DEVELOPING AN ALTERNATIVE MODEL FOR TRAVEL DECISION MAKING

A Dissertation

by

KAM HUNG

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

December 2008

Major Subject: Recreation, Park and Tourism Sciences

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ABSTRACT

Developing an Alternative Model for Travel Decision Making.

(December 2008)

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This study proposes an alternative travel decision making model and situates its arguments in the Motivation-Opportunity-Ability (MOA) theoretical construct. The MOA model suggests that motivation, opportunity, and ability are major factors influencing decision making. Applying this model in the context of tourism, the proposed model suggests that travel behaviors are determined by self-congruity, functional congruity, perceived travel constraints, constraint negotiation, and self-efficacy.

The proposed model and hypotheses were tested in the context of cruise travel. Both qualitative and quantitative methodologies were utilized in this study. Semi-structured interviews with both cruisers and non-cruisers were first conducted to derive measurement items for the interested constructs and to understand how different factors influence travel decision making. An online panel survey was followed to collect quantitative data for testing the proposed theoretical model and hypotheses.

Structural Equation Modeling (SEM) was used to test both the proposed model and hypothesized relationships among the constructs. The analyses were performed with **A**nalysis of **MO**ment **S**tructures (AMOS 7.0). All hypotheses except one were supported by the data. The

proposed model also had an acceptable fit to the data. Based on the findings, both theoretical and practical implications of the study were recommended.

In memory of

Ping Hung, my dearest sister.

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CHAPTER I

INTRODUCTION

Study Background

Cruise tourism has been experiencing stable growth in recent decades with an average annual growth of 8.1% in the number of passengers on board since the 1980's (Cruise Lines International Association [CLIA] 2007). The current prosperity of cruise tourism led CLIA to conclude that "the cruise industry is the most exciting growth category in the entire leisure market" (CLIA 2007, pp. 3). Cruise tourism is currently a multibillion dollar business with 9 million embarkations recorded at U.S. ports in 2006, up 4.5% from the previous year, and contributed $35.7 billion to the U.S. economy (Business Research and Economic Advisors 2007). Although Pacific Asia cruise business also displayed a 123% increase in the past decade, the number was established on a very low base (Dwyer, Douglas, and Livaic 2004). Therefore, the U.S. remains the major player in the cruise business (Business Research and Economic Advisors 2007) with 9.1 billion, or 79%, of total passengers worldwide in 2005 (CLIAa 2006).

Despite the rapid growth of cruise revenue, the cruise industry only has a small market share in tourism business compared to other land-based tourism. According to the United Nations World Tourism Organization [UNWTO] (2007), the international tourism receipts recorded in 2006 was US$733 billion, an increase of 4.3% from 2005. Among the 846 million total international arrivals, only 7% were accomplished by water transportation (UNWTO 2007). Although it was reported that over 60% of adults in North America are interested in taking a cruise vacation, only 17% of them have done so (Cruise Lines International Association 2007).

The citations in this dissertation follow the style and format of the *Journal of Travel Research*.

Intriguing research questions related to phenomena include who chooses not to cruise, why they do not do so, and what cruise companies should do in order to increase their customer base. As discussed by Kerstetter, Yen, and Yarnal (2005) constraints are one of the main factors which keep people from initiating or continuing to cruise. Identifying these travel constraints is essential to the understanding of the discrepancy between estimated and actual cruise tourism performance, and to be able to effectively plan marketing schemes to explore potential markets. Thus, one of the purposes of this study is to unveil the constraints which influence people's decisions related to taking a cruise vacation.

This study is also conducted to understand people's decision making related to not only taking a cruise vacation from the perspective of travel constraints, but also other factors affecting the travel decision-making process. For instance, Petrick, Li and Park (2007) found that social influences were the major factor affecting one's decision on cruise vacation. Other influential factors identified in past studies include perceived value and quality of cruise services (Petrick and Li 2006), and perceived image of cruise travel (Park 2006), in which perceived value and quality of services were studied in the context of repurchase decisions while perceived image of cruise was studied among both cruisers and non-cruisers.

Although Vina and Ford (2001) also studied factors influencing people's propensity to cruise, the variables of prediction were limited to demographic and trip characteristics, and the studied sample was limited to those who previously requested travel information for tourist destinations in South Texas from regional convention and visitor bureaus. Given the limited research on constraints and decision making in cruise tourism, it is unknown whether other factors such as self-image and perceived self-efficacy to travel might also explain tourists' behaviors. Thus, the current study is conducted to address this potential gap in the literature, and

to integrate these factors in a theoretical framework to hopefully yield a more holistic understanding of tourist decision making.

Decision-making studies are multidisplininary in nature and have evolved from a wide range of fields including psychology (e.g., Harmon-Jones 2000; Oyserman, Fryberg, and Yoder 2007; Pablo, Petty, and Barden 2007), sociology (e.g., Howard 2000; Pierce et al 2003, Lawler, Shane, and Yoon 2000), marketing (e.g., Simonson, et al 2001; Cotte and Wood 2004; Mandel 2003), communication (e.g., Homer 2006; Till and Baack 2005; Katz 1973), and so on. Although different theories or conceptual models (e.g., Theory of Planned Behavior by Ajzen 1991; Goal Hierarchy of Motivation by Bettman 1979; Elaboration Likelihood Model of Persuasion by Petty and Cacioppo 1980; Brand Personality by Aaker 1997) have been proposed for explaining consumers' decisions, no one unifying theory has been agreed upon by scholars to fully explain decision making (Sirakaya and Woodside 2005). Simonson et al (2001, pp. 251) suggested that this might be because "consumer behavior is too complex to be meaningfully captured in a single model." Alternative approaches may enhance our understanding of decision making from different ways. The current study proposes an alternative model with succinct concepts and structure for explaining travel decision making.

Different factors influencing tourist decision making have been identified in past research including travel motivation (Kim and Chalip 2004; Dann 1977; Crompton 1979a), information search (e.g., Bieger and Laesser 2004; Fodness and Murray 1999; Vogt and Fesenmaier 1998), memory (e.g., Braun-Latour, Grinley, and Loftus 2006), perceived quality and value (e.g., Petrick and Backman 2002; Petrick 2002), destination image (e.g., Pike 2002; Litvin and Ling 2001; Park 2006), and so on. Both internal (e.g., travel motivations, novelty, and personality) and external (e.g., group influences, cultural backgrounds, and destination images) factors have also

been examined in this line of research. One of the observations derived from these studies is that the majority of studies have assumed that tourists make decisions rationally without considering the hedonic nature of their decisions. Decrop and Snelders (2005) developed a decision-making typology in which they identified six different types of vacationers: habitual, rational, hedonic, opportunistic, constrained, and adaptable. This typology implies that decision making can be diversified across different individuals, and that both the rational and hedonic nature of decision making should be incorporated into the analysis of travel decision making.

However, scholars usually consider decision making as a rational process which involves multiple stages (Sirakaya and Woodside 2005) in which consumers logically derive their final decision. For instances, Crompton (1992) and Botha, Crompton, and Kim (1999) proposed a destination choice model in which people narrowed their choices from awareness set, initial consideration set, and late consideration set to final destination choice. Based on Assael's (1984) work, Vogt and Fesenmaier (1998) introduced an information search model in which information search process is comprised of five stages: input variables, information acquisition, information process, brand evaluation, and purchase. Sirakaya and Woodside (2005) summarized previous decision-making studies and suggested that people usually go through the following steps when making a travel decision: 1) recognizing the need of making a decision; 2) identifying goals; 3) formulating choice sets; 4) collecting information on each choice; 5) making a choice among the alternatives; 6) purchasing and/or consuming products/services; and 7) postpurchase evaluation.

Although these models present a logical hierarchical process of decision making, some scholars (e.g., Petrick, Li, and Park 2007; Crompton and Ankomah 1993; Opperman 1998) have suggested that not everyone follows all the steps scripted above. People are more likely to skip some stages of decision making when they are brand loyal (Petrick, Li, and Park 2007), have

previous experience (Opperman 1998), are familiar with the products/services (Prentice and Anderson 2000), have social influences (Petrick, Li, and Park 2007), are involved in decision-making process (Crompton and Ankomah 1993), and their decisions are routinized (Crompton and Ankomah 1993). Petrick, Li, and Park (2007) studied decision making of cruisers and found that Crompton's (1992) destination choice set model, which is a multi-state decision-making model, did not explain the phenomenon. This implies that the traditional multistage approach may not be applicable to explain tourists' decision makings due to its sensitivity to the factors mentioned above.

Another observation of the traditional multistage approach is that most models focus on describing the process of decision making rather than explaining why people make certain decisions. Crompton (1992, pp. 432) highlighted this drawback in his seminal paper examining the destination choice set model: "The choice structure taxonomy is not an explanatory model, because it does not explain the role of internal and external forces that shape the choices." The current study seeks to not only identify the major variables affecting decision making, but also addresses the fundamental motives which are needed for engaging people in the process.

Situated in the Motivation-Opportunity-Ability (MOA) framework developed in marketing (MacInnis and Jaworski 1989), self-congruity, functional congruity, travel constraints, constraint negotiation, and self-efficacy were postulated in this study as the key factors influencing travel decision making. It is argued in this study that the proposed model differs from previous decision-making models in terms of its parsimonious structure and its capability in explaining what motivates people to engage in decision making. The former characteristic of the model is necessary for facilitating the application of theoretical model in practical cases; the

latter assists in answering the "why" question (i.e., why people make certain decisions), which has not been adequately addressed in most existing decision-making models (Crompton 1992).

The proposed decision-making model was tested in the context of cruise travel. Early research on cruise travel focused more on economic aspects of cruise lines (Dwyer and Forsyth 1998; Henthorne 2000; Vina and Ford 1999) while later studies have paid more attention to psychological aspects of passengers such as their revisit intentions (Petrick, Tonner, and Quinn 2006), loyalty (Petrick and Sirakaya 2004), and price sensitivity (Petrick 2005), and social aspects such as social space, interaction and liminality (Yarnal and Kerstetter 2005), tourist bubble (Jaakson 2004), and globalization/macdonaldization (Weaver 2005). Yet, there is a lack of investigation on tourist decision making regarding cruise travel. Although Petrick, Li, and Park (2007) empirically examined the decision-making process associated with cruise vacations, the study was exploratory and was embedded within the framework of choice set model, which is a multistage decision-making model. This study intends to understand cruise vacation decision making by proposing an alternative decision-making model and empirically testing the model in the context of cruise travel.

Study Objectives

Understanding cruise vacation decision making is integral to the success of the cruise industry. However, past research has displayed a lack of attention to this area. It is the intention of this study to provide some insights to understand why some people cruise while others do not as well as what influences ones' decisions in taking a cruise. The specific objectives of the study are:

1. To examine the influences of perceived travel constraints and other key variables in cruise travel decisions.
2. To propose an alternative travel decision-making model, which incorporates both rational and hedonic aspects of decision making, and addresses the fundamental motives which are needed for engaging people in the decision-making process.
3. To empirically test the proposed model and hypothesized relationships among the constructs in the context of cruise travel.

Limitations

The proposed model and hypothesized relationships among the constructs of interest were tested with the data collected from an online panel survey. Although this study method is in accordance with the study purposes, it is nonetheless subject to some limitations. For instance, it could only reach those who have registered with the online panel company or those who have internet access and computer skills (Duffy et al 2005). Therefore, the study results cannot be generalized to the entire U.S. population. Another drawback of the study is that the online panel company performed sampling and contacted panel members on behalf of the investigator. Although the company reported the data collection process to the researcher, the credibility of information was solely based on the trust relationship between the researchers and the company. In addition, the study was not conducted in a controlled environment.

Delimitations

The following delimitations were taken place in the study:

1. The study only included the U.S. citizens who were registered to the online panel company being selected.
2. The study did not examine the influences of demographic (e.g., age, income, education, and job status) and situational (e.g., seasonality, travel distance, and travel duration) variables on the study results.

Definitions of Key Variables

The key terms of the study are defined below:

Self-congruity refers to the match between tourists' self-concept (actual self, ideal self, social self, and social ideal self) and perceived tourist' image of a destination (modified from Kressmann et al's, 2006 definition of consumer self-congruity).

Functional congruity refers to the match between tourists' ideal expectations of utilitarian destination features and their perceptions of how the destination is perceived along the same features (modified from Kressmann et al's, 2006 definition of consumer functional congruity).

Affective image refers to subjective feelings or emotional response of individuals toward a destination (Gartner 1993).

Cognitive image refers to beliefs or knowledge of a destination (Gartner 1993).

Travel constraints refer to the factors causing 1) inability to maintain travel frequency at or increase it to a desired level, 2) ceasing travel, 3) non-travel, and/or 4) insufficient enjoyment of travel (modified Jackson and Scott's (1999) leisure constraint definition).

Intrapersonal constraints are the psychological conditions of an individual such as personality, interest and attitude toward travel which lead to 1) inability to maintain participation

at, or increase it to, desired travel frequencies, 2) ceasing travel, 3) non-travel, and/or 4) insufficient enjoyment of travel (modified from Crawford and Godbey's (1987) intrapersonal constraint definition and Jackson and Scott's (1999) leisure constraint definitions).

Interpersonal constraints are the factors relating to interaction between a potential traveler and others, such as family and friends which lead to 1) inability to maintain participation at, or increase it to, desired travel frequencies, 2) ceasing travel, 3) non-travel, and/or 4) insufficient enjoyment of travel (modified from Crawford and Godbey's (1987) interpersonal constraint definition and Jackson and Scott's (1999) leisure constraint definitions).

Structural constraints are external factors in the environment such as inconvenient transportation which which lead to 1) inability to maintain participation at, or increase it to, desired travel frequencies, 2) ceasing travel, 3) non-travel, and/or 4) insufficient enjoyment of travel (modified from Crawford and Godbey's (1987) structural constraint definition and Jackson and Scott's (1999) leisure constraint definitions).

Constraint negotiation refers to the implementation of some strategies (either cognitive or behavioral strategies or combination of both) in order to surmount the constraints encountered (Jackson and Rucks 1995; Jackson, Crawford, and Godbey 1993; Hubbard and Mannell 2001).

Self-efficacy refers to the "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura 1977, pp. 3).

Travel behavior refers to current travel intentions, past travel frequencies, and enjoyment of the most recent travel experience.

Organization of the Dissertation

The study is organized into six chapters. Chapter I justifies the importance of this study by explaining the need to: 1) study travel constraints and other key factors influencing cruise vacation decision makings; 2) keep an alternative travel decision-making model which has both analytical and explanatory power; and 3) integrate both rational and hedonic aspects of decision making in a unifying model. Based on these justifications, three objectives of study were presented. The limitations and delimitations of the study were specified, and the key terms of the study were also defined.

A conceptual model was developed in Chapter II. The literature review was also provided in this chapter to logically derive the model and hypotheses.

Chapter III introduces the methods used in this study to test the proposed model and hypotheses. The study incorporated both qualitative and quantitative methods. For the former approach, semi-structured interviews were conducted with both cruisers and non-cruisers on campus and at a port. For the latter method, an online panel study was conducted with a random sample. The topics of measurement scale development, sampling, data collection and data analysis were also discussed.

Chapter IV describes the initial stage measurement scale development. The findings of interviews were presented and the process of development measurement scale was also outlined here.

Chapter V presents the data analyses and findings of the study. The statistical fit between the proposed model and the empirical data were reported. The results of hypotheses testing was also be depicted here.

Chapter VI summarizes the study results, present some theoretical and managerial implications of the study, and provide directions for future study.

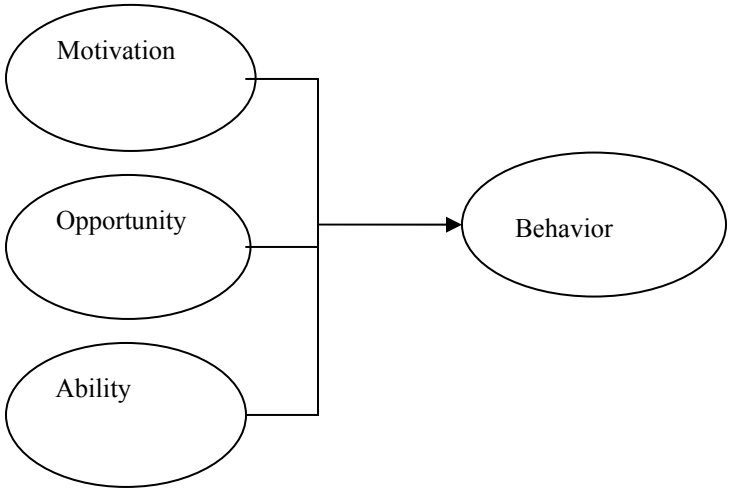
CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL MODEL

Theoretical Framework

The current study seeks to explain travel behaviors by constructing an integrated decision-making model based on the Motivation-opportunity-ability (MOA) theoretical framework (MacInnis and Jaworski 1989). The MOA model consists of motivation, opportunity, and ability (MOA), which are considered as antecedents of behavior(s) (Figure 1). Based on this model, it is suggested that motivation, opportunity, and ability to travel are necessary for a travel decision to occur, and various travel behaviors are assumed to be individually and situationally dependent due to the variability of the antecedents.

FIGURE 1
MOTIVATION, OPPORTUNITY, AND ABILITY (MOA) MODEL



The MOA model was first proposed by consumer behavior researchers within the context of information processing theory (see MacInnis and Jaworski 1989). According to MacInnis and Jaworski (1989), information processing can be divided into three components: antecedents, processing and consequences. Antecedents are comprised of needs or motivation, opportunity, and the ability to process brand information. The information process often begins with recognition of the discrepancy between the current situation and the desired situation. For the purposes of this paper, need was integrated into the motivation component as it has been argued to be an essential element for stimulating motivation to achieve a desired goal (Bettman, 1979). MacInnis, Moorman, and Jaworski (1991) also studied the role of MOA in brand information processing for advertising and found it plays a mediating role in the relationship between executional cues and communication outcomes. They suggested that the executional cues of an advertisement affect the communication effectiveness of an ad through their influences on consumers' motivation, opportunity, and ability to process the information. They thus suggested that to increase the effectiveness of an ad, marketers need to address how to enhance these three mediating factors (MacInnis, Moorman, and Jaworski, 1991).

The MOA approach has been adopted by several scholars on a wide range of topics. For example, Batra and Ray (1986) applied this model in a study of the situational effects of advertising repetition and found that motivation, opportunity, and ability are antecedent conditions required for advertisements to generate cognitive responses. Rothschild (1999) adopted the MOA model in the context of social marketing, and segmented the public based on these three elements. Based on this segmentation, education, marketing and law strategies were implemented accordingly. Wiggins (2004) suggested that consumers experience barriers to action because they lack motivation, ability or opportunity to act, or some combination of the

three. Rothschild (1999) segmented art participants into different segments, and suggested a specific marketing strategy to be implemented for each segment. In addition, crime literature suggests there are three antecedents that must be present before a crime can be committed: opportunity, ability and desire (Davidson and Gentry 2001; McGrew 2005; Kenry 2003; Beirne 1993). Other outcomes of the MOA model include brand information processing (MacInnis, Moorman, and Jaworski 1991), new product introduction (Wu, Balasubramanian, and Mahajan 2004), and blame attributions (Laufer, Silvera, and Meyer 2005). A commonality found among these applications of the MOA model is that all participants are engaged in information processing or a decision-making process. Additionally, specific situational factors and their level of influence can lead to different outcomes related to information processing and decision making.

Similarly, travel behaviors can be considered as the outcomes of information processing and decision making. A large body of research has been conducted in tourism contexts to investigate how people process information and how they make decisions (e.g., Vogt and Fesenmaier 1998; Fodness and Murray 1997; Crompton 1992; Gursoy and McCleary 2004). The efforts have been on identifying factors influencing travelers' decision-making processes and the outlying mechanisms leading to a travel decision. Although these studies have contributed to the understanding of tourists' decisions and behaviors, it can be argued that the proposed decision models and processes are too complicated to be useful to tourism practitioners. Applying the MOA model in a context of tourism, this study is expected to structure a theoretical framework with a more parsimonious structure than previous models. The following paragraphs investigate motivation, ability, and opportunity in more detail.

Motivation

There is substantial interest in investigating motives underlying human's behavior. Motivation is an important factor in a decision-making process as it affects both the direction and intensity of behavior (Bettman 1979), and has been one of the most researched topics in a variety of fields such as psychology, sociology, consumer behavior, and tourism. Various motivation theories have been developed such as drive reduction theory (Hull 1943; 1952), hierarchy of needs (Maslow 1943; 1954), expectancy-value theories (Lewin 1938), and goal directed behavior (Bettman 1979). While some theories such as drive reduction theory have suggested that people behave in certain ways due to their innate biological tendency such as eating for hunger; others such as hierarchy of needs theory suggest that people do something because they want to achieve certain goals such as working hard to get a raise. The former is termed as a regulatory approach which refers to responses to physiological need while the latter is termed a purposive approach which focuses on the goal-directed nature of behavior (Beck 2000). In a tourism context, the latter approach has been used more frequently.

Motivation has been a central theme of tourism studies. Satisfying tourists is important to sustaining business for travel destinations, while understanding tourists' travel needs is also essential to plan a destination and its services in a way which can maximize tourists' satisfaction. Gunn (1988) urged tourism planners to understand tourists' characteristics when designing a tourist region.

Various motivation theories or concepts have been proposed to explain tourist behavior. For instances, MacCannell (1973; 1999) suggested that tourists travel to other destinations to seek authentic opportunities since their usual environments lack such experience. Plog (1974; 2001) allocated tourists in an allocentric-psychocentric continuum in which tourists were

categorized according to their personalities toward novelty-seeking. This classification implies that personality is one of the basic sources of travel motivation. Pearce and Caltabiano (1983) applied Maslow's hierarchy of needs to the study of tourist travel motivations, and suggested that experienced travelers are more likely to go on trips to fulfill their higher level of needs such as self actualization than novice travelers. Pearce (1988) further elaborated this concept into the Leisure Career model in which tourists move upward to satisfy higher levels of needs in their travel career. Although many motivation theories have been proposed in past research, scholars do not perceive these approaches as competitive entities; rather, they all contribute to the understanding of tourist behaviors in different ways. Thus, it is unlikely that scholars will agree on one unifying motivational theory in explaining tourist behavior.

In his early work, Dann (1977) suggested that people travel for two basic reasons: 1) to escape from boredom of usual residence, and 2) to gain status recognition from others. These two basic travel motivations coincide with Iso-Ahola's (1982) notions of escaping usual environments and seeking intrinsic rewards, which act as two fundamental forces leading to a travel decision. Cromption (1979a) identified nine socio-psychological motivations leading to a travel decision: escape from a perceived mundane environment, exploration and evaluation of self, relaxation, prestige, regression, enhancement of kinship relationship, facilitation of social interaction, novelty, and education. The consensus generated from these studies is that people travel to achieve certain psychological benefits that may not be gained in their usual environment and/or to restoring their equilibrium state (Crompton 1979a). These motivations are also referred to as "push" travel factors that are necessary to be present in order to result in a decision to travel (Dann 1981; Crompton 1979a).

