be presented and easily available to current non-customers via travel agencies and brochures/pamphlets, which may help change the stereotype of cruise vacations being boring, unsafe, superficial and being filled with the elderly, as found in Phase 1 of the current study.

However, a caution should be made so that the messages to the public do not heighten people's romantic and fantastic expectations via spectacular advertisements. As found in this study's Phase 1, current non-customers' perception that cruise vacations are superficial might have been influenced by visually stimulating advertisements in media that they might find too-good-to-be-true. In this case, current non-customers might find those advertisements entertaining but not enticing enough to influence their perceptions and decisions.

Image of cruise vacations held by current non-customers can be monitored by periodic research studies to compare their image before and after a new launch of

marketing programs (e.g., advertising in media and promotions) to select the elements that are found to influence their perceptions the most. Periodic research studies should shed light on more innovative image elements other than image of cruise vacations as an escape from the usual environment that current non-customers were well aware of, as found in this study. For example, elements can include a variety of activities offered on and off board that are unique to cruise vacations.

Current non-customers' perception that "cruise vacations are costly" as a common constraining factor for not taking cruise vacations can be improved by making prices transparent and easily comparable to their other vacation types which may help them evaluate the value. This can be done by providing a chart for itemized costs so that current non-customers can compare what they pay for and what they would get in comparison to other leisure vacation types. This might be better than emphasizing price discounts in some cruise advertisements that this study's respondents perceived to be unreal or mysterious. Additionally, cruise vacation prices can be made more flexible as follows. While the base costs (e.g., fees for rooms and taxes) can be fixed, other costs could be charged "per selection" from categories (e.g., food, drinks and activities), utilizing debit cards that are paid for by passengers prior to boarding and are rechargeable on board. This way, passengers might feel they are "in control" of the way they make their own vacation experience.

Similarly, considering that the desires to control one's own vacation experience were found to be especially important for current non-customers, it is recommended that the cruise industry should emphasize that they can "choose" what to do or what not to do

on board and at ports-of-call. For example, advertising can show contrasting ways of time spent on a cruise vacation by two types of passengers between those who take a full break from any kinds of activities and those who take every opportunity to experience new and different activities on and off board.

To enhance current non-customers' perception that cruise vacations' offerings are "superficial" and lack "real" experiences, the cruise industry can proffer more educational programs and opportunities for experiencing and learning cultures of the destinations that are visited, given that local communities are willing to share these with cruise passengers. For example, more activities from which passengers can be in contact with local communities (e.g., learning local craftsmanship and cooking with locals) should be developed not only through shopping or touristic settings that current non-customers as well as current customers found unappealing but more in natural settings.

Finally, as structural constraints (e.g., a lack of time and money) were found to influence current customers' intention to take a cruise more negatively than that of current non-customers, although they have been commonly reported as reasons for not taking a cruise vacation, questions to understand current non-customers should consist of examining the underlying factors of non-choice behavior as demonstrated in this study. That is, questions should pertain to image or perceptions (e.g., thoughts and feelings) of cruise vacations, not directly asking current non-customers the reasons why they have stopped taking or never take a cruise vacation.

### **Conclusions and Recommendations for Future Research**

The current study focused on examining current non-customers of the cruise industry (i.e., the invisible market) which consisted of those who take other leisure vacation types and had taken a cruise vacation in their lifetime but not in the last five years (“past cruisers”) and had never taken a cruise vacation (“non-cruisers”). As there has been no existing conceptual framework or extensive empirical results on the factors influencing current non-customers’ decision to take a cruise vacation, the current study developed and tested a conceptual model based on the relevant literature in various disciplines.

Although a larger sample size of current non-customers would have been more ideal to test hypotheses for structural equation modeling (SEM), the survey which was conducted during the historically devastating hurricane Katrina and Rita season (i.e., October to December, 2005) seemed to have negatively affected the response rate. Accordingly, some paths of current non-customers’ SEM were not interpretable due to multicollinearity or other problems, which could not be solved in this study. Thus, this study’s model should be tested with a much larger sample of current non-customers, ideally larger than 700 based on the recommended ratio of 6:1 between the number of respondents and the number of parameters by Grewal, Cote and Baumgartner (2004) to increase the probability to detect the effects among variables.