Most motivation theories were established based on the "push" perspective according to why people travel to fulfill their inner needs. Parallel to the concept of "push" factors is "pull" factors, which have to do with the attractiveness of a destination that entices people to choose where to go for a vacation (Dann 1981; Crompton 1979a). Although the push-pull concept has been developed since the 1970s, it is still being widely applied in different tourism studies. For instance, Zhang and Lam (1999) applied this concept in a study of travel motivations of Chinese travelers to visit Hong Kong, while Kim, Lee, and Klenosky (2003) examined the influence of push and pull factors on visitors to the National Parks in Korea, and Kim and Chalip (2004) adopted this construct to investigate why people traveled to FIFA World Cup. These studies have demonstrated that the push and pull approach is a useful paradigm for studying tourist motivations.

Past research has often separated the discussions of "push" and "pull" motivations, even though they have been studied simultaneously. The integration of these two approaches is likely to enhance the understanding of the role of destinations in fulfilling visitors' fundamental needs. Among the very few studies addressing this concern, Botha, Crompton and Kim (1999) investigated how personal motivations (push factors), destination attributes (pull factors), and situational inhibitors influenced destination choice at different stages. They proposed that push factors influence the formation of initial consideration set; pull factors play a more important role when narrowing down the choice from initial consideration set to late consideration set; and situation inhibitors are more important when determining the final destination choice. The current study will apply the concept of self-congruity theory to interpret the relationship between "push" and "pull" factors and to bridge the gap between these two approaches. It is expected that self-congruity motivations, in which people choose to perform certain behaviors or purchase

certain products congruent with their self-concepts (Kressmann et al. 2006), can explain the interaction between push and pull factors.

Researchers often lament that there is a lack of attention given to building theoretical and conceptual frameworks to consolidate the study of destination image (Beerli and Martin 2004a; Tapachai and Waryszak 2000; Baloglu and McCleary 1999). Although the influence of destination image on destination choice has been suspected and validated in many studies, research seldom explains the fundamental reason underlying this process. It is unknown how destination image affects a travel decision in terms of meeting tourists' psychological needs. One exceptional case is the notion of beneficial image proposed by Tapachai and Waryszak (2000), which suggested that tourists travel to a destination due to the perceived functional, social, emotional, epistemic, and conditional benefits offered by visiting the place.

Past destination image research has often suggested that intention to visit a destination occurs when people hold a favorable image toward the destination (e.g., Fakeye and Crompton 1991). However, the mechanism behind this relationship remains unexplained. Baloglu and McCleary (1999, pp. 869) suggested: "little empirical research has focused on how image is actually formed…" It is still unclear why people prefer to visit a destination over another and how people choose among all destinations with positive images. This study is intended to address these concerns by applying self-congruity theory, which argues that a particular destination is chosen not only because its positive image, but also more importantly, because it matches tourists' self-images and contributes to their psychological wellbeing. A conceptual framework of travel choice is developed and empirically tested in the context of cruise travel. A review of the image literature suggests that most image studies conducted in the past were associated with destinations, rather than a specific type of travel. This study will test if

destination image is similarly applied to cruise travel. In the following paragraphs, a comprehensive review on self-congruity is conducted, followed by a review of the destination image literature.

Self-congruity theory

Self-image congruence is defined in marketing research as "the match between consumers' self-concept (actual self, ideal self, etc.) and user image (or personality) of a given product, brand, store, etc" (Kressmann et al. 2006, pp. 955). The congruence between the perceived image of a product and self-image can lead to preference of the product and thus, result in purchasing behavior. In other words, people tend to behave congruent to their self-images (Mannetti, Pierro, and Livi 2004).

Although the self-congruity concept was first proposed and developed in social psychology, it has been useful in explaining various consumers' behaviors. Past research has suggested that self-congruity theory predicts behavioral intentions (Mannetti, Pierro, and Livi 2004), product evaluation (Barone, Shimp, and Sprott 1999), consumer satisfaction (Magin et al. 2003), brand loyalty (Kressmann et al. 2006), and brand preference (Aaker 1999). The following paragraphs first overview the development process of self-congruity theory, and then identify different motives of self-congruity and their influence on various dimensions of self-concepts. Finally, the implications of self-congruity theory in consumer behavior research are summarized.

Historical overview of self-congruity theory. There are two streams of research in which self-congruity theory has been studied most frequently: self-concept research and personality research. With respect to self-concept research, self-congruity theory has been defined as the

"matches and mismatches between self-concept and images reflected by objects, persona, or events" (Sirgy 1986, pp. 1). With respect to personality research, researchers have examined congruence between product/brand personality and human personality (e.g., Magin et al. 2003; Aaker 1999), and self-congruity theory by using personality measurement. Confusion between self-concept and personality often arises since both concepts are associated with self structure. Ross (1971) distinguished personality from self-concept and suggested that self-concept refers to inner self (i.e., how the individual see him/herself) while personality refers to outward self (i.e., how other people perceive the person based on his/her behaviors).

Although discussion on self-congruity has been going on for about half a century (e.g., Birdwell 1968; Dolich 1969; Grubb and Stern 1971), the terminology of self-congruity has only been used sparsely (e.g., Hughes and Guerrero 1971; Sirgy 1982). Sirgy (1986) published the first book on self-congruity—*Self-congruity: Toward a Theory of Personality and Cybernetics*. Sirgy (1986, pp. 5) defined self-congruity as "the comparison between a perceived self-image and referent self-image" in which perceived self-image refers to the images reflected by objects, persona, or events, and referent self-image refers to the self-concepts upheld by individuals about themselves. Since most discussions of self-congruity have been associated with self-concept congruence, the following paragraphs explain the development of self-congruity in the stream of self-concept research.

Self-congruity research encompasses different disciplines. For instance, Sirgy (1986) situated self-congruity as an integrated theory of human behavior which contributes to research in different fields including personality, cognition, self-concept, and cybernetics. Rosenberg (1989) also indicated that there was a long tradition of studying self-concept in psychology, sociology, and psychoanalysis, even though there has been a few obstacles restricting self-

concept research. For instance, behaviorism prevailed during the first half of the twentieth century in psychology. This perspective put an emphasis on objectivity which requires observable facts, and rejects subjectivity which implies speculations on human's internal thoughts (Pear 2001; Sternberg 1999; Matlin 2005).

According to Rosenberg (1989), the shift from external to internal reactions was initiated by Donald Snygg (1941) who proposed a paradigm of phenomenology which suggests that people behave according to their own interpretations or feelings toward situations rather than responding to the actual facts. This shift of focus has placed human thoughts in the center of investigation of human behavior. In sociology, the origin of self-concept research can be traced back to Cooley's (1902) "looking glass self" and Mead's (1934) "taking the role of the other". Both perspectives imply that self-concept is an outcome of social interaction between society and self (Rosenberg 1989), and that self-reflection takes a major role in inducing human behavior.

Self-concept is becoming increasingly popular in both the psychology and sociology fields (Rosenberg 1989; Gecas 1982). Although both disciplines investigate self-concept, the two disciplines differ in their foci of investigation. While psychologists study self-concept from the perspective of human's inner world, sociologists interpret self-concept from the aspect of society and human interactions. The former focuses more on the consequences of self-concepts and their motivation implications; the latter looks for the influences of human and society's interactions on self-conceptions and thus, focuses more on the causes of self-concepts (Gecas 1982). Therefore, these two perspectives are complementary rather than conflicting with each other (Gecas 1982). Integrating these two streams of research is likely to broaden the understanding of human behavior. The following paragraphs explain the motives of engaging in self-congruity behavior,

the different dimensions of self-congruity, and the process and outcomes of self-congruity behavior.

Motives of self-congruity. Different motives have been proposed to explain why people engage themselves in behaviors including self-congruity activity. For instances, Hayakawa (1963) suggested that the basic purpose of human activity is to protect, maintain, and enhance their symbolic self. This implies that self-concept is the focal point of most human behaviors. People tend to engage in behaviors which can reflect or signify their self-images.

The role of others is especially significant in the dialogues of sociologists related to the topic of self-concept. People strive to maintain or enhance their self-concept based on the reactions received or anticipated from others (Grubb and Hupp 1968). The interactions between self and significant others can modify human's behaviors in the way which can help gain social approval or minimize social rejection (Kaplan 1986).

Gecas (1982) discussed three motivations associated with self-reflecting behaviors: self-efficacy, self-esteem or self-enhancement, and self-consistency. Sirgy (1986) further identified three motives of self-congruity: self-esteem, self-consistency, and self-knowledge. Although different motives have been outlined for the self-congruity mechanism, scholars have mentioned two motives most frequently: self-enhancement (or self esteem) and self-consistency.

While some scholars interpret self-esteem and self-consistency as independent (e.g., Aaker 1999), others have suggested that these two motives are complementary (Greewald 1980). Nevertheless, the consensus generated from these discussions is that both motives are basic elements explaining human behavior.

Self-enhancement refers to self betterment to achieve the standards set by self or others. This motive was also termed as positivity by Aaker (1999). People strive to enhance their self-concept and to feel good about themselves either through symbolic consumption, or by performing behaviors which are self-interpreted can potentially achieve these goals. Self-concept is an important asset to an individual as many of their behaviors are directed to enhance or protect their self-concept (Grubb and Grathwohl 1967). Self-esteem, which is regarded as an evaluative dimension of self-concept (Gecas 1982), is often used interchangeably with self-enhancement in the discussion of self-concepts. Both are motivational forces of human behavior, and different levels of them can lead to different directions of behavior. For instance, Rosenberg (1979) suggested that people with high self-esteem are more likely to work to maintain their self-esteem, and low self-esteem people are more likely to work to improve their self-esteem. Regardless, people choose to perform certain behaviors in order to achieve the goal of feeling good about themselves.

Self-enhancement is often motivated by social approval (Grubb and Hupp 1968). Gaining acceptance from others, especially significant others, can enhance self-confidence while being alienated by others generally can induce negative self-feelings. Rosenberg (1979, pp. 46) indicated: “We generally want other people to think of us as a certain type of person, and make efforts to insure that they do.” Thus, people often engage in behaviors or consumptions which are in accordance with the preferences of significant others. Sirgy (1986) made distinctions between private self and public self accordingly based on the notions of self-esteem and social approval. He regarded social approval as a public dimension of self-esteem in which people behave as a social object responding to the perceived reactions of others. The private dimension

of self relates to personal feelings toward self as a whole and self-consciousness of the need for self-esteem rather than social approval.

Self-consistency is an important motivator of self-congruity. Since stability of one's self-concept acts as a source of security, this preservation of one's self-concept becomes an end of itself. Humans strive to maintain a consistent self-concept, and their behavior revolves around maintaining and protecting their self-concept. Swann, De La Ronde, and Hixon (1994) suggested that consistency is an innate nature of humans due to the need for predictability, familiarity, and stability.

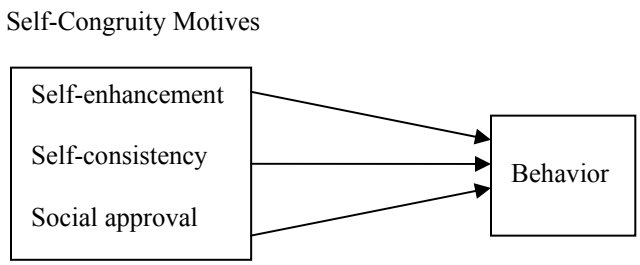
Self-concept is constructed, modified, and maintained based on interpretation of environment, past experience and interaction with others. People strive to protect or maintain the coherence of their self-concept and avoid behaviors which may induce inconsistency. Cognitive dissonance theory, which was developed by Leon Festinger (1957), provides some support for this argument. Dissonance theory suggests that people are consistent in their beliefs and behaviors. Inconsistency or dissonance causes psychological discomfort, which motivates people to reduce or eliminate the pressure and restore the equilibrium state.

In his discussion of self-referent behavior, Kaplan (1986) further revealed the interaction of self-concept and behavioral motivators in connections with other self constructs. The four constructs he discussed were: self-perception, self-evaluation, self-feeling, and self-protective/ enhancing mechanisms. Kaplan's (1986) self-referent behavior thesis suggests that the four self constructs are closely interrelated, and self-protective/enhancing mechanisms are both an outcome and an input of one's behavior. An individual evaluates him/herself against social standards that he/she perceives to be important, and positive or negative self-feelings are resulted from the evaluation of approximation to values (Kaplan 1986). To reduce negative self-feelings

one would perform self-protecting behaviors, and to reinforce one's positive self-feelings one would adopt self-enhancing mechanism (Kaplan 1986). Therefore, the self-protective and enhancing motivations determine the direction of human behaviors.

The overview of the motives of self-congruity above suggests that people behave to enhance, protect or be consistent with their self-concepts, and to gain social approval from others (Figure 2). They expect their behaviors to maximize positive evaluations or feelings of themselves.

FIGURE 2
SELF-CONGRUITY MOTIVES AND HUMAN BEHAVIOR

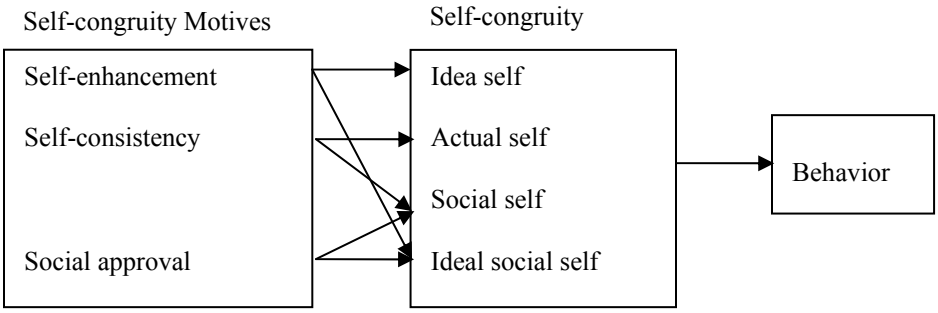


Dimensions of self-congruity. Self-concept is regarded as a multidimentional construct which contains different images that one holds about themselves (Sirgy 1982; Rosenberg 1979). People have different roles in society such as the role of being a parent, friend, worker, mentor, student, and so on. An individual develops different selves over time for different social roles or situations, and acts accordingly. The most common self-images used to measure self-concepts include actual self, ideal self, social self, and ideal social self, in which actual self and ideal self have been studied most frequently (e.g., Beerli, Meneses, and Gil 2007; Kressmann et al 2006; Litvin and Goh 2002).

Actual self refers to the way that a person actually sees him/herself (Sirgy, Grzeskowiak, and Su 2005; Sirgy 1982; Ross 1971); ideal self refers to the way a person would like to be (Sirgy, Grzeskowiak, and Su 2005; Sirgy 1982; Ross 1971); social self is the way a person presents him/herself to others (Sirgy, Grzeskowiak, and Su 2005; Sirgy 1982); and social ideal self refers to the way that a person would like other people to perceive him/herself (Sirgy, Grzeskowiak, and Su 2005; Sirgy 1982). Actual-self-congruity occurs when individuals act consistently according to their real self-image and thus, the behaviors reflect how they think they actually are. Self-consistency is the main motive for explaining actual self congruity (Sirgy and Su 2000). In contrast, ideal-self-congruity is motivated by self-enhancement which reflects an upward mobility of a person (Sirgy and Su 2000) as people strive to become the person that they want themselves to be.

The latter two selves (i.e., social self and ideal social self) can be traced back to Cooley (1902) and Mead's (1934) notions of "looking-glass self" and "taking the role of others (Malhotra 1988), and are most related to gaining social approval from others. Social-self-congruity responds to both self-consistency and social approval motives which means that people seek to establish a coherent self-image in social contexts by consistently presenting themselves in certain ways to significant others (Sirgy 1982; Sirgy, Grzeskowiak, and Su 2005; Sirgy and Su 2000). Ideal-social-self-congruity is motivated by self-enhancement and social approval in which people have desired self images in social contexts, and seek positivity and social support in interactions with significant others (Sirgy 1982; Sirgy and Su 2000) (Figure 3).

FIGURE 3
RELATIONSHIPS BETWEEN SELF-CONGRUITY MOTIVES, SELF-CONGRUITY DIMENSIONS, AND BEHAVIOR



Implications of self-congruity theory in consumer behavior. Implications of self-congruity theory in consumer behavior can be traced back to as early as 1950s in marketing research when Gardner and Levy (1955) investigated the influence of symbols or meanings of a brand on consumers. Traditional consumer research focused on economical perspectives and social aspirations in which assessment of value and upward mobility of consumers for higher status were highlighted as major motives of consumer behavior (Gardner and Levy 1955). Being disappointed with manufactures' frequent assumptions on consumers' needs based on stereotypes, Gardner and Levy (1955) advocated taking into account human characteristics of products which were believed to be more likely to respond to consumers' psychological needs. This claim coincided with the marketing orientation started in the 1950s which followed the sales orientation in the evolution of marketing concept (Baker 2000; Jaworski and Kohli 1993). Gardner and Levy's (1955) work laid the idea of self-congruity through identifying brand image in consumers' mind and building an image for a brand which can are most likely to be preferred by target markets.

Levy (1959) took a step further and suggested that other than economic and practical reasons, today's consumers are more likely to buy a product for the meaning symbolized by the product. Different brands of a same product may convey different meanings to consumers, and the interpretation of the brand often influences buying behavior more than the actual product. Therefore, the meaning associated with the product is important not only to consumers who want to make right decisions, but also to marketers competing in the market.

But how does a product's image influence people's consumption behavior? Levy (1959) proposed a mechanism to explain this phenomenon: "A symbol is appropriate (and the product will be used and enjoyed) when it joins with, meshes with, adds to, or reinforces the way the consumer thinks about himself" (p. 119). In other words, consumers evaluate the image of a product based on their own interpretations, and a purchase decision depends on how likely consumers' self-concepts can be maintained, reinforced, or enhanced by the product. This is the essence of self-congruity theory even though the term was not used.

Self-congruity has been applied in marketing research since the 1960s. For instance, Birdwell (1968) found that automobile owners' perceptions of their cars are congruent with their perception of themselves. Grubb and Hupp (1968) compared self-congruity between Pontiac GTO owners and Volkswagen owners and found that consumers perceived themselves to be similar to others who owned the same model of car, but different from others who owned different brands of autos. Dolich (1969) also found a higher level of self-congruity for favored brands than for less preferred product brands. While early studies tended to test the self-congruity hypothesis, later studies tended to offer more sophisticated measurements of self-congruity (e.g., Malhotra 1981; Mannetti, Pierro, and Livi 2004) and examined the operations of self-congruity under the influence of different factors such as conspicuousness (Ross 1971;

Belch and Landon 1977), ownership (Belch and Landon 1977; Barone, Shimp, and Sprott 1999), and self-consciousness (Elliott 1986; Aaker 1999). The consensus generated from these studies suggests that self-congruity is a useful approach to explaining consumer behavior in different contexts. Although automobiles seem to be the most popular product studied by self-congruity researchers (e.g., Grubb and Stern 1971) , other products or services have gained attention and have been examined with the self-congruity construct (e.g., Mannetti, Pierro, and Livi 2004).

Implications of self-congruity theory in tourism research. Tourism is one of the new arenas in which self-congruity theory has been examined. According to Beerli, Meneses, and Gil (2007), Chon (1992) was the first to apply self-congruity theory to the context of tourism. Comparing self-image with destination image, he found that higher satisfaction was correlated to higher agreement between self-concept and destination image. Goh and Litvin (2000) and Litvin and Goh (2002) also examined the predictability of self-congruity on pre-trip visitation interest and purchase proclivity. They found that the data supported the role of self-congruity in a destination image context.

Sirgy and Su (2000) provided a more integrative model of destination image, which revealed the interrelationships between destination environment, destination visitor image, tourists' self-concept, self-congruity, functional congruity, and travel behavior. Although the analysis was comprehensive and the model followed the logic of self-congruity theory, their proposed model was not empirically tested. Nevertheless, their model provided a holistic view of destination-self-congruity. They proposed that self-congruity can be a useful approach to explain why people visit a particular destination. Following this logic, Kastenholz (2004)

examined destination-self-congruity's influence on travel intention in a rural tourism context and found support for the self-congruity hypothesis.

The most recent research to have applied self-congruity theory to the study of destination image was conducted by Beerli, Meneses, and Gil (2007). This particular research tested not only the congruity between destination image and actual and ideal self-concept, but also investigated the effects of two moderators on self-congruity: previous visiting experience and involvement in leisure tourism. In summary, these studies have indicated that there is an increasing tendency in destination image research to characterize destinations as human-like and to explain tourists' visiting intentions as a function of congruity between their self-concept and perceived destination image. The self-congruity theory can also be a useful construct in which the hedonic nature of travel decisions can be taken into consideration.

Although previous research has demonstrated that self-congruity can be a useful approach to understanding destination choice, its applicability is constrained by limited empirical support and investigations in this area. Among the few studies concerning destination image and self-image congruity reviewed above, three of them are research notes (Chon 1992; Litvin and Goh 2002; Kastenholz 2004), one is a conference paper (Goh and Litvin 2000), and two are full papers (Sirgy and Su 2000; Beerli, Meneses, and Gil 2007) in which one is a conceptual paper (Sirgy and Su 2000). Also, the discussions of self-congruity are often not conducted in the context of destination image literature and thus, there is a disconnect in the conceptualization and measurement of self-destination image congruity. To address these concerns, the following paragraphs briefly review the destination image literature. Then a conceptual model utilizing the self-congruity and destination image concepts is proposed.

Destination image

Edward Mayo (1973) first introduced destination image research in his presentation at the Fourth Annual Conference of the Travel Research Association. In his study, Mayo examined the role of image in destination choice and used three destination attributes to assess auto vacationers' images toward destination regions: scenery, congestion, and climate. He indicated that a tourist "psychologically 'maps' the alternative destination areas and, all other things being equal, chooses that destination that comes closest to the ideal" (pp. 216). This seminal idea initiated many investigations of destination image in later tourism studies.

Pike (2002) conducted a comprehensive review of as many as 142 destination image papers published in tourism journals from 1973 to 2000 and summarized their context, scope of study, methodology, data analysis, study subjects, and topics. The trends of destination image research identified in this study were: 1) North America is the most frequently studied region; 2) the majority of research studied one destination; 3) the unit of study of most studies was countries; 4) structured techniques and factor analysis were used most often; and 5) the subjects included both visitors at destinations and people at their usual residence.