It also seemed that other efforts should be made to encourage current non-customers' participation in studies of which topics might not seem relevant to them because of their absence of experience. Although non-customer participants in a qualitative method and respondents in a quantitative method of this study were not directly asked why they had stopped taking or have never taken a cruise vacation, the number of non-customer respondents for the survey was lower than current customers (i.e., those who had taken a cruise vacation in the last five years) (200 vs. 252). Of current non-customers, there were 72 non-cruisers who had never taken a cruise vacation in their lifetime, but take other leisure vacation types and met this study's sampling criteria.

Although small compensations for participation were provided in both Phase 1 (i.e., \$15 Wal-Mart gift cards) and Phase 2 (i.e., two lucky draws of \$150 Target gift cards) of this study, the response rate might have been better if they were in smaller amount (e.g., \$20, \$25 or \$30) with more winners (e.g., 15, 12 or 10 winners). This method might have improved potential respondents' perception that the odds for winning were high. In addition, distributing questionnaires three or more times might have helped increase the response rate.

It should be noted that the results of path coefficients in structural models represent relationships of the variables based on previous models and theories but not causality, although they were treated so due to the nature of SEM.

For example, it is possible that leisure travelers' personal values could be influenced by their perceptions toward cruise vacations; what they learn about them from others or own experiences; and their age and educational level. Nonetheless, based on theories and models of consumer and tourist behavior, the directional influences could be hypothesized and tested to examine their relationships. As explored in this study, testing numerous variables at once using SEM seems to be important for theoretical as well as practical purposes.

It is also important to note that this study was a first attempt to synthesize various models and theories that could be interrelated to examine the overall relationships of the variables. Accordingly, results of SEM are not to confirm superiority of this study's model over and beyond other unexamined models. Although the initial model was revised considering multicollinearity and practical reasons, other competing models were not tested or compared with this study's revised model due to a lack of theoretical and empirical guidance. As other unexamined competing models could result in better fit, this study's model can only be said to be a not-disconfirmed model (Garson, 2006).



In the future, this study's model should be cross-validated with larger samples in different settings (e.g., countries). Further, more than three manifest variables for each construct should be used to obtain more reliable results (. In this study, two constructs (i.e., *Desires* and *Intentions*) were measured by two indicators each for realistic reasons (e.g., limited space on the questionnaire; to avoid seemingly repetitive questions). Moreover, other competing models should be examined to improve our understanding about the variables' relationships relating to leisure travelers' decision-making related to vacation choices.

Other relevant variables that can be incorporated in this study's model or in alternative models include *Frequency and Recency of Behavior* as tested in the Model of Goal-Directed Behavior (Perugini & Bagozzi, 2001). Other testable variables could include *Habit* to examine if current non-customers do not choose cruise vacations (or other types of leisure vacations) because their non-choice behavior is habitual. If this behavior is habitual, *Attitudes*, *Image* or *Perceptions* have been suggested to be more influential than *Behavioral Intentions* (Landis, Triandis, & Admopoulos, 1978).

Another variable that can be tested along with image of cruise vacations pertains to *Perceptions of Self* in the specific context of a vacation type (e.g., a cruise vacation). That is, the way an individual thinks and feels about "herself or himself while imagining that s/he were on a cruise vacation," can be examined for its effects on her or his image of cruise vacations, desires, intention and actual behavior.

The role of desires on intention should be examined further to find out if desires mediate the effects of antecedents of intention on intention as found in previous studies (e.g., Perugini & Bagozzi, 2001, 2004). In addition, when longitudinal studies are feasible, the effects of *Implementation Intentions* on actual behavior might be able to provide valuable information about examining the level of and the kind of volitional effects on tourists' behavior.