Importance of destination image. Destination image researchers have generally reached a consensus on the important role of destination image in tourist decision making (Beerli and Martin 2004). Tourists often formulate their images toward different destinations based on the information received from various sources over time. The images are formed according to their own interpretations and thus, may not represent objective reality (Baloglu and McCleary 1999; MacKay and Fesenmaier 1997; LaPage and Cormier 1977). Nevertheless, tourists make their

choices based on these images, and destinations with favorable images are more likely to be chosen for travel (Alhemoud and Armstrong 1996; Gartner 1996).

Destination image has been found to play a central role in destination positioning and marketing. Due to the intangibility of tourism services, destinations often compete with other places through projecting favorable images in the mind of potential visitors (Pike and Ryan 2004; Baloglu and McCleary 1999b). A successful image can differentiate one destination from another and bring competitive advantage to the destination since a destination with a distinct positive image has a higher chance to be selected by a tourist (Baloglu and Brinberg 1997). Echtner and Ritchie (1993) indicated: "Creating and managing an appropriate destination image are critical to effective positioning and marketing strategy" (p. 3). Researchers often urge tourism agencies to assess the conceptual map of a destination in the mindset of tourists relative to other competitive destinations, and based on this information positioning strategies can be reinforced, adjusted, or reformulated (e.g., Pike and Ryan 2004; Echtner and Ritchie 1991; Tapachai and Waryszak 2000).

Defining and conceptualizing destination image. Destination image can be interpreted as a pull factor which has an influence on whether tourists either select or avoid a place for visitation (Gartner 1993). Different terminologies with similar meanings have been used to define destination image in past research such as mental construct, representation or prototype (Fakeye and Crompton 1991; Hirschman 1981; Fridgen 1987), perceptions or impressions (Hunt 1975; Phelps 1986; Gartner and Hunt 1987), attitudinal construct (Baloglu and McCleary 1999), and overall beliefs, ideas and impressions toward a destination (Crompton 1979b). Perhaps the most comprehensive definition is the one provided by Echtner and Ritchie (1991) who defined

destination image based on three dimensions: attributes-holistic, functional-psychological, and common-unique. They indicated that past definitions are too vague and thus are unlikely to be effective.

Different dimensions of destination image have been identified from different approaches. For instance, Gunn (1972; 1988) proposed two dimensions of image including organic and induced images, in which the former refers to the beliefs or impressions toward a destination based on the information gained from different sources excluding those being promoted by the destination. The latter refers to the images being promoted by a destination through marketing activities. These two types of image are differentiated based on different information sources which can potentially lead to image formation. Induced images are formed based on information controlled by a destination while the opposite is true for organic images (Gartner 1993). Based on different information sources, Gartner (1993) developed a continuum of image formation agents which contained eight categories: Overt Induced I, Overt Induced II, Covert Induced I, Covert Induced II, Autonomous, Unsolicited Organic, Solicited Organic, and Organic, in which destinations have most control over Overt Induced I images and have the least control over Organic images.

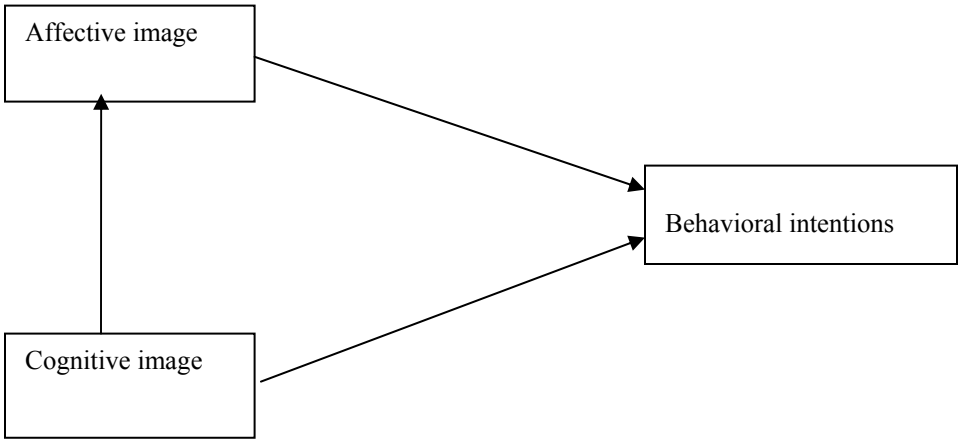
Gunn's notion of organic-induced images provided a building block for later conceptualizations of destination image. For instance, Fakeye and Crompton (1991) added one more dimension to this classification: complex image, which is formed based on personal visiting experience. They also argued that different promotional types can be used for different types of images and at different stages of travel in order to yield maximum benefits of promotion. They found that non-visitors often have organic images before planning a vacation, and that

informative promotion is most effective at the organic image stage since it can arouse awareness toward a destination by providing information or knowledge of the destination.

After people are motivated to travel, they typically actively search for more information related to different destinations (Fakeye and Crompton 1991). Persuasive promotion thus is more effective at the induced stage since it can be used to persuade potential visitors to choose a particular destination. Finally, reminding promotions which contain messages reminding travelers their positive experiences are most likely to invite repeated visits (Fakeye and Crompton 1991). Therefore, this type of promotion is most effective in the complex image stage for inducing revisit intentions.

Gartner (1993) suggested three constructs of destination image: cognitive, affective, and conative, in which cognitive image is formed based on beliefs or knowledge of a destination; affective image refers to subjective feelings or emotional responses of individuals toward a destination; and conative image refers to the behavioral intention of an individual or their likelihood to visit a destination. These three image constructs are often interpreted to be interrelated rather than separate entities, and both cognitive and affective images influence visiting intention to a destination (e.g., Baloglu and Brinberg 1997; Beerli and Martin 2004; Holbrook 1978; Stern and Krakover 1993). Figure 4 depicts the interrelationships among these constructs.

FIGURE 4
INTERRELATIONSHIP OF COGNITIVE IMAGE, AFFECTIVE IMAGE, OVERALL IMAGE, AND BEHAVIORAL INTENTIONS



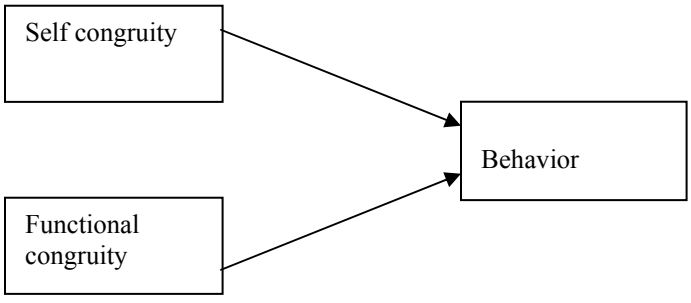
Integration of self-congruity and destination image. Two types of congruity have been identified in past research: functional and self-congruity, in which functional congruity refers to the knowledge aspects of congruity and self-congruity refers to self-expressive or emotional aspects of congruity. In their brand loyalty study, Kressmann et al. (2006) defined functional congruity as "the match between consumers' ideal expectations of utilitarian brand features and their perceptions of how the product is perceived along the same features" (pp. 955). In other words, purchasing decisions are based on people's evaluation of the costs and benefits of a transaction. The utilitarian need motivates people to buy products in which benefits are perceived to outweigh costs. People cognitively weigh the pros and cons of a behavior based on their subjective knowledge. It should be noted that perceived benefits in the utility model do not include expressive benefits of a product.

Although functional congruity is a simple approach, it has been criticized to be insufficient in explaining consumer behavior. Researchers (e.g., Chon 1992; Levy 1959; Landon

1974) have suggested that there are other dimensions beyond functional utility, and that functional congruence fails to explain symbolic expressive consumption behavior. Consumers often prefer to buy products which can reflect their self-images instead of being functionally oriented. Thus, symbolic meaning or value-expressive attributes of a product can be the sole reason for purchasing behavior.

While some scholars (e.g., Mannetti, Pierro, and Livi 2004) have treated self-congruity and functional congruity as competing theories, others (e.g., Sirgy, Grzeskowiak, and Su 2005) have suggested that these two approaches are complementary, and that integrating them can better explain product preference and choice. For instance, Echtner and Ritchie (1993) identified three dimensions of destination image among which functional-psychological image was one of them. Sirgy et al (1991) and Sirgy and Su (2000) further proposed that self-congruity can influence functional congruity which implies that consumers who experience congruence between product image and self image can distort their evaluation of a product's functional congruity in a positive direction. Figure 5 displays the interrelationships among self-congruity, functional congruity and behavior.

FIGURE 5
SELF-CONGRUITY AND FUNCTIONAL CONGRUITY



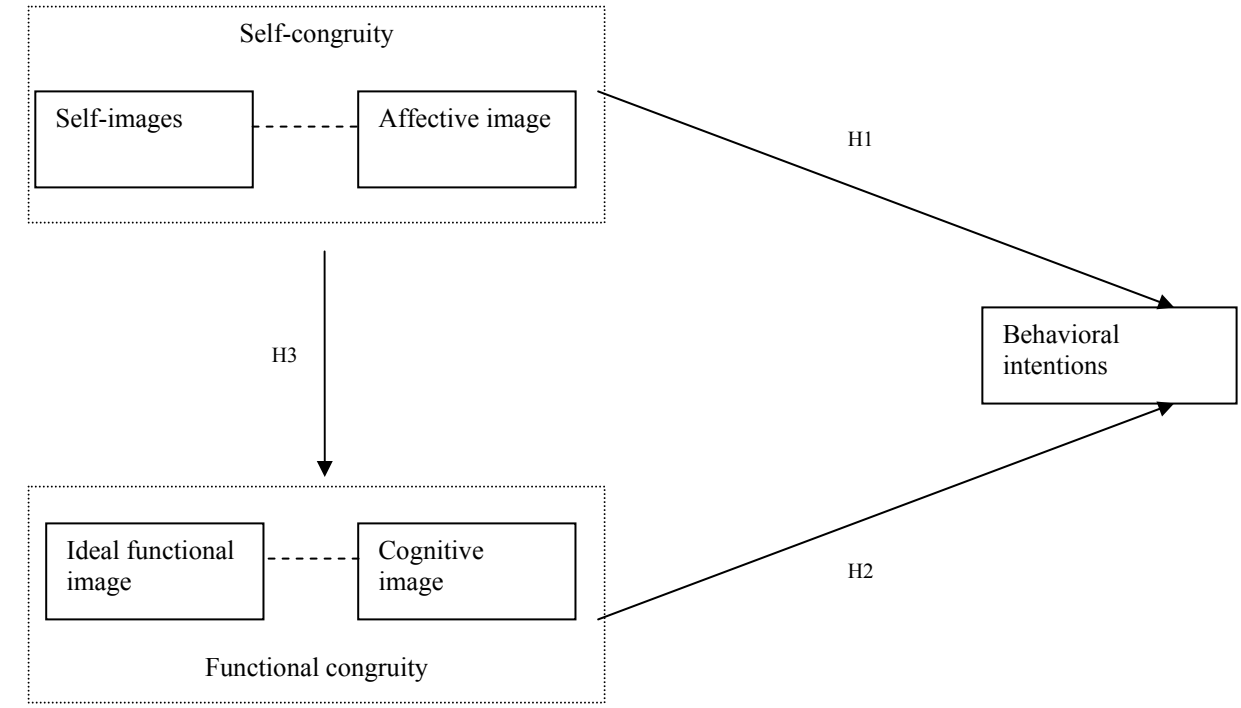
The applicability of self-congruity theory in the context of destination image has been discussed in the previous section. It was revealed that there is a lack of conceptualization in the integration of these two streams of research and a lack of empirical evidence to support the destination-self-congruity concept. Figure 6 integrates the destination image framework (Figure 3) and self-congruity model (Figure 4) and suggests that behavioral intentions are determined by the congruence between affective images and self-images (self-congruity), and cognitive images and functional attribute images (functional congruity). It is proposed that the more congruent images are, the more likely people would like to travel to a destination. The specific hypotheses to be tested are:

H1: The congruity between self-images and affective destination images influence people's travel intentions. The more congruent images are, the more likely people would like to travel to a destination.

H2: The congruity between idea functional images of destination attributes and cognitive destination images along the same attributes influence people's travel intentions. The more congruent images are, the more likely people would like to travel to a destination.

H3: Functional congruity is positively affected by self-congruity. People who have higher congruence between their self images and affective destination images are more likely to have higher functional congruity toward a destination.

FIGURE 6
DESTINATION-SELF-CONGRUITY MODEL



Conclusion. This section has demonstrated how motivation influences people's behaviors, and applied self-congruity theory to explain the influence of destination image on destination choice. However, motivation alone is not sufficient to explain travel behaviors. People also need to have ability and opportunity, which are two other antecedents of behavior related to engagement in leisure activities. This notion is supported by Litvin (2006)'s work on testing Plog's (1974) model of allencentricity and psychocentricity in which he suggested that Plog's model failed to explain people's actual travel behavior due to the time and money constraints in people's lives. However, this model fits the pattern of an ideal vacation destination. This implies that researchers need to consider travel constraints when explaining a tourist's decision-making. The concept of travel constraints is further elaborated in the following paragraphs.

Leisure Constraints

Opportunity is the circumstances that allow for or facilitate people to perform a behavior. In this study, leisure constraints are used as indicators for opportunity to participate in a leisure activity. Leisure constraints can be defined as those factors that inhibit continued use of leisure services, cause inability to participate in a new activity, result in the inability to maintain or increase frequency of participation, and/or lead to negative impacts on the quality of the leisure experience (Nadirova and Jackson 2000). The presence of leisure constraints and the inability to negotiate with them can lead to diminishing opportunities for gaining desirable leisure experiences.

Development of leisure constraints

Since the early 1960s, researchers have investigated barriers to recreation participation (Buchanan and Allen 1985). However, theoretical frameworks were not constructed to explain leisure constraints until the 1980s (Crawford, Jackson, and Godbey 1991), and constraints research has gone through substantial changes during the past twenty years. In recent years, some have summarized previous constraints research and from that basis suggested directions for future research in this area (e.g., Jackson and Scott 1999; Jackson 2005a).

Jackson and Scott (1999) classified the constraints literature into four stages. They argued that the first and second stages were a foundation for the later two stages though they were seldom directed by conceptual frameworks. Nevertheless, the ideas and findings presented in those two stages were important to constructing more systematic research in the later stages. The first stage can be viewed as a pre-barrier period in which researchers made assumptions about the cause of recreation non-participation, e.g., non-participation is the result of lack of, or

inadequate, services (Jackson and Scott 1999). Empirical research on constraints to leisure participation was not introduced in this period. The second stage has been interpreted as the experimental stage in which researchers tended to provide answers to specific problems, rather than building theories to guide their work which would make it more generalizable. The focus of this research was on specific barriers such as the role of lack of facilities in non-participation (Jackson and Scott 1999).

The third stage started in the early 1980s. In this stage, leisure constraint research was driven by two major assumptions: 1) Constraints function only as barriers to participation after preference for an activity is made, i.e., only structural or intervening constraints influence the participation decision; and 2) There is a positive relationship between constraints and level of leisure non-participation (Shaw, Bonen, and McCabe 1991), i.e., when a constraint is present, the outcome is non-participation. Another major characteristic of the third stage was that life cycle stage was viewed as an important variable in understanding leisure behavior (Buchanan and Allen 1985). Several researchers adopted life span as a framework with which to identify various leisure constraints that people encountered at each life stage (Witt and Goodale 1982; Buchanan and Allen 1985; McGuire, Dottavio, and O'Leary 1986).

Compared to the third stage, the fourth stage of leisure constraints research was more theory-driven. Criterion variables which were used to measure the impact of constraints were broadened, more sophisticated statistical tools were used, and theoretical frameworks were built in this period (Jackson and Scott 1999). Researchers tended to identify domains of constraints and categorize constraint items into them. This helped organize work which had been done in earlier years, and formulated leisure constraints in a more logical way.

Although new ideas and findings are continuously added to previous research, it does not mean that the previous constraints research should be neglected once new ideas emerged. Rather, previous research provides basic knowledge which has allowed later researchers to discover better ways of understanding leisure. Several changes have occurred in the: (i) criterion variables; (ii) terminologies; (iii) definition of leisure constraints; (iv) statistical analysis; and (v) conceptual models related to constraints (Samdahl and Jekubovich 1997; Henderson 1997; Jackson and Scott 1999; Nadirova and Jackson 2000).

Criterion variables

Early leisure constraints research was based on a widely accepted assumption that a constraint resulted in leisure non-participation (Jackson and Scott 1999). The focus was on examining absolute non-participation, i.e., those who drop out from an existing activity or do not take part in a new activity because a barrier exists. McGuire, Dottavio, and O'Leary (1986) indicated that a constraint may not only prohibit participation or result in people dropping out from leisure participation, but it may also reduce frequency of participation in an activity. Their study examined constraints to participation in outdoor recreation activities across the life span through two categories of constraints: prohibitors (those listed by individuals who have completely stopped participation) and limitors (those listed by individuals who have reduced their participation in a selected activity), which were termed by Jackson and Searle (1985) as "blocking" and "inhibiting" barriers respectively.

Different criterion variables have emerged in the leisure constraints research. In 1988, Jackson proposed that a constraint to leisure is anything that inhibits people's ability to participate in leisure activities, to spend more time doing so, to take advantage of leisure services,

or to achieve a desired level of satisfaction. Jackson and Dunn (1988) proposed a model which focused only on one aspect of non-participation, ceasing participation in leisure activities. Yet they pointed out that changes in the frequency and intensity of leisure participation should also be included in further refinements of the model.

Jackson and Dunn (1991) used two sets of data to investigate the internal homogeneity of leisure constraints. They tested homogeneity on two forms of non-participation: 1) Non-participation in activities in which an individual had an interest but did not currently participate; and 2) Ceasing participation in regularly attended activities. It was found that perceived constraints relating to these two forms of non-participation were different from each other. Thus, the authors suggested that constrained leisure must be viewed as an internally differentiated concept, and research should be conducted in both of these situations.

A broader range of criterion variables is likely to be characteristic of future research. Jackson and Scott (1999) classified the criterion variables that had been used in previous research into four categories: 1) Inability to maintain participation at, or increase it to, desired levels; 2) Ceasing participation in former activities; 3) Nonuse of public leisure services; and 4) Insufficient enjoyment of current activities. These four criterion variables were applied in subsequent research reported by Nadirova and Jackson (2000).

Terminology

There have been two major changes in terminologies in leisure constraints research. First, the term “constraints” replaced “barriers” which was used in early studies (Jackson, 1991). The early studies investigated “barriers” that prevent people from leisure participation, which is only one of the perspective outcomes of leisure constraints identified in the later research.

"Constraints" is believed to be a more appropriate term since it embraces not only nonparticipation, but also the other outcomes of constraints such as inability to maintain or increase the desired frequency of participation, and insufficient enjoyment of current activities.

Second, researchers started to investigate barriers to recreation participation as early as the 1960s (Buchanan and Allen 1985). A practical orientation was adopted at that time in which research tended to provide practical answers to why there was limited participation in recreation settings (Jackson and Scott 1999). Therefore, "recreation" was the term frequently used in early research. However, this term has a narrower implication than a general leisure perspective. Later research has used "leisure" in place of "recreation" which has two advantages: "broadening the focus of investigation and forging closer links than before with the mainstream of thinking in leisure studies" (Jackson and Scott 1999, pp. 300).

Definition of leisure constraints

In earlier research, "constraints" was simply defined as "those barriers or blockages that inhibit continued use of a recreation service" (Backman and Crompton 1989, pp. 59). Research on constraints in the past was framed within the assumption that there was a positive relationship between leisure constraints and leisure nonparticipation. Refinements in the definition of leisure constraints have been made continuously as leisure constraints research has progressed. For instance, Kay and Jackson (1991) pointed out that constraints do not necessarily lead to nonparticipation. People can experience some constraints even if they participate in a leisure activity. As more potential outcomes of leisure constraints have been identified, the range of definitions of leisure constraints has been broadened.

The definition of leisure constraints has evolved with the refinement of outcomes of leisure constraints. Based on the four domains of "constrained leisure" summarized by Nadirova and Jackson (2000), "constraints" can be redefined as those factors that inhibit continued use of leisure services, cause inability to participate in a new activity, result in the inability to maintain or increase frequency of participation, and/or lead to negative impacts on the quality of a leisure experience.

Statistical analysis

Four main statistical analysis tools have been adopted in leisure constraints research: item-by-item analysis, total constraints scores, factor analysis, and cluster analysis (Jackson 1993). As leisure constraints research has progressed, the statistical analysis tools adopted have moved from a lower level of aggregation such as item-by-item analysis and total constraints score, to a higher level of aggregation such as factor analysis and cluster analysis (Jackson 1993). However, the statistical analysis tools at the higher aggregation level are not substitutes for those at the lower level of aggregation. i.e., factor analysis and cluster analysis should not be viewed as replacements for item-by-item analysis or total constraints score analysis. Rather, these tools can be complementary and selected based on the specific needs of leisure constraints studies. Although classifications on dimensions of leisure constraints and comparison on those dimensions are more feasible when using higher level of analysis tools, more meaningful insights often can be derived in the reverse direction (Jackson 1993).

Conceptual models

Leisure constraint models were developed in order to integrate previous work on leisure constraints (e.g., Godbey 1985; Iso-Ahola and Mannell 1985; Jackson and Dunn 1988; Jackson and Searle 1985; Crawford, Jackson, and Godbey 1991). At least three major contributions to modeling constraints have been made to this point.

First, Jackson and Searle (1985) suggested a model which viewed recreation behavior as a process of decision-making. Blocking barriers and inhibiting barriers were used to screen leisure activity choices. Their model proposed that activities are first filtered by blocking barriers. If there is an absence of blocking barriers, activity choices are then be examined by inhibiting barriers. Blocking barriers include: internal and external barriers; lack of interest; and lack of awareness of an activity. Inhibiting barriers include only internal and external barriers. In contrast to previous research, Jackson and Searle (1985) injected a psychological barrier, lack of interest, into consideration, which in later research was interpreted as an intrapersonal constraint. However, this model was relatively complicated to implement (Jackson and Searle 1985), and was still rooted in the assumption that non-participation must result when a barrier is present in the decision making process. Other possible outcomes from the presence of a barrier were neglected.

Following Jackson and Searle's (1985) study, Jackson and Dunn (1988) suggested two models which reflected how participation, non-participation, ceasing participation, and demand were linked together within a comprehensive system of leisure decision-making. The first model presented an interconnected relationship between participation, non-participation, and demand. Consistent with Jackson and Searle's (1985) approach, the authors indicated that people can be interested or not interested in an activity even if they are non-participants. Non-participants who

are interested, but are unable to participate in an activity, fall into the latent demand category suggesting they may become participants later once the barrier to leisure participation is overcome. The second model incorporated the added situation of ceasing participation with two scenarios: 1) former participants and 2) people who had never participated. As in the first model, loss of interest was a criterion in both groups and identified whether a person has latent demand or no demand for a leisure activity.

The development of leisure constraint negotiation concept. Three seminal papers emerged in the late 80s and early 90s which changed the face of leisure constraints research. The first paper was written by Crawford and Godbey (1987) who proposed three dimensions of leisure constraints: intrapersonal, interpersonal, and structural constraints. Intrapersonal constraints are psychological conditions of an individual such as personality, interest and attitude toward leisure. Interpersonal constraints relate to interaction between a potential leisure participant and others, such as family and friends. Structural constraints are external factors in the environment, such as lack of facilities and inconvenient transportation which can frustrate potential leisure participants. The development of leisure constraints as a dimensional construct has allowed for the analysis of constraints in a more systematic manner.

A second important contribution to constraint research was by Crawford, Jackson and Godbey (1991) who proposed a hierarchical model which linked intrapersonal (antecedent), interpersonal, and structural (intervening) constraints together. The authors proposed that people experience these three types of constraints in a sequential order; first at the intrapersonal level; second at the interpersonal level; and last at a structural level. They suggested that intrapersonal constraints influence leisure preferences while structural constraints influence leisure

participation after the preferences have been made. Three propositions were proposed in light of the hierarchical model of leisure constraints (Crawford, Jackson, and Godbey 1991, pp. 314-5):

1. …leisure participation is heavily dependent on negotiating through an alignment of multiple factors, arranged sequentially, that must be overcome to maintain an individual's impetus through these systemic levels (pp. 314).
2. …constraint levels are arranged from most proximal (intrapersonal) to most distal (structural). Thus, intrapersonal constraints on leisure participation are conceptualized as being the most powerful, due to the fact that they condition the will to act, or the motivation for participation (pp. 314).
3. …social class may have a more powerful influence on leisure participation and nonparticipation than the analysis of socioeconomic variations in recreational activities have typically demonstrated…This influence is…channeled through variations in the ways in which people perceive and experience constraints (pp. 315).

The importance of developing a theoretical leisure constraint models was emphasized in Jackson, Crawford, and Godbey's (1993, pp. 2) seminal paper on leisure constraints negotiation in which they suggested that developing constraints models which reflect people's leisure decision-making behavior "represents a shift toward a deeper level of understanding of the leisure constraints construct and the desire to interpret empirical results within a theoretical framework."

Negotiation of constraints, which was first raised by Crawford, Jackson, and Godbey (1991), is one of the major concepts in this model. The authors argued "leisure participation is

heavily dependent on negotiating through an alignment of multiple factors, arranged sequentially, that must be overcome to maintain an individual's impetus through these systemic levels" (Crawford, Jackson, and Godbey 1991, pp. 314). This suggests that constraints are negotiable rather than insurmountable, and nonparticipation is no longer interpreted as the sole outcome of constraints, rather, it is only one of many possible outcomes (Scott 1991).

Past studies have provided empirical evidence for this approach. For instance, Kay and Jackson (1991) found that respondents succeeded in maintaining their desired level of participation despite the presence of constraints. Thus, nonparticipation or reduction in leisure participation is not the absolute outcome of constraints. Shaw, Bonen, and McCabe (1991) also found a positive relationship between constraints and level of participation in their study. A higher participation level was reported by those respondents who experienced more constraints than those with a lower participation levels.

Scott's (1991) work provided an explicit explanation for this phenomenon. He argued that apart from nonparticipation, modification of behavior to maintain a pattern of sustained involvement can result along with the process of negotiation, and that many factors can lead to various outcomes of negotiation. For example, people have different personal abilities or assets with which to negotiate constraints such as personalities, motivations, and social status; they experience different types of constraints; their perceived importance of constraints differs; the strength of constraints encountered differs; and so on.

Refinements to the hierarchical model of leisure constraints and negotiation approach have been made. Jackson, Crawford, and Godbey (1993, pp. 4-9) suggested six propositions:

1. Participation is dependent not on the absence of constraints (although this may be true for some people) but on negotiation through them. Such negotiation may modify rather than foreclose participation (pp. 4).
2. Variations in the reporting of constraints can be viewed not only as variations in the experience of constraints, but also as variations in success in negotiating them (p.6).
3. Absence of the desire to change current leisure behavior may be partly explained by prior successful negotiation of structural constraints (pp. 6).
4. Anticipation of one or more insurmountable interpersonal or structural constraint may suppress the desire for participation (pp. 7).
5. Anticipation consists not simply of the anticipation of the presence or intensity of a constraint but also of anticipation of the ability to negotiate it (pp. 8).
6. Both the initiation and outcome of the negotiation process are dependent on the relative strength of, and interactions between, constraints on participating in an activity and motivations for such participation (pp. 9).

The first three propositions summarized the ideas presented in previous research on leisure constraints. The other three propositions were constructed based on the interrelationships among different types of constraints, and the interaction between the relative strength of constraints and motivations in leisure choices (Jackson, Crawford, and Godbey 1993). Proposition 6 represents a "balance" proposition in which motivation was brought into the model, and level of participation was used in place of participation/non-participation due to the various outcomes generated from the constraint negotiation process.

Since the development of the leisure constraint negotiation concept, there has been a large amount of interest in identifying negotiation resources and strategies. For instance, Bialeschki (2005) described strategies that women used before and during their outdoor activities to reduce their fears related to violence. Two types of negotiation strategies have been identified in the past research: behavioral strategies which are the actions people take to confront constraints or make adaptations, and cognitive strategies which are appraisals or the changes in one's perceptions, values or beliefs in order to justify their cognitive dissonance (Jackson and Rucks 1995). Given the potential influence of motivation on negotiation, constraints, and participation, some research (although not much) has started to investigate the interrelationships among these variables. More discussions on the role of these constructs on constraint negotiation can be found in the following section.

Motivation, leisure constraints, constraint negotiation, and participation. There is an inseparable relationship between motivation/perceived benefits and constraints studies. In the first chapter of *Constraints to Leisure*, Jackson (2005a) provided three justifications for leisure constraints research. One of the justifications stated that "to understand individuals' leisure choices and behavior requires investigation of all the factors, both positive (e.g., motivations, anticipated benefits) and negative (e.g., constraints) that influence those choices" (pp. 3). This statement indicates an interrelationship of constraints and motivation/perceived benefits with leisure behaviors. Crompton, Jackson and Witt (2005) also advocated that leisure benefits and constraints should be studied in terms of their linkage rather than as separated entities. They applied the concept of "benefit chain of causality" (Driver and Burn 1999) to leisure constraints and proposed an integrated model of constraints and benefits. Their model promoted a linkage

between benefits and constraints in influencing leisure experiences, and broadened the thinking of leisure research.

The connection of leisure benefits/motivation to constraints suggests that investigating the relationship between these two streams of research is beneficial and can potentially enhance our understanding of leisure experiences. However, the attention to the linkage is a recent phenomenon for leisure constraints research. The origin of attention on motivation in leisure constraints research can be traced back to the development of the constraint negotiation thesis (by Jackson, Crawford, and Godbey in 1993), which was built on previous research on the categorization of constraints into intrapersonal, interpersonal, and structural constraints (Crawford and Godbey 1987), sequential hierarchical model of leisure constraints (Crawford, Jackson, and Godbey 1991), and the observation of positive or no relationship between constraints and participation (e.g., Scott 1991; Kay and Jackson 1991; Shaw, Bonen, and McCabe 1991). In fact, before the introduction of the negotiation thesis, the role of motivation in constraints research had been proposed by Crawford and Godbey (1987) who argued that "if preference is significantly greater than perceived constraints, the leisure activity in question may be undertaken despite the presence of such barriers" (pp. 124).

This argument was elaborated in the proposition proposed by Jackson, Crawford, and Godbey (1993): "Both the initiation and outcome of the negotiation process are dependent on the relative strength of, and interactions between, constraints on participating in an activity and motivation for such participation" (pp. 9). They went on to suggest that "participation is dependent not on the absence of constraints but on negotiation through them. Such negotiation may modify rather than foreclose participation" (pp. 4). This seminal paper consolidated the important role of negotiation in constraints research in which motivation is one of the key

concepts of negotiation. Thus, motivation was added to the revised model by Jackson, Crawford, and Godbey (1993) with motivation influencing not only leisure preferences, but also the persistence of the preferences along the line of the constraints negotiation process.

Despite the potential importance of motivation in understanding the influence of constraints in leisure experiences, research on the interrelationship between motivation and constraints is scarce. Nevertheless, the few studies in this area demonstrate that adding motivation and other variables to constraint research can yield a more holistic picture of the influence of leisure constraints on leisure experiences and broaden the thinking of constraints scholars. For instance, Carroll and Alexandris (1997) appear to be the first to have empirically examined this relationship. Using intrinsic motivation items (Beard and Ragheb 1981), they found that the strength of motivation was negatively related to the perception of constraints, and positively related to sport participation. The results in term support the "balance" proposition of Jackson, Crawford, and Godbey (1993).

Alexandris, Tsorbatzoudis, and Grouios (2002) investigated the influence of constraint dimensions on intrinsic motivation, extrinsic motivation and amotivation based on self-determination theory (Deci and Ryan 1985) and the hierarchical model of intrinsic and extrinsic motivation (Vallerand and Losier 1999). They found that intrapersonal constraints accounted for 38% of the variance in amotivation, and 15% of the variance in intrinsic motivation. However, there were no relationships between interpersonal constraints and amotivation, structural constraints and amotivation, as well as any type of constraint and extrinsic motivation.

Hubbard and Mannell (2001) empirically tested four competing models of leisure constraint negotiation (independence, buffer, mitigation, reduction) which were comprised of constraints, negotiation, motivation, and participation with data from full-time employees of four

companies on the investigation of their participation in work site physical recreation activities. Strong support was found for the constraint-effects-mitigation model which suggested that the experience of leisure constraints triggers the implementation of constraint negotiation strategies, and highly motivated people are more likely to spend greater effort on negotiating the constraints that they are experiencing.

In her dissertation, Lee (2007) examined the process of celebrity fan's constraint negotiation by using Hubbard and Mannell's (2001) constraint-effects-mitigation model. Different from Hubbard and Mannell's study in which enjoyment and health benefits were used to measure motivation, Lee used leisure involvement to measure leisure motivation. Using a sample collected from travelers at Japan's airport, the study found that the level of celebrity involvement (i.e., psychological state of an individual toward celebrities) positively affected constraints negotiation and frequency of participation in celebrity fandom activities (i.e., activities revolving admiring celebrities conducted by individuals who are fans of celebrities), and the level of perceived leisure constraints positively influenced constraints negotiation and frequency of participation.

Although past studies have provided evidence of the interactions among constraints, motivations, and participation, the integration of the leisure constraint concept to the study of destination image is limited. To the best of the author's knowledge, only Botha, Crompton, and Kim (1999) have applied the concept of structural constraints (termed as situational inhibitors) to a destination image study. They found a significant influence of structural constraints on destination choices and argued that structural constraints are essential in determining final destination choice from the late consideration set of destination choices. They measured motivation with Crompton's (1979a) eight personal motivation scales.

Using self-congruity and travel constraints constructs, this study seeks to explore the effect of motivation, negotiation, and travel constraints on travel behaviors. Figure 7 integrates Hubbard and Mannell's (2001) constraint-effects-mitigation model with destination-self-congruity model and demonstrates the interrelationships between motivation (self-congruity), negotiation, travel constraints and travel behavior. The specific hypotheses to be tested are:

H4: Travel constraints negatively influence travel intentions. The higher the level of travel constraints a person experiences, the less likely the person would like to travel.

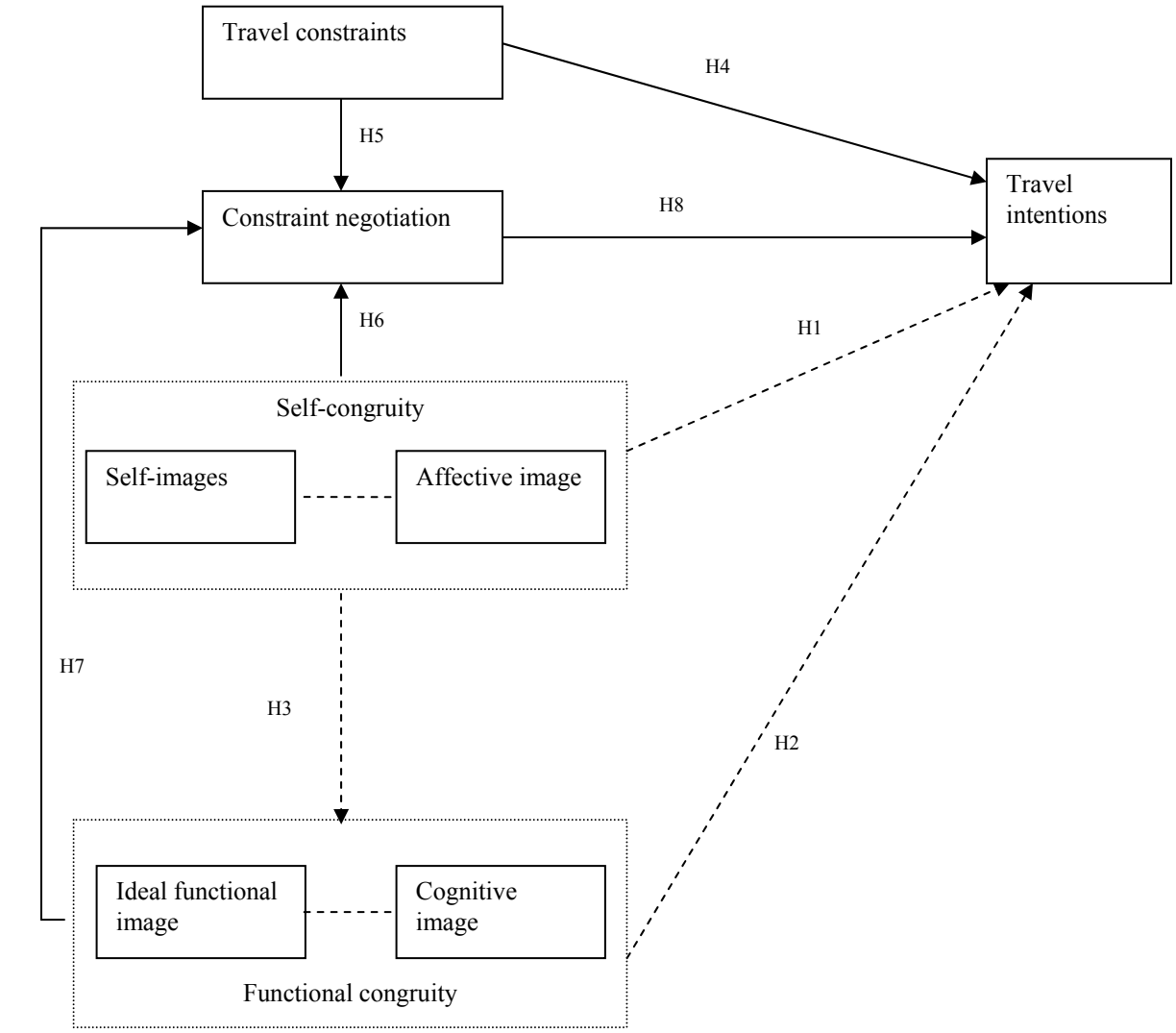
H5: The presence of travel constraints initiates adoption of constraint negotiation strategies. The more constrained a person is, the more likely the person will use negotiation strategies.

H6: Self congruity positively influences constraint negotiation. The higher the level of self congruity, the more likely a person will adopt constraints negotiation strategy.

H7: Functional congruity positively influences constraint negotiation. The higher the level of functional congruity, the more likely a person will adopt constraint negotiation strategy.

H8: Constraint negotiation positively influences travel intentions. The more constraint negotiation strategies a person adopts, the more likely the person would like to travel.

FIGURE 7
MOTIVATION, CONSTRAINTS, AND TRAVEL BEHAVIOR MODEL



Self-efficacy

Ability is the last antecedent of the MOA model. A person must possess the appropriate abilities in the relevant domain of behavior, in order to be able to perform a given behavior. The ability to perform a behavior can be measured by self-efficacy, which refers to the perceived capability of ones' self to execute a behavior (Bandura, 1977). There is a large body of research (e.g., Giacobbi, Hausenblas, and Penfield, 2005; Hoff and Ellis, 1992; Hill and Smith, 1987) which has investigated various aspects of self-efficacy, and suggests that self-efficacy has an important role in explaining people's behavior. The application of self-efficacy in different disciplines indicates that self-efficacy is a general trait that people possess when they execute certain behaviors.

Development of self-efficacy theory

Researchers have been searching for motives underlying various animal and human's behaviors. White's (1959) revisitation of motivation theories presented a comprehensive review on the development of motivation theories in both animal behavior and psychoanalytic ego psychology. Based on his analysis, the early motivation theories in animal behavior were based upon the assumptions that animals behave due to their curiosity, inner drives to reduce anxiety, environment exploration, and activity manipulation. In psychoanalytic ego psychology, instincts were first proposed as the cause of all human activity, and sexual instincts and ego instincts were identified as two types of the instincts (Freud 1949).

While sex drive refers to natural responses of human beings to their biological needs, ego instincts imply self-regulation and self-preservation which can be accomplished through the mechanisms of perception, memory, defense, and adaptive action (White 1959). Instinct to

master was added as another dimension of motivation in later research as an instrumental tool to develop the ego functions (White 1959). An overview of these two realms of research suggests that the early explanations of motivation based on anxiety reduction and instincts assumptions inadequately explained the exploration, activity manipulation, mastery need, and affective ego dimensions of motivation (White 1959). It is suggested that environment is the common link among these motivations since all of them are carried out in environmental settings, and are the outcomes of the interactions between humans and the environment.

White's (1959) extensive review of motivation theories provides solid support for his later proposition in which environment plays an important role in affecting human behaviors. An individual unavoidably interacts with his/her environment, and the interaction provides feedback to the individual to maintain or modify his/her behavior. The inseparable relationship between behavior and environment was further depicted in Woodworth's (1958) work which suggested that dealing with the environment was the primary motive for all behaviors. This approach to motivation not only takes one's biological drive into consideration, but also it includes environment as an external variable influencing human behavior. Based on his observation of children's learning behavior, White (1959) proposed that effectance, which is the feeling of efficacy or the ability to deal with the environment, is the ultimate motive to human's behavior. In addition, effectance is built on human's learning experience in interacting with the environment.

The relationship between human and environment was also illustrated in Bandura's (1986) social cognitive theory which considers the triadic interrelationships among behavior, cognitive and other personal factors, and environmental events to explain human functioning. This theory suggests that behavior, cognition, and environment do not operate independently. Rather, they

interact with each other, and the feedback received from the interactions exert influence on themselves. This theory highlights the role of socialization with other human beings or environments in motivation and daily life. Charon (2006) also depicted the importance of social interaction:

> "Interaction is the basic unit of study. Individuals are created through interaction; society too is created through social interaction. What we do depends on interaction with others earlier in our lifetimes, and it depends on our interaction right now. Social interaction is central to what we do." pp. 29

The interaction between human and others and the environment influences their cognitive thoughts and behaviors through a self-reflective mechanism. In this sense, social cognitive theory coincides with Kaplan's (1986) self-referent behavior constructs which suggests that social interactions influence and are influenced by four self-referent behavior constructs: self-perception, self-evaluation, self-feeling, and self-protective/enhancing mechanisms. However, in social cognitive theory, environment refers to physical environment (Bandura 1977; 1986) while in self-referent behavior constructs, the environment refers to social environment (Kaplan, 1986). The cognition component in social cognitive theory is largely determined by self-referent thoughts, and self-efficacy is the major determinant of these thoughts (Bandura 1994).

Bandura (1977) further elaborated the idea of effectance motivation and social cognitive theory in his self-efficacy theory. He defined self-efficacy as the "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (pp. 3). In other words, self-efficacy refers to a person's self-confidence related to their ability to perform

an action which could lead to desired outcomes. The actual skills that a person possesses may have nothing to do with the beliefs they have related to heir capability to execute the behavior. Rather, self-efficacy is built on the self-evaluation or judgment of one's ability to implement the action (Bandura 1986).

Since the development of self-efficacy theory, the concept has received a vast amount of attention, and has been adopted in a wide range of topics. Most research has examined self-efficacy in specific rather than general situations, and has suggested that measurement of self-efficacy is only meaningful when it refers to a task specific situation (Gist and Mitchell 1992; Abusabha and Actterberg 1997; Bandura 1980). When referring to self-efficacy for a particular task, researchers have named self-efficacy according to their study context with terms such as physical activity self-efficacy (Sylvia-Bobiak and Caldwell 2006), exercise self-efficacy (McAuley 1992; Giacobbi, Hausenblas, and Penfield 2005), leisure self-efficacy (Hoff and Ellis 1992), computer self-efficacy (Hill and Smith 1987), physical self-efficacy (Ryckman, Robbins, Thornton, and Cantrell 1982), nutrition-teaching self-efficacy (Brenowitz and Tuttle 2003), heart healthy eating self-efficacy (Gaugban 2003), and breast feeding self-efficacy (Well, Thompson, and Kloeblen-Tarver 2006).

Bandura (1977; 1980) further suggested that self-efficacy has its highest predictive power when the course of action is novel, challenging, or stressful. Schunk (1983, pp. 848) included this argument in his definition of self-efficacy and defined self-efficacy as the "judgments of how well one can organize and implement actions in specific situations that may contain ambiguous, unpredictable, and possibly stressful elements." This implies that self-efficacy may not be applicable in predicting routine behaviors.

Although a majority of research has used self-efficacy for task-specific situations, some researchers point out that the generalizability of self-efficacy should also be considered. For instance, Hoff and Ellis (1992) suggested that engaging in leisure enhances self-efficacy on both leisure and non-leisure aspects. Applying self-efficacy in computer learning context, Hill, Smith, and Mann (1987) found that computer efficacy beliefs contribute not only to the prediction of intentions to purchase and learn about computers, but also the decision to use technological innovations in general. McAuley (1992) also indicated that both general self-efficacy and exercise self efficacy were able to predict frequency and intensity of exercise participation among middle-aged sedentary adults. Further evidence was provided by the micro-analytic procedure conducted by Bandura et al (1980) in which generality of self-efficacy was found to hold across behavioral domains and treatment modalities. These studies show that people may generalize their self-efficacy from one domain to another. Higher self-efficacy in academics, for example, may imply higher self-confidence not only for academics, but also for working performance and other aspects. Thus, self-efficacy in general may diffuse to different aspects of life. A generally accepted terminology for self-efficacy when referring to general rather than specific situations is *generalized self-efficacy* which represents the self-judgment of one's ability on performing an act across a variety of situations (Smith 1989).