Considering that the income levels of current non-customers of the cruise industry were not found to differ from those of current customers in this study, examining personal or household wealth (i.e., the net worth of assets) might shed new light on tourist choice behavior in future studies.

A variety of research methods should be explored in tourism research. As utilized in this study, multi-methods, a combination of qualitative and quantitative methods in various formats sequentially (e.g., qualitative → quantitative; qualitative → qualitative; quantitative → quantitative; and quantitative → qualitative) or concurrently (e.g., two quantitative or qualitative methods used on different samples for the same study population) depending on research questions, should be encouraged to expand the way of studying complex tourism phenomena.

Finally, understanding non-choice tourist behavior which has been scarcely examined might not only widen the horizons of theoretical advancement for tourist behavior but also help tourism businesses develop innovative strategies and define their own markets for more successful future.

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**APPENDIX 1**  
**SURVEY INSTRUMENT**

## Perceptions toward Cruise Vacations

Please tell us about your leisure vacations and your perceptions about cruise vacations regardless of whether or not you have ever taken a cruise:

This survey package consists of 8 pages in total:

1. (Page 1) Please read and sign the consent form.
2. (Page 2-8) Please answer the questions in three sections:
  - Section 1: Your Leisure Vacations (page 2)
  - Section 2: Your Perceptions about Cruise Vacations (page 2-5)
  - Section 3: General questions to group responses (page 6-8)
3. When completed, please insert this survey package into the enclosed return envelope and drop it in a mailbox. Thank you!

### Section 1: Your Leisure Vacations

**“Leisure vacation” means a vacation you pay for. It excludes visiting family or friends in another city or country and staying at their place. However, it includes your trips to other destinations while visiting your family or friends.**

1. Do you take a **leisure vacation** for 3 nights or more, at least once a year?  
 YES       NO
  
2. On average, **how many days per year** do you spend on leisure vacations?  
 \_\_\_\_\_ DAYS
  
3. On average, **how many leisure vacations per year** do you take?  
 \_\_\_\_\_ LEISURE VACATIONS
  
4. How many months **in advance** do you usually plan your leisure vacation?  
 \_\_\_\_\_ MONTHS
  
5. Approximately, **how much** did your household spend on leisure vacations **last year**?  
 \$ \_\_\_\_\_

### Section 2: Your Perceptions toward Cruise Vacations

**Please answer the following questions, *regardless of whether or not you have ever taken a cruise vacation.***

1. How would you rate your **feelings** towards taking a cruise vacation? Please circle the most appropriate number for **each** pair.

<b>Not enjoyable</b>	1	2	3	4	5	6	7	<b>Enjoyable</b>
<b>Boring</b>	1	2	3	4	5	6	7	<b>Exciting</b>
<b>Uncomforting</b>	1	2	3	4	5	6	7	<b>Comforting</b>
<b>Unpleasant</b>	1	2	3	4	5	6	7	<b>Pleasant</b>
<b>Annoying</b>	1	2	3	4	5	6	7	<b>Calming</b>

2. **How much do you agree** with the following statements about **cruise vacations, compared to other vacation types?** If you have *never* taken a cruise, please base your opinion on what you have seen or heard. Please circle the most appropriate number for **each** statement.