Sources of self-efficacy

Bandura (1977) suggested four sources of information that may influence the intensity of self-efficacy: performance accomplishments, vicarious experience, verbal persuasion, and physiological states. In another words, self-efficacy is the outcome of self-appraisal based on various information received from past experience, observations, interactions with others, and

self-emotional arousals. Therefore, cognitive processing of information most likely plays a central role in determining the intensity of one's self-efficacy. Individuals, thus constantly interpret information which they receive as either the source or threat to their ability to execute the behavior required to produce desired outcomes.

The role of self-evaluation in self-efficacy was explained in self-referent behavior constructs proposed by Kaplan (1986). According to Kaplan (1986), self-evaluation is a cognitive judgment of ones' self and is a cognitive self-referent response. Through self-evaluation, individuals can expect certain responses from others or the outcomes of behaviors prior to initiating any actions. Self-evaluation is likely to contribute to self-perception including self-efficacy.

Self-efficacy, which is one measure of self-concept, is influenced over time by four sources of information to different degrees through the mechanism of self-interpretation: 1) mastery experience; 2) vicarious experience; 3) persuasion of others; and 4) physiological state (Bandura 1977). Performance accomplishment or mastery experiences is suggested to increase self-efficacy more than mere exposure to vicarious experiences, verbal persuasion, or physiological state changes (Brian and Wilson 1981; Gist, Schwoerer, and Rosen 1989). On the other hand, failures are more likely to lead individuals to perceive themselves as having poor abilities (McAuley 1992). Further evidence of this claim was provided by Cousins (1997) who found that exercise self-efficacy in late life is significantly related to the movement confidence in childhood. Schunk (1983) also suggested that children who attribute their cause of success to their own ability have higher self-efficacy.

Vicarious experience can also potentially enhance ones' belief on their ability to engage in an activity which he/she observes other people performing successfully (Bandura 1986). Other

than learning from past experience, individuals may acquire information by observing others in learning (Bandura 1977). The modeling of others enables one to form a conception and confidence in performing the same behavior. However, modeling alone has been found to be a weaker predictor than mastery experience, and the efficacy expectations induced by modeling are vulnerable to change (Bandura 1977). Living modeling (seeing others perform activities), symbolic modeling (behavior described in words), and imaginal modeling (subjects visualize themselves or others performing the behavior) have been suggested as modes inducing vicarious experiences (Bandura 1977). For instance, symbolic modeling has been reported to increase perceived coping efficacy and cognitive mastery in past research (Rooke and Malouff 2006; Bandura, Adams, Hardy, and Howells 1980).

The social support received from others via the mechanism of verbal persuasion has also been suggested as a predictor of efficacious beliefs (Bandura 1977). Past studies indicate that social support predicts a wide range of behaviors such as physical activity participation (Eyler et al. 2003; Sylvia-Bobiak and Caldwell 2006), organizational citizenship behaviors (Chu, Lee, and Hsu 2006), and psychological adjustment to distress (Schweitzer et al 2006). This suggests that social support plays an important role in explaining various behaviors. Thus, researchers have examined the effect of verbal persuasion, which is a form of social support, on various behaviors via self-efficacy mechanisms from different perspectives such as perceived similarity between persuader and subject (Mellor et al 2006), strength of persuasive arguments and communicator characteristics (Newlin 1997), and persuasion levels (Ellis, Maughan-Pritchett, and Ruddell 1993). It has been suggested that the emotional support that people gain from verbal persuasion enhances their perceived capability to master difficult situations and thus leads to greater effort to execute or maintain certain behaviors (Bandura 1977).

Emotional arousal refers to the physiological state changes within an individual which act as psychological cues to the formation of self-efficacy beliefs. For instance, arousal is generated from anxiety or the discrepancy between the stimulus and existing adaptation level (McClelland, Atkinson, Clark, and Lowell 1953). High arousal occurs when the stimulus exceeds the adaptation level, which in turn provides the individual an indication of his/her capability to handle the situation. The reduction of anxiety arousal through desensitization has been found to be associated with reduction of avoidance behavior (Bandura 1977). An avoidance behavior jeopardizes the opportunity to gain mastery experience and develop coping skills and thus, can lead to low self-efficacy to perform a behavior (Bandura 1977).

Differentiating self-efficacy from other concepts

Self-efficacy can easily be confused with and treated as analogous to self-esteem, locus of control, or outcome expectancy. For instance, Hu, McAuley, and Elavsky (2005) tested if the Physical Self-Efficacy scale (Ryckman et al 1982) reflects the measure of self-esteem or self-efficacy and found that the scale of Perceived Physical Ability, which is the subscale of the Physical Self-Efficacy, is more reflective of self-esteem than perceived ability of exercise participation. Although self-efficacy is sometimes regarded as a synonym of self-esteem, outcome expectancy, and locus of control, its differences from these concepts have been addressed. Judge, Locke, and Durham (1997) indicated that self-esteem, generalized self-efficacy, and locus of control are different dispositional traits. However, they argued that they all belong to a higher order construct, which can also be termed as core self-evaluations or positive self-concept. Further evidence on the common core construct among self-esteem, neuroticism, locus of control, and generalized self-efficacy were provided in Judge et al's (2002) work. They

suggested that these four personality traits were closely related, and were the indicators of a common core construct.

While self-esteem refers to awareness of self-value by one's self (Campbell 1984; Judge, Locke, and Durham 1997), self-efficacy is the belief of one's ability (whether or not accurate) to execute a behavior through the influences of performance accomplishments, vicarious experience, verbal persuasion, and physiological states (Bandura 1977). Objective information has been found to influence perceived self-efficacy through self-evaluation mechanisms, and this self-appraisal can be affected by self-concepts including self-esteem (Lane, Jones, and Stevens 2002).

Lane, Jones, and Stevens (2002) investigated the relationship between self-esteem and self-efficacy and found that individuals who have a lower self-esteem have higher reduction of self-efficacy after failure than those who have a higher self-esteem. In another words, people who have high self-esteem are more likely to maintain confidence in their ability to perform an act when facing failure, and people who have low self-esteem are more likely to be defeated by failure. In addition, Judge, Erez, and Bono's (1998) meta-analysis on personality traits also indicated that the interpretation of one's successfulness is highly correlated to both their self-esteem and locus of control.

Both self-efficacy and locus of control can be described as sense of control (Abeles 1991). Studies have suggested that self-efficacy is related to internal locus of control, and that these two terms have been used interchangeably in some research (Welch and West 1995; Wood and Bandura 1989; Schunk 1990). For instance, a positive relationship between self-efficacy and locus-of-control was found in Ryckman et al's (1982) work in which people who have stronger internal locus-of-control are more likely to have greater perceived physical efficacy.

However, studies have shown that these two concepts are not completely identical (Schunk 1990, 1984; Bandura 1977). Locus of control (LOC) refers to the attribution of success or failure to either "internal factors (personal characteristics; internal LOC), or external factors that one cannot control (other people or luck; external LOC)" (Welch and West 1995, pp.154). However, both concepts are reported to have predictive power related to executing behaviors (e.g., McAuley and Blissmer 2000; McAuley 1992; Shamseddeen et al 2006). In their theory of planned behavior (Ajzen 1988; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), Ajzen (2002) used perceived self-efficacy and controllablity to represent a higher order construct of control, called perceived behavioral control. He suggested that although self-efficacy, controllability, and perceived behavioral control are all concerned with the ability to perform a behavior, they have fundamental differences. Perceived behavioral control refers to the "subjective degree of control over performance of the behavior itself " (p. 668), while self-efficacy is more concerned with ones' confidence in their ability to perform a behavior or the ease of performing a behavior and controllability refers to whether executing the behavior is up to the individual (Ajzen 2002).

Self-efficacy also differs from outcome expectancy. Bandura (1977) outlined the differences between these two concepts by using a diagram in which efficacy expectation referred to one's action control (person-behavior) while outcome expectation refers to the perceived consequences of the behavior (behavior-outcome). Although research has suggested that self-efficacy can be linked to outcome expectancy and can be regarded as the rationale explaining the outcome expectancy (Bandura 1984; 1986), Welch and West (1995) suggested that correlation between these two constructs does not necessarily exist. For instance, a student knows that obtaining a high GPA can lead to a better job opportunity (outcome expectancy).

However, he/she may not feel competent enough to maintain a high GPA (perceived self-efficacy).

Conclusion

There is a large body of research which has investigated various aspects of self-efficacy, and has suggested that self-efficacy has an important role in explaining people's behavior. The applications of self-efficacy in different disciplines indicates that self-efficacy is a general trait that people possess when they execute a behavior. Despite the important role of self-efficacy in behavior, the application of this concept in the tourism field is scarce. It is unknown if people's travel behavior is affected by their perceived self-efficacy, how the influence takes place, and what the other influential factors are which may interact with self-efficacy in order to explain travel behaviors. It is anticipated that integrating self-efficacy with travel motivations and constraints in a behavioral model will thus provide a more holistic understanding of travel decision-making.

Development of an Integrative Behavior Model

The concept of negotiation of leisure constraints implies a central role of self-appraisal and self-efficacy in decisions related to leisure activity participation. The decision on whether or not to participate in an activity does not depend solely on the presence/absence of leisure constraints. Rather, it depends on the self-examination of one's ability to successfully negotiate the constraints in order to perform the behavior. Leisure constraints may inhibit one's participation if the level of perceived self-efficacy is too low to execute the behavior. However,

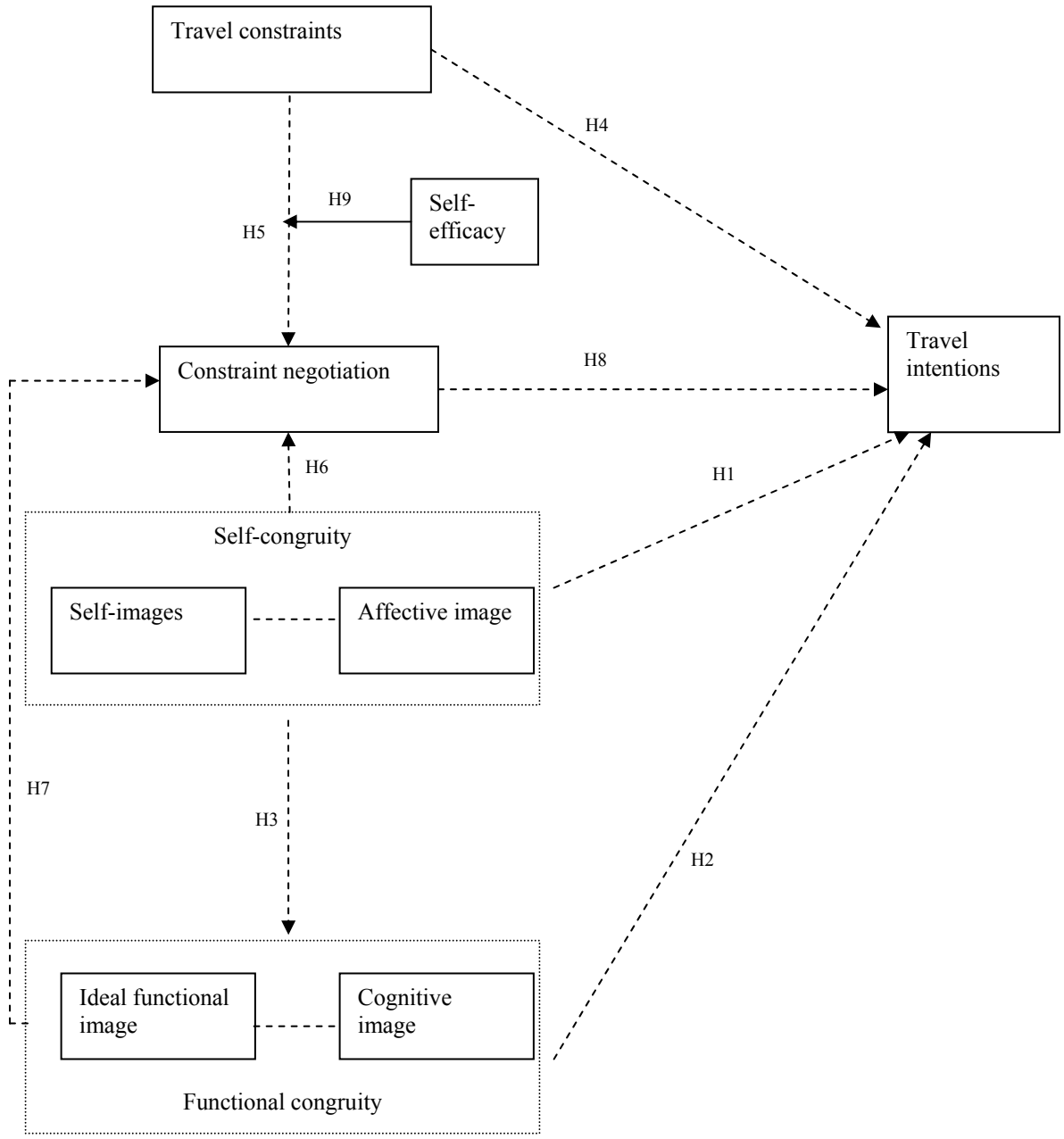
if individuals do not perceive the constraints as threats to their ability, they may participate in the leisure activity regardless of the presence of constraints.

There has also been a lack of attention paid to the interaction between self-efficacy and constraints. Although the role of self-efficacy in constraint negotiation has long been justified (Jackson, Crawford, and Godbey 1993), it was not empirically tested until recently (Loucks-Atkinson and Mannell 2007). The inclusion of self-efficacy corresponds with the role of perceived self-ability in confronting constraints, which was one of the essential components of Jackson, Crawford, and Godbey's (1993) propositions. Their fifth proposition states that "anticipation consists not simply of the anticipation of the presence or intensity of a constraint but also of anticipation of the ability to negotiate it" (pp. 8). This infers that the perceived capacity to negotiate with constraints can determine the effects that constraints have on participation. "Negotiation efficacy" has been used when applying self-efficacy in the context of constraint negotiation (Loucks-Atkinson and Mannell 2007). It refers to the confidence in one's ability to use negotiation resources effectively (Hubbard and Mannell 2001). Although other constraint researchers have not included self-efficacy in their investigations, some of them suspected that it could be one of the important factors influencing the success of negotiation efforts (e.g., Henderson et al 1995; Hubbard and Mannell 2001).

Figure 8 depicts the mediating effect of self-efficacy on negotiation strategies. The specific hypothesis to be tested regarding self-efficacy is:

H9: People who have higher self-efficacy are more likely to invest their efforts in negotiating travel constraints than those who have lower self-efficacy.

FIGURE 8
SELF-CONGRUITY, SELF-EFFICACY AND TRAVEL CONSTRAINT MODEL



Chapter Summary

The above paragraphs on self-congruity (motivation), self-efficacy (ability), and leisure constraints (opportunity) suggest that the MOA model could be an effective framework within which the three streams of research can be integrated. Past research has investigated these three constructs separately without considering their interactions. This chapter suggests that there are interactions among these three constructs, and that integrating them can provide a more holistic understanding of tourist behaviors.

CHAPTER III

METHODOLOGY

Zeller and Carmines (1980) classified theory construction into two components: theoretical and empirical. Theoretical components are abstract in which concepts and the relationships among them cannot be observed directly. Empirical components consist of data which can be used to test hypotheses derived from theory, and the supported empirical relationships can be inferred as the representation of the theory. In other words, theory derives from the observation of reality, and the support of empirical data on the hypothesized relationships among theoretical constructs consolidates the theory. Therefore, theory and data are closely related, and without which a scientific investigation is incomplete.

Both deduction and induction are necessary in the process of theory construction (Aneshensel 2002). Deduction occurs when a theory is translated into testable hypothesized relationships, and induction occurs when hypothesized empirical relationships are generalized into theoretical relationships (Aneshensel 2002). A theory is supported when observations coincide with hypothesized relationships and is not supported when observations do not reflect the hypothesized relationships (Aneshensel 2002). In the previous section, a theoretical model of tourist decision-making was proposed and the theoretical relationships among the constructs were reasoned. This section focuses on designing research to generate valid data to test the proposed theoretical model and hypothesized relationships.

Research Design

As tourism research has become more mature, researchers have used more rigorous techniques to collect and analyze data. The increasing attention on refining tourism research methodology is demonstrated by the increasing number of publications on tourism research methods in various aspects such as the use of non-response options in questionnaires relating to attitudinal research (Ryan and Garland 1999), on-site sampling (Crompton 2001), number of waves of data collection (Crompton and Cole 2001), web-based and mail surveys (Cole 2005), qualitative methods (Decrop 1999), and new analytic tools such as structural equation modeling (Reisinger and Turner 1999). Although preference for qualitative or quantitative methods exist among tourism scholars, recent research has started to integrate both methodologies instead of discriminating one method from another (e.g., Pike and Ryan 2004; Choi, Chan, and Wu 1999; Baloglu and Love 2005). The sole use of structured questionnaires with Likert type scales in most tourism studies has been criticized as confining subjects' responses to pre-determined items and forcing subjects to respond to items which may not apply to them (e.g., Samdahl 2005; Tapachai and Waryszak 2000). Therefore, the use of multimethods which contain both qualitative and quantitative methods is more likely to yield deeper understanding of subjects' true feelings.

Destination image research has been dominated by quantitative methods in which Likert-type scales and semantic differential scales are most commonly used to measure multiple dimensions of destination image (Tapachai and Waryszak 2000; Echtner and Ritchie 1993). Pike (2002) reviewed 142 destination image papers from 1973 to 2000 and found that most papers (114) used quantitative approaches to operationalize destination image. However, recent research has gradually responded to the calls for more qualitative destination image research (e.g., Ryan

and Cave 2005; Echtner and Prasad 2003; MacKay and Couldwell 2004) and/or incorporating different methods of investigation (e.g., Baloglu and Love 2005; Baloglu and Mangaloglu 2001). Various qualitative research methods have been utilized including: free elicitation techniques in which respondents are asked to respond to open-ended questions (Baloglu and Love 2005; Baloglu and Mangaloglu 2001; Tapachai and Waryszak 2000), visitor-employed photography (MacKay and Couldwell 2004), content analysis (Baloglu and McCleary 1999), focus groups (MacKay and Fesenmaier 1997), panels of tourism experts (Echtner and Richie 1993), and personal interviews (Fakeye and Crompton 1991). These studies have demonstrated that qualitative approaches can provide rich insight on the investigated topics.

Recent leisure constraint research has also experienced theoretical and empirical development, yet, survey-based approaches have prevailed (Jackson 2005a). Most constraint research has been dominated by quantitative surveys in which most constraints items are derived from researchers' assumptions (Jackson 2005a). Samdahl (2005) pointed out the drawback of using this approach: "the way we ask questions is driven by the type of answers we seek, and both are the product of the models and paradigms that shape the way we think" (pp. 343). Several scholars such as Crawford and Jackson (2005), Mannel and Iwasaki (2005), and Samdahl (2005) have placed calls for applying grounded methodologies to the study of leisure constraints. As a result, recent research has displayed a tendency to conduct leisure constraint research with a diverse range of topics by using qualitative approaches on issues such as gender (e.g., Shaw and Henderson 2005; Bialeschki 2005), race and ethnicity (e.g., Shinew and Floyd 2005; Stodolska and Yi-Kook 2005), immigration (e.g., Stodolska and Yi-Kook 2005), adolescence (e.g., Caldwell and Baldwin 2005), aging (e.g., McGuire and Norman 2005), and life transitions (e.g., Jackson 2005).

The above paragraphs indicate that utilizing both qualitative and quantitative methods is likely to generate a more holistic picture for the topic of investigation. Thus, the current study utilized both methods. In-depth interviews were first conducted with a convenience sample including both cruisers and non-cruisers. The information generated from the interviews was incorporated into the questionnaire design in the later stage. An online panel study was then conducted. The proposed model and hypotheses were subsequently tested. The following paragraphs further explain each step.

Qualitative/unstructured method

Semi-structured interviews with a small sample were conducted as an initial step of the study. The intent of the interviews was to derive measurement items for the interested constructs.

Convenience sampling was used to select both cruisers and non-cruisers for the study. The sample was generated from two sources: 1) volunteers recruited from the Department of Recreation, Park & Tourism Sciences at Texas A&M University, and 2) cruise passengers embarking and debarking at Port Everglades in Fort Lauderdale, Florida. Since only a small portion of the population have taken a cruise (17% of the U.S. population) (CLIA 2006), it was believed to be unlikely that an adequate number of cruisers could have been recruited on campus to participate in the interviews. Therefore, different cruise lines were contacted during the period of December 2007 to February 2008. A permission request proposal (Appendix I) was sent to the companies based upon their requests. Two cruise lines (i.e., Holland America Line and Princess Cruises) granted the author permission to interview their passengers at Port Everglades.

Conducting interviews at a port had two advantages. First, all persons at the port were likely to be cruisers. Second, since the passengers were either those who had just debarked from

a cruise ship or were waiting for embarkation, they were most likely to have their experiences related to their decision-making process fresh in their memory and thus could more likely accurately recall the information.

After obtaining permission from the cruise lines, the researcher flew from Texas to Fort Lauderdale and stayed there from March 2, 2008 to March 8, 2008 to conduct the interviews. Due to the tightened security at Port Everglades, a port identification card was required to enter the port. Therefore, permission was requested from the Port Identification Office to allow the researcher to freely enter the port area.

To recruit a convenience sample on campus, an invitation was sent via the listserv of the Department of Recreation, Park, and Tourism Sciences (RPTS) to all graduate students, staff, and faculty members (n = 138). A total of 21 RPTS members agreed to participate in the study, which resulted in 15.2% response rate. The interviews were conducted between February 11, 2008 and February 21, 2008. Most interviews were conducted face to face at different locations in the city of College Station including coffee shops, a library, seating areas on campus, informants' residences, and interviewer or informants' offices with consideration for minimizing interruption, protecting informants' privacy, and the convenience of participants. Only one interview was conducted via phone since the participant did not reside in the same city as the author.

For both sets of interviews, the sample size was not determined a *priori*. Rather the strategy was to continue to interview people until the increment of new information forthcoming was minimal. The profile of respondents for both interviews is reported in Chapter IV. All the interviews were semi-structured. An interview protocol (Appendix II), which is a list of predetermined questions and topics to be asked, was used. Open-ended questions were asked in

the interviews to generate insightful information from the respondents. The interviews were recorded with a digital voice recorder after consent from the participants was given. The interviews were then transcribed into text and analyzed.

Quantitative/structured method

An online panel survey was hence conducted to collect quantitative data for testing the proposed model and hypotheses. Since the study sample was comprised of two groups of subjects (i.e., cruisers and non-cruisers), skip patterns were needed in the questionnaire design. It was expected that a web-based survey would reduce the confusions caused by complicated instructions since the "skip patterns can be designed into Web questionnaires in ways that are mostly invisible to the respondent" (Dillman 2007, pp. 354). Evans and Mathur (2005) also suggested that online surveys are likely to be more effective than other modes of surveys when multiple samples are used in the study since respondents can be easily directed to the questions of interest. In addition, as mentioned in the introduction section that only a small portion of the U.S. population (17%) have cruised (Cruise Lines International Association 2007), a random national survey would have been unlikely to be effective in reaching a sufficient number of cruisers. Dennis (2001) suggested that panel surveys, which are characterized by having a targeted sample, are especially efficient in reaching low-incidence groups.

Other advantages of conducting a web-based survey over traditional survey modes include refined appearance with various shapes, colors and formats, pop-up instructions, drop-down boxes with long lists of answer choices, immediate data coding (Dillman 2007); quick and easier access to subjects of investigation despite their geographic locations, cost savings, lower data processing time, fast response, and that they are effective in reaching busy professionals

(Deutskens, Ruyter, and Wetzels 2006); fitting in with a respondent's life, low social desirability effect on survey answers due to the absence of interviewers (Duffy et al 2005); and instant data entry (Wilson and Laskey 2003).

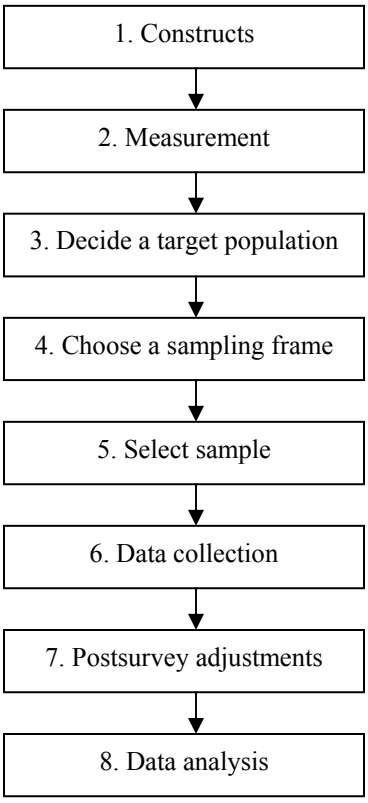
Although web-based surveys have been noted as one of the most significant advances in survey methodology (Dillman 2007), scholars have displayed concerns such as: low internet coverage, rigid questions' orders, computer anxiety, different screen formats, technical or interface problems (Deutskens, Ruyter, and Wetzels 2006); reluctance of older people to respond to online surveys (Couper et al 2007); perceived as junk mails, skewed attributes of Internet population, and privacy and security concerns (Evans and Mathur 2005). Readers are referred to Evans and Mathur's (2005) study for a comprehensive list and detailed discussion of strengths and weaknesses of online surveys.

The above paragraphs presented both pros and cons of online surveys relative to other survey designs. In his discussion of the total survey error approach, Weisberg (2005) indicated that each survey mode has its limitations, and trade-offs are often needed when deciding which type of survey to be used. Researchers need to choose a survey design based on their study purposes, expected survey error as well as financial and time constraints (Weisberg 2005).

Based on the above information and the objectives of the study, an online survey panel was deemed appropriate for this study. Survey panels consist of "individuals who are pre-recruited to participate on a more or less predictable basis in surveys over a period of time" (Dennis 2001, pp. 34). Today, panel surveys are common practice in a wide range of research areas such as consumer behavior (Lohse, Bellman, and Johnson 2000), health (e.g., Contoyannis, Jones, and Rice 2004), communication (e.g., Beaudoin 2007), leisure (e.g., Kuentzel and Heberlein 2006), and travel (e.g., Li 2007). The following paragraphs describe the survey design and procedures.

Survey design. Groves et al (2004) presented two major survey dimensions: measurement and representational, in which the former is concerned with what the survey is about and the latter concerns who the survey is about. The measurement dimension contains the following procedures: 1) identifying constructs of measurement, 2) developing survey measurements to gather information about constructs, 3) collecting data, and 4) editing responses. The representation dimension is comprised of: 1) selecting the target population, 2) setting the sampling frame, 3) choosing the sample from the sampling frame, 4) handling unit or item non-responses, and 4) postsurvey adjustments. The steps of these two dimensions were implemented interchangeably throughout the study (Figure 9).

FIGURE 9
SURVEY DESIGN



1) Constructs

A conceptual model of tourist decision-making was presented in the previous chapter (Figure 8). The constructs of interest in this model are: self-congruity (congruity of self image and affective image), functional congruity (congruity of functional image and cognitive image), travel constraints (intrapersonal, interpersonal, and structural constraints), constraint negotiation strategies, self efficacy, and travel behavior. The definition of each construct was presented in the first chapter.

2) Measurement

Measurement scales are the items designed to reflect the true meanings of constructs of interest. Validity and reliability are two of the major concerns in scale development. Validity refers to the extent to which measurement scales are measuring the constructs of interest (Nunnally 1967). Reliability refers to the repeatability of a result with the same measurement (Aneshensel 2002). This section describes how the current study developed valid and reliable measurement scales to measure the interested constructs. Due to the scarcity of research on cruise travel, no measurement scales were readily available for testing the theoretical model proposed in this study. Although some scales such as leisure constraints have been developed elsewhere, it was unknown if these scales could be equally applied to cruise travel. Thus, the current study adopted the comprehensive procedure of developing measures recommended by Churchill (1979).

The eight steps of measurement development recommended by Churchill (1979) are listed in the first two columns of Table 1. While step one through four address concerns of face or content validity, dimensionality, and internal consistency, steps five to eight address the

concerns for reliability, criterion validity, and construct validity (Echtner and Ritchie 1993). Churchill (1979) suggested that researchers can use these procedures with certain flexibilities and the recommended techniques can be replaced with other alternatives. In Echtner and Ritchie's (1993) research, a measurement of destination image was developed with the use of the first four steps of Churchill's (1979) procedures. This study used all steps of the recommended procedures. The third column of Table 1 lists the corresponding techniques that were used.

TABLE 1
PROCEDURE FOR DEVELOPING INSTRUMENT MEASURES

Procedures for developing better measures suggested by Churchill (1979)	**Techniques recommended by Churchill (1979)**	**Techniques used in this study**
1. Specify domain of construct	Literature search	Literature search
2. Generate sample of items	Literature search	Literature search
	Experience survey	In-depth interviews
	Insight-stimulating examples	Panel of experts
	Critical incidents	
	Focus groups	
3. Collect data		Pilot study
4. Purify measure	Coefficient alpha	Coefficient alpha
	Factor analysis	Factor analysis
5. Collect data		Online panel survey
6. Assess reliability	Coefficient alpha	Composite reliability
	Split-half reliability	
7. Assess validity	Multitrait-multimethod matrix	Face validity
	Criterion validity	Convergent validity
		Discriminant validity
8. Develop norms	Average and other statistics summarizing distribution of scores	Means Standard deviations

The first step is to specify and define the domains of the constructs. This was completed in the previous section. The constructs of interest are: self-congruity, functional congruity, travel constraints, constraint negotiation strategies, self efficacy, and travel behavior.

The second step is to generate an item pool to measure each construct. Echtner and Ritchie (1993) suggested that using multiple techniques is more likely to produce a complete list of measurement items. Three techniques were used in this study: literature search, in-depth

interviews, and a panel of experts. A comprehensive literature review was first conducted to generate a list of measurement items. Additional items from the interviews were added to the list. The list of measurement items was then submitted to a panel of experts. The panel judged the applicability of the measurement items to the study. The list was then recompiled based on the expert panel's opinions and according to which, a draft of the questionnaire was then designed.

The purpose of the third and fourth steps is to purify the measures. The list of measurement items resulting from the second step was pre-tested with a small sample of undergraduate students (N = 293). An exploratory factor analysis (EFA) was performed on the data collected to determine the dimensions of the scales. To ensure that each attribute loaded only on one factor, the items which had factor loadings lower than .4 or cross-loaded on more than one factor were eliminated (Gursoy and Cavcar 2003; Chen and Hsu 2001). The internal reliability of each factor was then measured by using Cronbach's alpha. A low alpha coefficient suggests that the item has a low contribution to the measurement of construct of interest (Churchill 1979). The reliability of each item was further examined by using item-to-total correlations. Past studies have used .5 item-to-total correlation as a cut-off point for the retention of items in the analysis (e.g., Gursoy and Gavcar 2005; Chen and Hsu 2001; Zaichkowsky 1985). Thus, items with lower than .5 item-to-total correlations were considered to be eliminated.

The measurement scales were further validated with data collected from an online panel study. The composite reliability of the factors for each construct, which also refers to the internal consistency of indicators measuring the underlying factors (Fornell and Larcker 1981), was examined in confirmatory factor analysis (Reuterberg and Gustafsson 1992) with the new data. It has been argued that a factor displays its reliability if its composite reliability is greater than .6 (Bagozzi and Kimmel 1995).

Construct validity was assessed by both convergent and discriminant (also termed as divergence) validity. Convergent validity refers to the extent of correlation between the intended measure and other measures used to measure the same construct (Clark-Carter 1997). This can be examined with the predictive power of each item on its assigned factors by using t-tests (Bollen 1989). A statistically significant contribution of an item to its posited underlying construct suggests adequate convergent validity of the measurement (Marsh and Grayson 1995; Anderson and Gerbing 1988). Discriminant validity refers to the extent of dissimilarity between the intended measure and the measures used to indicate different constructs (Clark-Carter 1997). It can be examined by comparing correlations among the constructs to the square root of the average variance extracted for each of the factors (Fornell and Larcker 1981). If the latter is greater than the former, the discriminant validity of the factors can be established (Fornell and Larcker 1981).

More detailed procedures on how the measurement scales for the constructs of interest in this study were developed are depicted in Chapter IV.

3) Target population

Following Cruise Line International Association (2007) and Li (2006), the study sample was chosen based on three criteria: 1) 25 years old and older; 2) Annual household income of $25,000 or more; 3) 50-50 gender distribution. People who match with these criteria have been suggested the target market of cruise line companies (CLIA 2007). Since it is the intention of this study to generalize the study results to the target market, these criterion were used.

Travel constraints are defined in this study as the factors that inhibit continued travel, cause inability to travel, result in the inability to maintain or increase frequency of travel, and/or

lead to negative impacts on the quality of the travel experience (modified from Nadirova and Jackson 2000). Since both cruisers and non-cruisers may experience constraints associated with cruising to different extents, they were both included in the sampling in order to present a broader spectrum of analysis.

4) Sampling frame

A qualified random online panel was acquired from Zoomerang, which is an online panel company. The company was chosen due to the credibility of their services (Li 2007, personal communication). Although the company's online panel database is considered to be comprehensive, it is unknown what percentage of eligible subjects from the population are included in the company's online panel database. Therefore, alternative methods were employed to check if the sample used in the study was a reasonable representation of the general population. Following Li (2006), the demographic profiles (i.e., age, income, marital status, education, number of times a person has cruised) of cruisers in the current study were compared to the profile of cruisers reported by the Cruise Lines International Association (CLIA 2007). The details of comparison can be found in page 93.

5) Sampling

The samples were randomly selected from a list of qualified online panel members in Zoomerang's database. Various rules for deciding sample size have been suggested by different scholars, which led Muthén and Muthén (2002) to conclude that there is no rule of thumb for deciding a sample size since the sample size depends on many factors such as the size of the model, distribution of the variables, amount of missing data, reliability of the variables, and

strength of the relations among the variables. Nevertheless, these rules can give researchers a reasonable estimation of how large a sample is required to reach a valid statistical conclusion. Kline (2005) suggested that the sample size of a survey depends on the number of parameters in the model to be tested. He suggested: "a desirable goal is to have the ratio of the number of cases to the number of free parameters to be 20:1; a 10:1 ratio, however, may be a more realistic target…If the cases/parameter ratio is less than 5:1, the statistical precision of the results may be doubtful" (pp. 111). Stevens (1996) also recommended 15 cases per measured variable. Li (2006) estimated the sample size for his study by using 5 cases per parameter and 15 cases per measured variable rules. Based on the rule of thumb provided by Dillman (2007), the sample size needed for a 95% confidence level with 5% standard error is 246 for a homogeneous sample. McNamara (1992) suggested a sample size of 384 for any size of population. Since the sample was derived from two groups: cruisers and non-cruisers, it was hoped to have about 800 (400 cruisers and 400 non-cruisers respectively) usable responses in total at the end of data collection. This also enabled the study to have at least 5 cases for each parameter.

6) Data collection

Groves et al (2004, pp. 51) defined measurement error as "the observational gap between ideal measurement and the responses obtained." This error may arise in different situations such as misinterpretation of respondents of the real intent of questions and unwillingness of respondents to disclose private information (Groves et al 2004). The error can be systematic when the response is deviated from the true value of the measure in a consistent direction. To minimize this type of error, the questions should be clearly stated by using simple words which can be most easily understood by respondents. The design of the online survey should be user-

friendly so that respondents can comprehend the questions easily. A pilot study was conducted with a small convenience sample to help ensure the above standards had been met before releasing the online panel survey (Detailed procedures of the pilot test are depicted in Section IV).

A questionnaire was designed based on the measurement scales derived from exploratory factor analysis. The questionnaire was reviewed by an expert on the panel who is a faculty specialized in cruising and travel decision-making. Comments on different aspects such as wording, format, and structure of questions were given and the questionnaire was revised accordingly. Then, an online survey was designed with the software provided by Zoomerang. Standard colors and screen dimensions were used in the survey design to avoid technological variations (Evans and Mathur 2005).

The survey was tested on a small number of subjects (seven faculty and graduate students in the Department of Recreation, Park and Tourism Sciences at Texas A&M University) and computers with different screen configurations and browsers to ensure consistent appearance of the survey (Dillman 2007). Constructive feedback on wording, font size, spelling and length of cover letter were provided by the respondents. The average completion time was about 15 minutes. A definition of cruising was added to the questionnaire due to the confusion of some respondents on the concept of cruising. Cruising was defined in the study and on the survey as "trips of a few days or more, and can extend to round-the-world voyages, with commercial cruise lines such as Carnival, Royal Caribbean, and many others" (Revised definition retrieved from Wikipedia 2007). The definition was tested among two of the respondents and was perceived to be clear and consistent with the purpose of the study.

The first page of the survey consisted of a brief information sheet with information such as purpose of study, estimated completion time, voluntary participation, and researchers' contact information. A screening question was presented after the information sheet. Respondents were asked to indicate if they had ever cruised before. This was to differentiate cruisers from non-cruisers. Cruisers were asked to report their cruising behavior in Section I while non-cruisers skipped this set of question. Both groups of respondents were then asked to respond to the questions associated with their perceived cognitive image of cruising, images of perfect cruise vacations, self-images, constraints to cruising, constraint negotiation strategies, self-efficacy, and behavioral intentions. Demographic information was requested at the end of the survey.

After final amendment on the online survey, Zoomerang was informed to deploy the survey to online panel members. Zoomerang identified panel members who were qualified for the study. The survey was deployed on May 15, 2008 and ended on May 16, 2008. Single e-mail invitations were sent to 5,300 qualified panel members who were randomly chosen from the company's database. The number of panel members invited to the study was determined by the company based on its past experience. Since a request of 800 responses (599 cruisers and 392 non-cruisers respectively) was placed, Zoomerang terminated the survey once the number of responses had reached the required sample size. Nine hundred and ninety responses were yielded about 25 hours after sending invitations to online panel members. The response rate was 18.7%, which was higher than the acceptable range (8-15%) noted in Li's (2006) dissertation. Real-time reporting of data was available via the Zoomerang account and the data was exported directly from the account to Microsoft Excel.

7) Postsurvey adjustments

Before performing model fitting and hypotheses testing, some postsurvey adjustments were first performed to clean the data and to prepare the data for later stages of data analysis.

Data cleaning

Data recording was performed after exporting the data from the Zoomerang account to Microsoft Excel and before exporting the data to SPSS. For instance, due to the open-ended nature of questions, some respondents filled in blanks with letters (e.g., "one") rather than numbers (e.g., "1") when they were asked "How many times have you cruised in your lifetime?" The letters were manually changed to numbers to maintain the consistency of data format.

Data was subsequently transported to SPSS in which further data cleaning and analysis was performed. Although $25,000 annual household income was desired, it was found that 91 respondents did not meet the preset requirement. A further investigation suggested that two cruiser respondents did not meet the requirement of being 25-years-old. The disqualified subjects were excluded from subsequent analysis. The final sample size was 897 as a result with 564 respondents being cruisers and 333 respondents being non-cruisers.

Similar to the pilot test, "D-measure" (Birdwell 1968; Ross 1971; Dolich 1969) was used to measure self-congruity and functional congruity in which absolute arithmetic differences between different images were computed. "0" refers to high congruence while "6" refers to low congruence between two corresponding measurement items. Again, for the purpose of consistent direction of scaling and easier interpretation, the data was recorded with "6" refering to high congruence and "0" refering to low congruence. In addition to the computations of congruity

index, age was calculated as the difference between 2008 and the birth year reported by the respondents.

Data screening was conducted after data entry to detect any outliers that may exist in the data. Outliers were defined to be data points that "deviates so much from other observations as to arouse suspicions that it was generated by a different mechanism" (Hawkins 1980, pp. 1). Outliers can be produced from various sources such as mistakes made by researchers on data recording or data entry, misinformation provided by respondents either intentionally or unintentionally, or legitimate rare observations (Osborne and Overbay 2004). Although distinguishing legitimate outliers from illegitimate outliers sometimes may be impossible due to the post hoc nature of analysis, some obvious human errors can still be identified. Four obvious typo errors on reporting birth years were corrected. "2975" was changed to "1975", "1829" was changed to "1929", "1663" was changed to "1963", and "11941" was changed to "1941." A common sense approach was adopted in the study to estimate the causes of outliers.

Although some researchers have suggested to accommodate legitimate outliers instead of removing them from a database (e.g., Orr, Sackett, and DuBois 1991; Ott and Longnecker 2001), Osborne and Overbay (2004) suggested deletion of outliers may improve the accuracy of estimation. Since the purpose of this study was to reveal the decision-making patterns of a majority respondents, legitimate outliers which represented rare cases were deleted from analysis. Boxplots and standardized z-scores were employed to identify univariate outliers (Ott & Longnecker, 2001). Data points which fell outside the 1.5 times inter-quartile range (Hoaglin et al. 1983) or with z-score larger than 3.29 (Tabachnick and Fidell 2001) were declared as outliers. Mahalanobis distance was computed in SPSS to identify multivariate outliers. The study used p

< 0.001 as a chi-square cut-off criteria as suggested by Tabachnic and Fidell (1996). No substantial outliers were detected from these procedures.

Missing data

Missing data (or item nonresponse) often occurs when respondents skip some questions (Weisberg 2005). Researchers use different approaches to dealing with missing data such as listwise deletion, pairwise deletion, mean substitution, regression-based single imputation, and multiple imputation. Royston (2004) and Buuren, Boshuizen, and Knook (1999) suggested that excluding cases or variables with missing data or substituting missing data with means or with single imputation can lead to invalid estimations. Multiple imputation, however, has advantages over the others due to its ability to introduce randomness to the imputations and produce unbiased estimates of parameters (Royston 2004; Landerman, Land, and Pieper 1997). Multiple imputation was originally proposed by Robin (1976; 1987) and is comprised of three steps: 1) imputing missing data multiple times (usually 5-10 times) with random variations; 2) analyzing data separately for each imputed dataset; and 3) averaging the parameter estimates obtained from each data analysis. Since all questions in the survey were mandatory (i.e., respondents were required to fill in answers for all the questions before submitting the survey), no missing data were reported in the current study.

Non-response bias check

Nonresponse bias occurs when the opinions of those who do not respond to survey requests differ from those who respond (Pearl and Fairley 1985). One way to minimize the influence of nonresponse bias on a study's results is to yield as high of a response rate as

possible (Dillman 2007). Offering incentives is a common practice used by researchers to motivate people to participate in a survey (Göritz 2004). Göritz, Reinhold, and Batinic (2002) reviewed 64 online panel studies which employed different incentives and found that the incentives used in these studies varied from cash/cheque to redeemable bonus points, lotteries, donated money on behalf of the panelist, and gifts. To increase the response rate of the study, Zoomerang offered 50 bonus points to their participants. Past research (e.g., Göritz 2004) has suggested that bonus points are more effective than lotteries in yielding high response rates for online panel members.

Salant and Dillman (1994) suggested that studies with responses rate lower than 60 percent merit concerns related to nonresponse bias. Thus, a nonresponse bias check was conducted. Although comparing respondent and non-respondent responses and/or demographic information is a common practice for non-response bias check, it was not feasible in this study due to the unwillingness of the survey company to disclose non-respondents information and the one-time nature of e-mail invitations. Demographic data of online panel members is often collected by online panel companies at the time of panel members' registration (Dennis,\ 2001; Evans and Mathur 2005). However, an attempt to request non-respondents' information failed due to privacy protection reasons. Therefore, an alternative non-response bias check was adopted in this study. Early responses (data obtained on the first day of survey deployment) were compared with late responses (data obtained on the second day of survey deployment) in this study. This tactic has been used commonly in other research as a proxy of non-response bias check when direct data of non-responses is not obtainable. For instance, Li (2006) compared early respondents' responses with late respondents' responses as a proxy of testing the difference between nonrespondents and respondents.

Following Li (2006), the study compared 761 early responses and 138 late responses on six demographic characteristics (gender, employment status, education status, ethnic background, marital status and annual household income), affective image and behavioral intention toward cruising. Since past research (Ott and Longnecker 2001) has suggested that chi-square is effective for nominal variables while t-test is effective for continuous variables, chi-square tests were conducted to examine the differences between the two groups on demographic information while independent t-tests were performed to test the difference on behavioral intentions.

Table 2 presents the results of the chi-square tests. No significant differences were detected between early and late responses in gender ($\chi^2 = 1.083$, $p = .298$), employment status ($\chi^2 = 8.011$, $p = .237$), ethnic background ($\chi^2 = 9.118$, $p = .104$), marital status ($\chi^2 = 3.574$, $p = .467$) and annual household income ($\chi^2 = 11.380$, $p = .251$). However, the test revealed difference on education status ($\chi^2 = 15.956$, $p = .003$) between early respondents and late respondents.

TABLE 2
CHI-SQUARE COMPARISONS OF EARLY AND LATE RESPONDENTS

Variable	Chi-Square	DF	p
Gender	1.083	1	.298
Employment status	8.011	6	.237
Education	15.956	4	.003
Ethnic background	9.118	5	.104
Marital status	3.574	4	.467
Annual household income	11.380	9	.251

Independent t-tests were performed on affective image and behavioral intentions to further examine the difference between early responses and late responses. Affective image was measured with nine items and behavioral intention was measured with four items (Please refer to Section IV for the measurement scale development of these two constructs). A common practice

of performing independent t-test on multivariate constructs is to sum the items' scores up before performing t-test for each variable (Petrick and Backman 2002; Maxim 1999). The results suggested no difference between early and late respondents on their answers to affective image or behavioral intentions (Table 3). Due to the only minor difference (i.e., small difference in education only), the responses between early and late respondents were deemed similar enough to suggest a lack of non-response bias.