	<i>Strongly Disagree</i>		<i>Neither Disagree Nor Agree</i>		<i>Strongly Agree</i>
I can be treated well on a cruise vacation.....	1	2	3	4	5
Cruise ships are too crowded .....	1	2	3	4	5
I can eat a lot of food on a cruise vacation.....	1	2	3	4	5
Things are controlled too much on a cruise vacation .....	1	2	3	4	5
Cruise ships provide a variety of food.....	1	2	3	4	5
I don't feel comfortable being on a ship filled with strangers .....	1	2	3	4	5
I can experience new things and activities on a cruise vacation .....	1	2	3	4	5
Taking a cruise vacation is unsafe .....	1	2	3	4	5
I can be playful on a cruise vacation.....	1	2	3	4	5
I think cruise ships impose too many rules and regulations on passengers .....	1	2	3	4	5
A cruise vacation is hassle-free.....	1	2	3	4	5
A cruise vacation is superficial .....	1	2	3	4	5
Cruise ships are filled with the elderly .....	1	2	3	4	5
I can spend much time with family and friends on a cruise vacation.....	1	2	3	4	5
Cruises emphasize food too much .....	1	2	3	4	5
I can be calm and relaxed on a cruise vacation.....	1	2	3	4	5
Taking a cruise vacation is desirable to me.....	1	2	3	4	5
A cruise vacation doesn't allow me to make my own vacation experience .....	1	2	3	4	5
I can escape from the usual environment if going on a cruise vacation.....	1	2	3	4	5
I have health-related concerns about cruises regarding outbreaks or diseases .....	1	2	3	4	5
Cruise ships have confined personal space .....	1	2	3	4	5
A cruise vacation is good value-for-money .....	1	2	3	4	5
I wish to take a cruise vacation.....	1	2	3	4	5
Cruise ships are boring .....	1	2	3	4	5
The probability that I will take a cruise vacation in the next 3 years is high	1	2	3	4	5
A cruise vacation focuses on shopping too much .....	1	2	3	4	5
A cruise vacation doesn't provide enough educational programs.....	1	2	3	4	5

3. Which of the following are the **sources of your knowledge** about cruise vacations?  
Please circle the most appropriate number for **each** information source.

	<i>Not at all</i>		<i>Somewhat</i>			<i>A lot</i>	
	1	2	3	4	5	6	7
My own experience .....	1	2	3	4	5	6	7
Cruise companies' websites .....	1	2	3	4	5	6	7
Internet websites (Other than cruise companies' websites) .....	1	2	3	4	5	6	7
Friends & family .....	1	2	3	4	5	6	7
Magazines .....	1	2	3	4	5	6	7
Newspapers .....	1	2	3	4	5	6	7
Travel guide books .....	1	2	3	4	5	6	7
TV programs .....	1	2	3	4	5	6	7
Brochures/pamphlets .....	1	2	3	4	5	6	7
Travel agencies .....	1	2	3	4	5	6	7
Travel/auto clubs .....	1	2	3	4	5	6	7
Convention & Visitors Bureaus .....	1	2	3	4	5	6	7
Other (Please specify and rate): _____	1	2	3	4	5	6	7

4. Have you ever taken a cruise vacation in your lifetime?

YES → Please answer the following questions, **4-1) to 4-3)**.

Then, please continue to Question 5.

NO → Please continue to **Question 5**.

4-1) How many cruises have you taken in your **lifetime**?  
\_\_\_\_\_ CRUISE VACATIONS

4-2) With how many **different cruise lines** have you traveled in your **lifetime**?  
\_\_\_\_\_ CRUISE LINES

4-3) Approximately, which year did you take your **first** cruise vacation?  
\_\_\_\_\_

5. The following is a list of factors or reasons why people don't go on a cruise vacation or don't go as often as they would like. How much do you agree with each of the following? Please circle the most appropriate number for each statement.

	<i>Strongly Disagree</i>		<i>Neither Disagree Nor Agree</i>		<i>Strongly Agree</i>
I get sea-sickness or motion-sickness .....	1	2	3	4	5
My spouse/partner has poor health .....	1	2	3	4	5
I don't have enough time to go on a cruise vacation.....	1	2	3	4	5
I have a fear of sea water/ocean .....	1	2	3	4	5
I don't have the opportunity to take a cruise vacation .....	1	2	3	4	5
I have a physical disability .....	1	2	3	4	5
My spouse/partner doesn't like taking a cruise vacation .....	1	2	3	4	5
I don't have knowledge about cruise vacations .....	1	2	3	4	5
My commitment to family prevents me from going on a cruise vacation.....	1	2	3	4	5
I have claustrophobia .....	1	2	3	4	5
My work responsibilities prevent me from going on a cruise vacation .....	1	2	3	4	5
I don't know how to book a cruise vacation .....	1	2	3	4	5
Cruise vacations are too costly .....	1	2	3	4	5
I have poor health (illness, etc.) .....	1	2	3	4	5
I don't have a companion to go with on a cruise vacation .....	1	2	3	4	5
Natural disasters such as the recent hurricanes (e.g., Katrina and Rita) prevent me to go on a cruise vacation .....	1	2	3	4	5
Other (Please specify and rate): _____	1	2	3	4	5

6. What is the **likelihood** that you will go on a cruise vacation in the next **3** years? Please check the most appropriate number.

Not at all Likely	Somewhat Likely	Very Likely
<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 3 <input type="checkbox"/> 4	<input type="checkbox"/> 5
<b>If your answer is 1 or 2: Please skip Question 7 and continue to Section 3.</b>	<b>If your answer is 3, 4, or 5: Please go to Question 7 and continue to Section 3.</b>	



7. If you answered **3, 4, or 5 in Question 6** (in other words, if the likelihood of you taking a cruise vacation in the next 3 years is somewhat to very likely) :

7-1) Have you decided **when** you will go on your next cruise vacation?

YES → In how many months are you going to take your next cruise vacation? \_\_\_\_\_

NO

7-2) Have you decided **where** you will go on your next cruise vacation?

YES (Where are you going to go? \_\_\_\_\_)

NO

### Section 3: Your Perceptions toward Cruise Vacations

**The following information will help me group your answers with those of others.**

1. The following is a list of things that some people look for or want out of life. Please read carefully and then rate each on how important it is in your daily life.

	Not at all Important							Extremely Important	
A sense of belonging .....	1	2	3	4	5	6	7	8	9
Excitement .....	1	2	3	4	5	6	7	8	9
Warm relationships with others .....	1	2	3	4	5	6	7	8	9
Self-fulfillment .....	1	2	3	4	5	6	7	8	9
Being well-respected .....	1	2	3	4	5	6	7	8	9
Fun and enjoyment of life .....	1	2	3	4	5	6	7	8	9
Security .....	1	2	3	4	5	6	7	8	9
Self-respect .....	1	2	3	4	5	6	7	8	9
A sense of accomplishment .....	1	2	3	4	5	6	7	8	9

2. How many years of education have you completed? Please **circle one number**.

ELEMENTARY				HIGH SCHOOL				UNDERGRADUATE				GRADUATE SCHOOL			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+

3. Are you?  FEMALE  MALE

4. Which of the following best describes your current life situation? Please check **one**.

- Single adult living alone or with other single adults
- Married couple without children
- Family with one or more infants (Oldest child is 24 months or younger)
- Family with preschoolers (Oldest child is 2 to 6 years old)
- Family with young children (Oldest child is 7 to 12 years old)
- Family with teenagers (Oldest child is 13 to 20 years old)
- Family with at least one child having grown up and left home.
- All children have grown up and left home, but parents have not retired.
- At least one spouse is retired.
- Other (Please describe): \_\_\_\_\_

5. What is your ethnic background?

- AFRICAN AMERICAN       NATIVE AMERICAN       ASIAN
- CAUCASIAN       HISPANIC       Other (Please specify): \_\_\_\_\_

6. What year were you born? 19\_\_\_\_\_

7. What was your total annual household income before taxes **last year** (2004)? Please check the most appropriate answer.

- UNDER \$25,000  
 \$40,000 ~ \$49,999  
 \$50,000 ~ \$74,999  
 \$75,000 ~ \$99,999  
 \$100,000 ~ \$124,999  
 \$125,000 ~ \$149,999  
 \$150,000 OR MORE

8. Have you taken a cruise vacation in the last **5 years**?  YES  NO

9. Please let us know your comments. (i.e., your overall opinion regarding cruise vacations, what you like or dislike about cruise vacations, or what you think about this survey)

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**THANK YOU VERY MUCH FOR YOUR PARTICIPATION!!**

***Please insert your completed survey package  
into the enclosed envelope and drop it in a mailbox.***

## VITA

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