TABLE 3
T-TEST COMPARISONS OF EARLY AND LATE RESPONDENTS

Variable	t-test	DF	p
Affective image	-.694	897	.490
Behavioral intentions	1.538	897	.124

Sampling bias check

Among all the weaknesses of online surveys, low coverage has drawn the most attention from scholars (Duffy et al 2005; Couper et al 2005). This problem occurs when not everyone in the U.S. population is included in an online survey due to one's nonuse of internet or lack of a valid e-mail address (Couper 2000). However, recent research has suggested that internet coverage is increasing with 72.5% of the U.S. population having internet access (Internet World Stats, 2008). In addition, there is also an increasing number of people signing up to be online panel members (Deutskens, Ruyter, and Wetzels 2006). As a result, internet surveys are increasing in popularity in a wide range of social science research such as marketing, psychology, and health studies (Couper et al 2005; Deutskens, Ruyter, and Wetzels 2006; Duffy et al 2005).

Nevertheless, some scholars concerned with the quality of online surveys have conducted studies to compare the results generated from online surveys to other modes of survey (e.g.,

Deutskens, Ruyter, and Wetzels 2006; Deutskens et al 2006; Duffy et al 2005). A comprehensive list of these studies is provided by Deutskens, Ruyter, and Wetzels's (2006). While some scholars have found that online surveys generate different results than other survey designs (e.g., Roster et al 2004; Klassen and Jacobs 2001), others have suggested that the results are equivalent (e.g., Epstein et al. 2001; Knapp and Kirk 2003). For instance, Couper et al (2005) examined noncoverage and nonresponse in a panel study of persons aged 50 years old and over in the U.S. and found that online surveys are more likely to yield a nonrepresentative sample since those who responded to the online survey were different from those who did not respond. Duffy et al (2005) conducted both online and face-to-face surveys and compared the results before weighting and after weighting on some demographic and attitudinal variables. The study yielded mixed findings (some results were similar while others were different) across these two types of survey.

However, Deutskens et al (2006) compared the generalizability of online and mail surveys and found that online surveys produced equally generalizable results as mail surveys with lower costs. Similarly, Deutskens, Ruyter, and Wetzels (2006) analyzed the accuracy and completeness of respondents' answers to both online and mail survey and found that these two types of survey generated equivalent results with more comprehensive qualitative feedback provided by online respondents. In his six cases studies, Dennis (2001) also examined if online panel members responded differently than those who lacked panel experience and found minimal panel effects.

To examine if the current sample was a reasonable representation of the population of interest, the demographics of the present sample were compared with the 2006 cruise market profile reported by a national online study conducted by Cruise Line International Association

(CLIA 2007). In the prior study, 2,482 national online interviews were conducted with adults 25 years or older with household incomes $40,000 or more. The study (CLIA 2007) suggested that about 97% of the cruise market meets these two criteria. About half of the sample were cruisers (46.3%) and another half were non-cruisers (53.7%). Cruisers were 49 years old on average, with higher than average annual household income ($104,000). Most of them were married (83%). About half of them had college educations (57%) and worked on full time jobs (57%). Compared to cruisers, non-cruisers were slightly younger on average age (45 years old) and less wealthy with average annual household income of $65,500. Their education level also tended to be lower than cruisers (40% had college educations). In addition, more cruisers were married (83%) than non-cruisers (76%). However, similar to cruisers, about half of non-cruisers had full time jobs (55.5%).

Since statistical comparison is not feasible due to the unavailability of the previous data, the following comparisons are mainly descriptive. Table 4 provides a descriptive comparison of demographic characteristics of cruisers and non-cruisers in the current study and CLIA's (2007) study. The two samples share many similar characteristics. For instance, cruisers in the current study were also slightly older, had higher incomes and were more educated than non-cruisers. Both samples had half-half gender distributions. Additionally, a majority of respondents in both groups were married, worked for full-time, and were Caucasians. Similar to the previous sample, more cruisers were retirees than non-cruisers in the current study.

TABLE 4
COMPARISON OF DEMOGRAPHIC CHARACTERISTICS OF CRUISERS AND NON-CRUISERS IN CURRENT STUDY AND CLIA STUDY

	2006 Cruise Market Profile Study		Present Study	
	Cruisers	Non-cruisers	Cruisers	Non-cruisers
Age				
25 – 29	6%	6%	5.7%	13.2%
30 – 39	24%	18.5%	21%	27%
40 – 49	26%	32.5%	21.7%	23.1%
50 – 59	22%	24.5%	21.2%	21.9%
60 – 74	18%	15.5%	20%	10.2%
75+	4%	3%	10.1%	4.5%
Average	49	48.5	51	45.2
Median	49	45	50	43
Income				
$40,000 to less than $50,000	11%	21.5%	12.3%	22.4%
$50,000 to less than $60,000	28%	40.5%	26.4%	39.8%
$75,000 to less than $100,000	22%	17%	24.7%	16.7%
$100,000 to less than $200,000	31%	17%	31.8%	17.1%
$200,000+	8%	4%	4.8%	4.1%
Average (in 1,000s)	$104	$81	$95	$77.8
Median (in 1,000s)	$84	$65.5	$87.5	$62.5
Gender				
Male	49%	48.5%	50.7%	53.5%
Female	51%	51.5%	49.3%	46.5%
Marital status				
Married	83%	76%	74%	65.3%
Single/Divorced/Separated	17%	24%	26%	34.7%
Employment status				
Full-time	57%	55.5%	58%	60.4%
Retired	16%	14.5%	25.6%	13.2%
Education background				
College grad or higher	57%	40%	37.6%	34.8%
Post graduate	23%	14.5%	27.6%	15.3%
Ethnic background				
White	91%	87.5%	86.7%	85.3%
Black	4%	7%	3.4%	3.6%
Other	5%	5.5%	9.9%	11.1%

Normality test

Normality is one of the major concerns when testing hypotheses in structural equation models (SEM). Thus, a normality test was performed in SPSS to check if the data was normal and if skewness or kurtosis had occurred. A Kolmogorov-Smirnov test (Massey, 1951) revealed that the data was significantly (< .001) not normal (Table 5). However, further investigation on

skewness and kurtosis of items in **A**nalysis of **MO**ment **S**tructures (AMOS) suggested that the observed dependent variables had only mild (< $\pm$3) skewness and kurtosis (Table 6). A multivariate normality check was also performed in AMOS and it was found that multivariate kurtosis was significant (< .001). Since the assumption of normality often does not hold in social sciences (Micerri 1989; Lei and Lomax 2005), it was no surprise that the data displayed a non-normal distribution.

TABLE 5
KOLMOGOROV-SMIMOV TESTS OF NORMALITY

Items	t-value	df	Sig.
I'll say positive things about cruising to other people. (Intent1)	.237	897	.000
I intend to cruise in the next 3 years. (Intent2)	.234	897	.000
I'll recommend cruising to others. (Intnet3)	.238	897	.000
I'll encourage friends and relatives to go on a cruise. (Intent4)	.227	897	.000

TABLE 6
TESTS OF SKEWNESS AND KURTOSIS OF OBSERVED DEPENDENT VARIABLES

Items	Mean	S.D.[a]	Skewness	Kurtosis
I'll say positive things about cruising to other people. (Intent1)	3.940	1.080	-0.769	-0.110
I intend to cruise in the next 3 years. (Inent2)	3.612	1.407	-0.593	-0.926
I'll recommend cruising to others. (Intent3)	3.824	1.239	-0.793	-0.345
I'll encourage friends and relatives to go on a cruise. (Intent4)	3.803	1.258	-0.816	-0.336

[a]. S.D. refers to standard deviation

As non-normality of data violates one prerequisite of running statistical tests in SEM, attention needed to be paid for choosing an appropriate estimation method which could give robust tests with non-normal data. Alternative statistical tests which do not assume normality have been recommended to handle data with marginal skewness and kurtosis such as Weighted Least Squares (WLS), Diagonally Weighted Least Squares (DWLS) and Robust Maximum

Likelihood (RML) (Jöreskog et al 2001). For instance, Li (2006) adopted a nonparametric bootstrapping approach to his study as an alternative way to analyze non-normal data. This method can repeatedly draw a large number of samples with replacement from raw data and generate a pseudopopulation based on which statistical inferences can be made (Kline 2005). Lai (2007) applied Robust Maximum Likelihood (RML) which is also termed as Satorra-Bentler scaled statistics (Storra and Bentler 1988) to her model testing. Normal Scores which normalizes variables before data analysis was also recommended as an alternative way to perform tests on data with non-normal distribution (du Toit et al 2006).

Maximum Likelihood (ML) was chosen for this study since this method has been suggested to be a robust estimator when fitting model to moderate nonnormal data (Muthén and Kaplan 1985; Finch 1993). ML is "often iterative, which means that the computer derives an initial solution and then attempts to improve these estimates through subsequent cycles of calculations" (Kline 2005, pp. 113). This application was available in AMOS.

Chapter Summary

This chapter discussed the methods used in the current study to examine proposed model and hypothesized relationships among the constructs. The study incorporated both qualitative and quantitative methods. For the qualitative methods, semi-structured interviews were conducted with participants recruited from both the Texas A&M campus and from Port Everglades cruise passengers. For quantitative methods, an online panel survey was conducted to collect data. The study followed the detailed procedures for developing a survey suggested by Groves et al (2004) as well as procedures for developing measurement scales recommended by Churchill (1979).

CHAPTER IV

MEASUREMENT SCALE DEVELOPMENT: THE PRELIMINARY STAGE

This chapter continues the discussion of measurement scale development from the previous section and focuses on reporting the outcomes of interviews, expert panel's review on instrument measures, and pilot study. Although these are still parts of the measurement scale development (i.e., interviews and experts panel are the second step while pilot test is the third step of measurement scale development) recommended by Churchill 1979, they are reported separately from the previous chapter for clarity of presentation.

Interviews and Panel of Experts

Self-congruity has been traditionally measured with semantic differential scales (e.g., Malhotra 1981; Dolich 1969; Bridwell 1968) with the same measurement scales used to measure two image constructs. The congruity between the two concepts is measured by calculating the distance between the respondent's evaluation of him/herself and the product/brands' image (Birdwell 1968). In his development of a scale to measure self-concept, person concepts, and product concepts, Malhotra (1981) indicated that the items selected for the study should be relevant to the concepts being measured. In other words, since self-congruity is concerned with the congruence between two constructs (i.e., self-images and products/brands' images), the measurement scales should be relevant to both dimensions of self-congruity: self-images and products/brands' images. Thus, for the self-congruity construct used in this study, scale items were first developed for affective destination image; then, the applicability of the scale to self-images was tested. The same procedures were applied to functional congruity. First, scale items

were developed for functional image of cruising; then the applicability of the scale to ideal functional image was tested.

The original intent was to ask experts on the panel to review measurement items for all constructs. However, a trial on one of the experts suggested that it would be too demanding and confusing to request the experts to review measurement items for all the constructs of interest (affective images of cruising, functional images of cruising, self images, ideal functional image of cruising, and cruising constraints) at once.

To simplify the task, the evaluations on face validity of measurement items for self-congruity and functional congruity were broken down into two steps (Appendix III). For the self-congruity construct, measurement items for affective image of cruising were first evaluated by a panel of experts which consisted of seven faculty who research in tourism and/or leisure at either Texas A&M University or the University of South Carolina. Then, the measurement items retained from the first round of reviews were submitted to a panel of two experts which consisted of a tourism faculty and a Ph.D. student majoring in tourism at Texas A&M University for further examination of the applicability of the scale to the self-image construct.

For the functional congruity dimension, the panel of seven experts was first asked to evaluate the face validity of measurement scales for the cognitive image of cruising. Then, the items which survived the first round of review were submitted for a second round of review with the panel of two experts for evaluating its applicability to the ideal functional attributes of cruising.

Profile of interview participants

Most interview participants (15) on campus had never gone on a cruise. Only 6 out of the 21 participants on campus had cruising experience among which all participants except one had cruised only once. More females (15) participated in the interviews than males (6). About half (11) were married while the other half were single or never married (10). Most participants (16) were either masters (6) or doctoral (10) students; 5 informants were non-students. The average age of participants was 35 ranging from 23 to 78, while average duration of the interviews was about 35 minutes, ranging from 25 minutes to an hour.

For the interviews at Port Everglades, the sample size was not determined a *priori*. Rather the strategy was to continue to interview people until the increment of new information forthcoming was minimal. In total, 32 interviews were conducted at the port with 19 interviews conducted with passengers who had just debarked from cruises and 13 interviews conducted with passengers who were waiting for embarkation. A total of 17 interviews were conducted with Holland America Cruise Lines' passengers and another 15 interviews were conducted with Princess Cruises' passengers. A majority (19) of the participants were female while 13 participants were male. Most participants (21) were retired. The average age of participants was 60 ranging from 22 to 85. Most participants (23) were married; five were single; two were divorced; and two were widowed. Most participants (27) had cruised more than once. Only five were first-timers. Most of the others were frequent cruisers. On average, they had cruised about three times in the past three years and about nine times in their life-time. The average duration of interviews at the port was 15 minutes and interviews were conducted at the seating areas of Holland America Line and Princess Cruises' terminals.

The main purpose of the interviews was to generate cruising specific measurement items for scale development. Thus, the following paragraphs present the measurement items generated from both the literature and interviews.

Self-congruity

Affective image of cruising was defined as subjective feelings or emotional response of individuals toward cruising (modified Gartner's (1993) affective image of destination). In past destination image research, Arousing-Sleepy, Exciting-Gloomy, Pleasant-Unpleasant, and Relaxing-Distressing were the most frequently used scales for measuring affective image of a destination. They were originally developed by Russel and Pratt (1980) to measure the affective meaning that people attribute to the environment. This scale has been adopted by many tourism scholars (e.g., Baloglu and Brinberg 1997; Baloglu and McCleary 1999; Baloglu 2001; Baloglu and Mangaloglu 2001; Kim and Richardson 2003; Baloglu and Love 2005) to measure the affective aspects of destination image. In her dissertation, Park (2006) used five semantic differential items (Enjoyable-Not enjoyable, Exciting-Boring, Comforting-Uncomforting, Pleasant-Unpleasant, and Calming-Annoying) derived from her qualitative interviews to measure the affective image toward cruise vacations.

Due to the lack of studies using affective image in the context of cruising, interviews with both cruisers and non-cruisers were conducted to generate items to measure the affective image of cruising. Non-cruisers were asked to describe the atmosphere of cruising or the mood that they would expect to experience if they went on a cruise; while cruisers were asked to describe the atmosphere of a cruise or the mood that they have experienced while they were on a cruise. This

technique was used by Echtner and Ritchie (1993) to identify the psychological component of destination image.

Participants reported various feelings toward cruising. The author first identified the affective items reported by the participants, then categorized the items which had similar meanings in order to reduce the items to a more manageable number for further interpretation. A name which was perceived to represent the meanings of all the items in a cluster was then assigned. For instance, “relaxing”, “at ease”, “tension-free”, “just laid back”, “low key”, and “stress free” were clustered under the category of “relaxing”. These procedures generated 18 affective images of cruising. The face validity of the image categories was further enhanced by inviting two graduate students in the Department of Recreation, Park & Tourism Sciences at Texas A&M University to review, comment, and revise the classifications. The affective image items and categories are reported in Table 7.

TABLE 7
AFFECTIVE IMAGES OF CRUISING

Relaxing (Relaxing/At easy/Tension-free/Just laid back/Low key/Stress free)	30 counts
Happy (Happy time/Delightful mood/Good mood/ "Up” feeling/People are positive	25
Enjoyable	9
Pleasant (Pleasant/Jovial)	6
Comforting (Comfortable environment)	6
Fun (Lots of fun/Have a good time)	5
Crowded (Crowded/Limited space)	5
Getaway (Get away from it all/Escape from the routine life/Take a break Being away from work and stress)	4
Romantic	3
Calming (Calming/Peaceful/Tranquility)	3
Exciting (Exciting mood/Excitement)	2
Freedom (Being free/Do as much as you want or as little as you want)	2
Luxury (Luxury/Lavish)	2
Adventurous (Adventure/New sights/Discovery)	2
Indulgence (Indulge/Being pampered)	2
Lazy	1
Carefree (Forget everything/Without thinking of work and life and just playing/ Do not have to worry about anything	1
Serene	1

The data in Table 1 revealed that most participants associated cruising with “relaxing” and “happy”. Most participants had positive affective images toward cruising. To generate semantic differential scales for each affective image item, antonyms were looked up in the dictionary (Oxford Thesaurus of English 2006) to match with each name. For instance, the word with the opposite meaning of “Relaxing” found in the dictionary was “Distressing”. Table 8 demonstrates the 18 semantic differential scales of affective image of cruising, among which six of them (Relaxing–Distressing, Pleasant–Unpleasant, Exciting–Gloomy, Comforting-Uncomforting, Enjoyable-Not enjoyable, Calming-Annoying) being duplicates of the items used in past studies.

TABLE 8
SEMANTIC DIFFERENTIAL SCALES FOR AFFECTIVE IMAGE OF CRUISING DERIVED FROM INTERVIEWS

1. Relaxing - Distressing
2. Pleasant - unpleasant
3. Exciting - gloomy
4. Comforting - uncomforting
5. Enjoyable - not enjoyable
6. Calming - annoying
7. Lazy - active
8. Getaway - obligated
9. Carefree - worried
10. Freedom - restrictions
11. Happy - unhappy
12. Fun - boredom
13. Luxury - abstemious
14. Romantic - realistic
15. Adventurous - unadventurous
16. Indulgence - severity
17. Serene - anxious
18. Crowded - spacious

Table 9 shows the measurement items of affective image of cruising, the sources of each item, and the settings in which the items were applied. The 20 measurement items of affective

image toward cruising were combined with the items generated from both past literature and the interviews.

TABLE 9
MEASUREMENT ITEMS OF AFFECTIVE IMAGES OF CRUISING SUBMITTED FOR A REVIEW BY PANEL OF EXPERTS

Sources	Items derived from each source	Setting	Items employed
Russel & Pratt, 1980; Baloglu & Brinberg, 1997; Baloglu & McCleary, 1999; Baloglu, 2001; Baloglu & Mangaloglu, 2001; Kim & Richardson, 2003; Baloglu & Love, 2005	1. Arousing - sleepy 2. Exciting - gloomy 3. Pleasant - unpleasant 4. Relaxing - distressing	Tourist destinations	1. Arousing - sleepy 2. Exciting - gloomy 3. Pleasant - unpleasant 4. Relaxing - distressing
Park, 2006	1. Enjoyable - not enjoyable 2. Exciting - boring 3. Comforting - uncomforting 4. Pleasant - unpleasant 5. Calming - annoying	Cruising	5. Enjoyable - not enjoyable 6. Comforting - uncomforting 7. Calming - annoying
Interviews	1. Relaxing - Distressing 2. Pleasant - unpleasant 3. Exciting - gloomy 4. Comforting - uncomforting 5. Enjoyable - not enjoyable 6. Calming - annoying 7. Lazy - active 8. Getaway - obligated 9. Carefree - worried 10. Freedom - restrictions 11. Happy - unhappy 12. Fun - boredom 13. Luxury - abstemious 14. Romantic - realistic 15. Adventurous - unadventurous 16. Indulgence - severity 17. Serene - anxious 18. Crowded - spacious	Cruising	8. Lazy - active 9. Escape - obligated 10. Carefree - worried 11. Hassle-free - Hassle 12. Freedom - restrictions 13. Happy - unhappy 14. Fun - boring 15. Luxurious - abstemious 16. Romantic - realistic 17. Adventurous - unadventurous 18. Indulgence - severity 19. Serene - anxious 20. Crowded - spacious

To simplify the measurement scale evaluation task for the panel of experts, only the positive affective items of the semantic differential scales were included on the list submitted to the seven experts. To convey clear meaning of each item to the experts, statements were used instead of providing only one word for each affective image item. For instance, “Cruising is

arousing" was used instead of "Arousing". Table 10 lists the statements formulated for the 20 semantic differential scales for affective image of cruising. Two items ("Cruising means carefree" and "Cruising means freedom to do whatever I want wherever I want on a cruise") were removed from the list after the first exercise of reducing measurement items conducted by a Ph.D. candidate and a tourism faculty based on their judgments of appropriateness and redundancy of items both within the constructs and among different constructs. Eleven measurement items of affective destination image survived the first round of panel expert review. They were: "Arousing – Sleepy"; "Exciting – Gloomy"; "Pleasant – Unpleasant"; "Relaxing – Distressing"; "Enjoyable – Not enjoyable"; "Comforting – Uncomforting"; "Calming – Annoying"; "Fun – Boring"; "Luxurious – Abstemious"; "Romantic – Realistic"; and "Adventurous – Unadventurous."

TABLE 10
CONVERTING AFFECTIVE IMAGE OF CRUISE ITEMS FROM SEMANTIC DIFFERENTIAL SCALE TO STATEMENTS

Semantic differential scale	Statements for each item
1. Arousing – sleepy*	1. Cruising is arousing.
2. Exciting – gloomy*	2. Cruising is exciting.
3. Pleasant – unpleasant*	3. Cruising is pleasant.
4. Relaxing – distressing*	4. Cruising is relaxing.
5. Enjoyable - not enjoyable*	5. Cruising is enjoyable.
6. Comforting – uncomforting*	6. Cruising is comforting.
7. Calming – annoying*	7. Cruising is calming.
8. Lazy - active	8. Cruising means being lazy on a cruise.
9. Escape - obligated	9. Cruising provides a chance to escape.
10.Carefree - worried	10.Cruising means carefree.
11.Hassle-free - Hassle	11.Cruising is hassle-free.
12.Freedom – restrictions	12.Cruising means freedom to do whatever I want wherever I want on a cruise.
13.Happy - unhappy	13.People are happy on a cruise.
14.Fun – boring*	14. Cruising is fun.
15.Luxurious - abstemious	15. Cruising is luxurious.
16.Romantic – realistic*	16. Cruising is romantic.
17.Adventurous – unadventurous*	17. Cruising is adventurous.
18.Indulgence - severity	18. Cruising provides a chance to indulge myself.
19.Serene - anxious	19. Cruising is serene.
20.Crowded - spacious	20. Cruising is crowded.

* Items retained after 1st round review by panel of experts

Self-image is regarded as a multidimentional construct which contains different images that people holds about themselves (Sirgy 1982; Rosenberg 1979). Since one of the study purposes was to find out how the congruity between affective image of cruising and perceived self-images influences cruising intentions, the measurement scale of self-images needed to be identical to the scale for affective image of cruising so that the magnitude of congruity could be computed. Therefore, the measurement items of affective image of cruising retained from the first round of review by the seven experts were submitted to a second round of review by two experts to examine their applicability to measure self-images. The experts recommended the removal of the "Luxurious – Abstemious" item considering the difficulty respondents may have in understanding the item's meaning. As a result, the ten items for measuring self-congruity between affective image of cruising and self images included in the pilot study were "Arousing – Sleepy"; "Exciting – Gloomy"; "Pleasant – Unpleasant"; "Relaxing – Distressing"; "Enjoyable – Not enjoyable"; "Comforting – Uncomforting"; "Calming – Annoying"; "Fun – Boring"; "Romantic – Realistic"; and "Adventurous – Unadventurous."

Functional congruity

Ideal functional attributes of cruising was defined as cruisers expectation of utilitarian features of their ideal cruise vacation (modified Kressmann et al.'s (2006) definition of functional congruity). Cognitive image of cruising was defined as beliefs or knowledge of cruising (modified Gartner's (1993) cognitive image of destination). Both constructs deal with cognitive aspects of cruising with the former referring to an ideal/perfect cruise vacation while the latter is related to how people perceive an actual cruising vacation.

Following Echtner and Ritchie (1993), to identify the cognitive or functional aspects of cruising image, participants were asked to list any distinctive or unique things that they would experience or have experienced when they went on a cruise. To derive the measurement items for ideal functional attributes of cruising, participants were asked: "In your perception, what would a perfect cruise vacation be like?" A wide range of attributes were yielded for both constructs: destination, staff/services, cruise ship conditions, food, other passengers, entertainments, activities/amenities, accommodation, and others (Table 11). While most people mentioned destinations when they were asked for ideal functional attributes of cruising, activities were the most frequently reported when they were asked about cognitive images of cruising.

The results of ideal functional attributes of cruising revealed the fantasies that people have toward cruising. For instance, some participants would like to have no one else on the cruise or fish off the back of the boat. More participants reported destination, staff or services, cruise ship condition, other passengers, and accommodations to be associated with their ideal functional attributes of cruising than their cognitive images of cruising. On the contrary, more participants reported food, entertainment, and activities to be associated with their cognitive images of cruising more than for their ideal functional attributes of cruising. These discrepancies might be due to the focuses of cruise lines on the later aspects.

TABLE 11
IDEAL FUNCTIONAL ATTRIBUTES OF CRUISING AND COGNITIVE IMAGE OF CRUISING

	Ideal functional Attributes of cruising	Cognitive image of cruising
Port of call/Destinations:	**35 counts**	**18 counts**
Exotic destinations/good port selection/exciting places/interesting ports	8	1
Stay longer/overnight at each destination longer	6	0
Opportunity to learn local culture	5	2
More stops	4	0
Understand local culture	2	0
Just cruise, no port, no stops/at sea all the time	2	0
Opportunity to taste local/traditional food	2	0
Stops during day time and moving at night when passengers are sleeping	1	0
Spend less time on the boat and more time in land	1	0
Having guides	1	0
Environmental friendly/contribution to local people	1	0
Arrive destinations without any effort	1	0
Fewer ports/too many ports to stop at	1	0
Disembark at different ports	0	1
See many locations in a small amount of time	0	1
Have land excursions	0	6
Provide an opportunity to visit new destinations	0	5
Opportunity to meet local people	0	1
See sun rising	0	1
Staff/services:	**19**	**12**
Friendly/courteous staff	5	2
Good/excellent service	3	2
Easy/smooth embarkation and debarkation process/shorter waiting time	2	0
Staff are helpful	2	3
Be attentive to my needs	1	0
Waiter waiting at my table is pleasant and remembers what I like	1	0
Be organized/ better baggage arrangement/spend less time on waiting	1	0
You don't have to do anything	1	1
Wheeled me all the way out	1	0
Wait on us every minute	1	0
Wait staff know my name	1	0
Staff are accommodating	0	1
Staff are obliging	0	1
Small number of passengers, lots of staff	0	2
Cruise ship condition:	**13**	**0**
Smaller cruise/with nobody else on it	6	0
Clean	3	0
Beautiful/nice ship	2	0
Lot of life boats/safety	2	0

TABLE 11
CONTINUED

	Ideal functional Attributes of cruising	Cognitive image of cruising
Food:	**11**	**28**
Incredible/above-average/good/wonderful food	7	10
Good seafood	2	2
Healthy food options	1	0
Luxury food service	1	0
You can have as little or as much food as you want	0	2
Good dining experience	0	4
24-hour free room service	0	3
Different food choices/restaurants	0	2
Eating constantly	0	4
Can take your food and drink wherever you want to go	0	1
Other passengers:	**9**	**6**
Family/friend togetherness/ with family or friends	4	0
Passengers at similar age	1	0
Travel with fun people	1	0
Acquainted with other passengers	1	0
Lots of old people/ Less old people/younger passenger profile	1	0
Meeting people	1	2
Good company	0	1
See different types of people	0	1
Being with a bunch of strangers	0	2
Entertainment:	**7**	**26**
Good entertainment	6	5
Be entertained	1	1
Live entertainment	0	20
Activities/amenities:	**6**	**30**
Flexible schedule	3	0
Learning opportunities for children to learn about different cultures, ocean, etc.	1	0
A variety of activities	1	26
Have baby-sitting service	1	1
Do as much as you want or as little as you want	0	1
A wide range of itinerary for everybody, of all ages	0	1
Sit on the deck	0	1
Accommodation:	**5**	**3**
Spacious rooms	3	2
Room with sea view/balcony	1	1
Comfortable accommodation	1	0
Other:	**25**	**12**
Good/beautiful weather	7	1

TABLE 11
CONTINUED

	Ideal functional Attributes of cruising	Cognitive image of cruising
No sea sick	3	0
Deliver what's being advertised/no misstatements	2	0
All inclusive	2	4
Winning the jackpot	2	0
Affordable	1	0
Fish off the back of the boat	1	0
Can lay down anytime and anywhere	1	0
No discrimination	1	0
Adults only, no kids	1	0
Complementary gifts/nice surprises for honeymooner or anniversaries	1	0
Provide sufficient information before boarding	1	0
Learning opportunity for my children	1	0
Hear some ocean life at night	1	0
Lots of Laughter	0	1
Being surrounded by water	0	3
Wearing bikini suit on the deck	0	1
Get dressed up	0	1
Lying under the stars	0	1

To measure the congruity between ideal functional attributes of cruising and cognitive images of cruising, the measurement items needed to be applicable to both constructs. A list of 74 measurement items was compiled based on both past literature (Kerstetter, Yen, and Yarnal 2005; Park 2006) and the interviews conducted in this study. Similar to self-congruity, the list was submitted to the first round of review by the panel of experts for establishing the face validity of indicators measuring cognitive images of cruising. The list was shortened to 21 items after judgments of redundancy or inapplicability to both ideal functional attributes of cruising and cognitive images of cruising constructs by the experts (Table 12).

TABLE 12
MEASUREMENT ITEMS OF COGNITIVE IMAGE OF CRUISING RETAINED FROM THE FIRST ROUND OF PANEL OF EXPERTS' REVIEW

1. I can arrive at destinations without any effort with cruising.
2. There will be a small number of passengers and lots of staff on a cruise.
3. Cruises are crowded.
4. I don't have to wait for a long time for my baggage if I cruise.
5. Cruise ship staff will care for my needs.
6. Cruising has a variety of activities available.
7. Cruise ships provide excellent service.
8. I'll have higher than average service if I go on a cruise.
9. Cruising has good entertainment.
10. Cruising provides me an opportunity to engage in activities different from those available at home.
11. Cruising has everything included in one price.
12. Cruising means eating constantly.
13. Cruise ships are clean.
14. Cruising means I only have to unpack once.
15. The room on a cruise is spacious.
16. Cruising has a wide range of itineraries for everybody.
17. Everything you want is right there on a cruise ship.
18. Cruises have comfortable accommodations.
19. Cruising means lots of eating options.
20. Cruising provides me an opportunity to eat good food.
21. I don't have to wait for a long time for embarkation or debarkation if I cruise.

The measurement items retained from the first round of reviews were further examined by two experts in a second round of review for their applicability to the ideal functional attributes of cruising, and all the items were judged to be representative of the construct. The wordings of two items were revised to be more applicable to the construct ("Cruises are crowded" was reworded as "There is a lot of open space on a cruise ship" and "The room on a cruise is spacious" was reworded as "The cabin on a cruise is spacious") (Table 13). In accordance with past literature (e.g., Fakeye and Crompton 1991; Baloglu and McCleary 1999; Uysal, Chen, and Williams 2003), the 21 items were categorized into five dimensions: "Services", "Food", "Activities", "Cruise ship Conditions", and "Convenience".

TABLE 13
MEASUREMENT ITEMS OF COGNITIVE CRUISING IMAGE RETAINED FROM THE SECOND ROUND OF PANEL OF EXPERTS' REVIEW

Services
1. There will be a small number of passengers and lots of staff on a cruise.
2. Cruise ship staff will care for my needs.
3. Cruise ships provide excellent service.
4. I'll have higher than average service if I go on a cruise.
5. Cruising has everything included in one price.

Food
6. Cruising means eating constantly.
7. Cruising means lots of eating options.
8. Cruising provides me an opportunity to eat good food.

Activities
9. Cruising has a variety of activities available.
10. Cruising provides me an opportunity to engage in activities different from those available at home.
11. Cruising has a wide range of itineraries for everybody.
12. Cruising has good entertainment.

Cruise ship conditions
13. There is a lot of open space on a cruise ship
14. The cabin on a cruise is spacious.
15. Cruises have comfortable accommodations.
16. Cruise ships are clean.

Convenience
17. I can arrive at destinations without any effort with cruising.
18. I don't have to wait for a long time for my baggage if I cruise.
19. Cruising means I only have to unpack once.
20. Everything you want is right there on a cruise ship.
21. I don't have to wait for a long time for embarkation or debarkation if I cruise.

Cruising constraints

Cruising constraints are defined as the factors causing: 1) inability to maintain cruising frequency at or increase it to a desired level, 2) ceasing cruising, 3) non-cruising, and/or 4) insufficient enjoyment of cruising (modified Jackson and Scott's (1999) leisure constraint definition). The interviews suggested that participants experienced various constraints toward cruising. The constraints items derived from interviews were classified into three categories

based on Crawford, Jackson, and Godbey's (1991) conceptualization: intrapersonal constraints, interpersonal constraints, and structural constraints (Table 14).

TABLE 14
CRUISING CONSTRAINTS REPORTED BY PARTICIPANTS IN THE INTERVIEWS

Intrapersonal constraint:	**43 counts**
Lack of interest.	5
Not my first choice.	5
Cruising is for old people.	5
Cruising doesn't provide much opportunity to understand local cultures of the destinations.	4
Cruising doesn't provide much opportunity to have contact with nature.	3
Cruising is boring.	3
The time that I can spend on the destinations is too short.	3
I'll get seasick.	3
I am waiting for the right moment to take a cruise.	3
Cruising is not safe.	2
I don't have much contact with local people at the destinations.	1
Cruising negatively affect the sustainability of local environment.	1
I won't learn anything from cruising.	1
Cruising doesn't fit into my family life style.	1
I prefer flying directly to the destinations instead of cruising.	1
It never occurs to me as my travel option.	1
There are many other travel alternatives that I'd like to do before cruising.	1
There needs to be a situation or an occasion to take a cruise.	1
I am interested in cruising, but I'd like to do it when I am old.	1
I have claustrophobic.	1
Cruising is packaged/artificial/shallow/mass tourism.	1
I'll experience lack of freedom on the cruise.	1
Interpersonal constraint:	**11**
People that I know do not have cruising experience.	3
My family/friends are not interested in cruising.	2
My family/friends do not cruise due to various reasons such as time.	2
I'd like to cruise but no one is going with me at this moment.	2
I don't socialize well with strangers.	2
My family/friends want me to stay at home instead of cruising.	1
I can't cruise now due to my family responsibilities.	1
I need to stay home to take care of my spouse/partner.	1
Structural constraint:	**31**
Lack of financial resource/can't afford it.	9
Lack of time.	9
Cruising is more expensive compared to other travel options.	3
The space on cruise is very limited/Cruise is crowded/There are too many people on cruise ship.	3
My family/friend and I have different work schedule.	3
I have pets.	1

TABLE 14
CONTINUED

There is limited range of activity on cruise will fit into my interest.	1
There is a lack of freedom on the cruise ship.	1
I have to apply for a visa.	1
My family/friend and I want to go to different locations.	1
I have no constraints at all.	**24**

Table 15 summarizes the total number of counts of constraint items reported by non-cruisers and cruisers respectively. In total, non-cruisers reported more constraints than cruisers even though the cruiser sample size (38) was more than twice of the non-cruiser sample size (15). However, cruisers reported more structural constraints than non-cruisers. Three reasons may explain this phenomenon: 1) This might be due to the smaller sample size of non-cruisers than cruisers; 2) Cruisers might have more resources to negotiate constraints; and 3) Structural constraints may be more easily surmounted than intrapersonal and interpersonal constraints. Therefore, cruisers were able to cruise despite the presence of structural constraints. In addition, many cruisers (24) reported that they did not experience any constraints at all when they were deciding whether or not to go on a cruise while all of the non-cruisers reported some constraints limiting their cruising decisions.

TABLE 15
COUNTS OF CONSTRAINT ITEMS REPORTED BY CRUISERS AND NON-CRUISERS RESPECTIVELY

	Non-cruisers	Cruisers	Total
Intrapersonal constraints	31	12	43
Interpersonal constraints	8	3	11
Structural constraints	11	20	31
No constraints	0	24	24

A list of cruising constraint items was compiled based on past literature (Kerstetter, Yen, and Yarnal 2005; Park 2006) and the interviews conducted in this study. This yielded 55 constraint items after removing the duplicated and inappropriate items (Table 16). These constraint items were also submitted for a review by a panel of experts.

TABLE 16
CRUISING CONSTRAINT ITEMS SUBMITTED TO THE PANEL OF EXPERTS FOR REVIEW

1. I might be lonely on a cruise.
2. I travel with individuals who do not want to cruise.
3. I need a special diet that is not available on a cruise.
4. I might not like my dinner companions.
5. I have cruised once and that was enough.
6. Cruising is boring.
7. I don't have a good time when I cruise.
8. Cruise ships are too confining.
9. I am not sure what to wear on a cruise ship.
10. I worry about getting lost on a cruise ship.
11. I worry about security on cruise ships.
12. Cruise pots are difficult to get to.
13. Getting to and from the cruise ports adds to the cost.
14. Cruising is expensive.
15. Cruising has hidden costs.
16. It's difficult for me to find time to cruise.
17. I have sea-sickness/motion-sickness.
18. I have fear of water/ocean.
19. I have a lack of knowledge about cruise vacations.
20. I have claustrophobia.
21. I have physical disability.
22. I have poor health.
23. I am unaware of how to book a cruise.
24. My spouse/partner has poor health.
25. I have no companion to go on a cruise with.
26. I have no time to cruise.
27. I don't have the opportunity to cruise.
28. I don't cruise due to my family commitment.
29. I don't cruise due to my work responsibilities.
30. Cruising is not my family lifestyle.
31. I am not interested in cruising.
32. Cruising is not my first choice.
33. Cruising doesn't provide much opportunity to understand local cultures of the destinations.
34. Cruising doesn't provide me much contact with local people at the destinations.
35. Cruising doesn't provide me much opportunity to have contact with nature.
36. Cruising is for old people.
37. Cruising has negative impact the sustainability of local environment.
38. I won't learn anything from cruising.
39. The time that I can spend on the destinations are too short.
40. I prefer flying directly to the destinations instead of cruising.
41. Cruising is not safe.
42. Cruising never occurs to me as my travel option.
43. I am interested in cruising, but I'd like to do it when I am old.

TABLE 16
CONTINUED

44. There are many other travel alternatives that I'd like to do before cruising.
45. There needs to be an occasion to take a cruise.
46. I am waiting for the right moment to take a cruise.
47. My family/friends want me to stay at home instead of cruising.
48. My family/friends do not cruise due to various reasons such as time.
49. People that I know do not have cruising experience.
50. I don't socialize well with strangers.
51. I have pets.
52. There is limited range of activity on cruise which will fit into my interest.
53. The space on cruise is very limited.
54. There are too many people on cruise ship.
55. I will be experiencing lack of freedom on the cruise ship.

After review by the panel of experts, the number of measurement items for cruising constraints was reduced to 23 with considerations of redundancy, applicability, and representativeness of the construct (Table 17). Items 5, 8, 33, 35, 37, 38, 46, and 54 in Table 16 were removed due to the lack of representativeness of the travel constraint construct; item 15 was deleted due to its vague meaning; and the rest of items were discarded because of redundancy.

TABLE 17
CRUISING CONSTRAINT ITEMS RETAINED FROM THE REVIEW BY PANEL OF EXPERTS

Intrapersonal constraints

1. I have sea-sickness/motion-sickness.
2. I have a fear of the water/ocean.
3. I have a lack of knowledge about cruise vacations.
4. I don't cruise because I have claustrophobia.
5. I can't cruise because I have poor health.
6. I am not interested in cruising.
7. Cruising never occurs to me as my travel option.
8. There are many other travel alternatives that I'd like to do before cruising.
9. I worry about security on cruise ships.
10. I am interested in cruising, but I'd like to do it when I am old.

Interpersonal constraints

11. I have no companion to go on a cruise with.
12. My family/friends do not cruise.
13. I might not like my dinner companions on the cruise.
14. I might be lonely on a cruise.
15. I don't cruise because my spouse/partner has poor health.
16. I don't socialize well with strangers.

TABLE 17
CONTINUED

Structural constraints
17. Cruising is too expensive.
18. I don't cruise because I have too many family obligations.
19. Cruising is not my family's lifestyle.
20. I don't cruise due to my work responsibilities.
21. It's difficult for me to find time to cruise.
22. I need a special diet that is not available on a cruise.
23. I prefer flying directly to the destinations instead of cruising.

Measurement Scales Adopted from Past Studies

Constraint negotiation

The study employed a revised version of Loucks-Atkinsons and Mannell's (2007) constraint negotiation scales. Since the original scale was developed for active leisure activities participation among individuals with fibromyalgia, the items were modified and reworded to adapt to a cruise tourism context. Some items were not included due to their inapplicability to the study context. As a result, 16 measurement items were derived (Table 18). Consistent with Loucks-Atkinsons and Mannell (2007), a 5-point Likert-type scale (1 = "Never," 5 = "Very Often") was used to measure each negotiation strategy item.

TABLE 18
CRUISING CONSTRAINT NEGOTIATION ITEMS DERIVED FROM LOUCKS-ATKINSONS AND MANNELL (2007)

Improving finances
1. Budget my money for cruising.
2. Find a cruise that best fits within budget.
3. Save up money to cruise.
4. Try to get a better job so I can afford what I want to do.
5. Learn to live in my financial means.

Change interpersonal relations
6. Find people to cruise with.
7. Plan cruising around my family/friend's work time.
8. Organize cruising with my own group.
9. Try to find people with similar interests.

Time management
10. Set aside time for cruising.
11. Plan ahead for things so that I can cruise.
12. Be organized so that I can cruise.
13. Get up earlier or stay up later to increase time for my cruise vacations.
14. Prioritise what I want to do, and make cruising a priority sometimes.
15. Ask my family to share in the chores so that I can cruise.
16. Find a cruise that best fits within my time limitations.

Self-efficacy

Self-efficacy has often been measured by asking respondents their level of confidence for performing certain behaviors (e.g, Loucks-Atkinsons and Mannell 2007; Giacobbi, Hausenblas, and Penfield 2005; Bandura et al 1980). Following Loucks-Atkinsons and Mannell (2007), this study evaluated negotiation-efficacy by asking respondents to indicate their level of confidence for executing each constraint negotiation strategy item. A confidence scale (0% to 100%) was used in which 0% meant "Very Uncertain" while 100% meant "Very Certain." This measurement has been used frequently in health related studies and has been referred to as "standard measurement of self-efficacy strength" by Maibach and Murphy (1995, p. 44). Following Bandura et al (1980) and Loucks-Atkinson and Mannell (2007), two steps were adopted to compute the average strength of self-efficacy for each subject: 1) the scores for each

self-efficacy item was summed; then 2) the overall score by the number of self-efficacy item was averaged. The maximum average score for the strength of self-efficacy was 100 and the minimum average score for the strength of self-efficacy was 0. The mean self-efficacy score yielded in the study was 57.63. The persons with scores lower than 57.63 were classified into the low self-efficacy group and scores higher than 57.63 were classified into the high self-efficacy group. The sample sizes for the high self-efficacy and low self-efficacy groups were 494 and 403 respectively.

Travel intentions

This study adopted Zeithaml, Berry and Parasuraman's (1996) measurement of behavioral intentions. In their investigation of behavioral consequences of service quality, they developed a 13-item behavioral intention measurement scale which includes five dimensions of behavioral intentions: loyalty to company (loyalty), propensity to switch (switch), willingness to pay more (pay more), external response to problem (external response), and internal response to problem (internal response). The loyalty component of behavioral intentions was chosen in this study to measure behavioral intentions for its consistent satisfactory factor loadings across different studies (e.g., Zeithaml, Berry and Parasuraman 1996; Tian-Cole, Crompton, and Willson 2002; Baker and Crompton 2000; Lee 2005) (Table 19). Similar to Lee (2005), four modified items were included in the measurement scale: I'll say positive things about cruising to other people; I intend to cruise in the next 3 years; I'll recommend cruising to others; and I'll encourage friends and relatives to go on a cruise. A 5-point Likert-type scale (1 = "Strongly Disagree," 5 = "Strongly Agree") was used to measure each behavioral intention item.

TABLE 19
CRUISING INTENTION MEASUREMENT ITEMS

I'll say positive things about cruising to other people.
I intend to cruise in the next 3 years.
I'll recommend cruising to others.
I'll encourage friends and relatives to go on a cruise.

Pilot Test

Based on measurement items derived from the literature review, and interviews and from feedback from a panel of experts, a questionnaire was designed and a pilot test followed (Appendix IV). The pilot test was conducted with 293 undergraduate students who were in classes in the Department of Recreation, Park & Tourism Sciences (RPTS) or the Sociology Department at Texas A&M University. Students were recruited from six RPTS courses (RPTS 201, RPTS 202, RPTS 301, RPTS 308, RPTS 336, and RPTS 340) and two Sociology courses (SOCI 205 and SOCI 330). Since some students registered for more than one course, they were told not to fill out the questionnaire again if they had already completed the survey. Two mistakes on the questionnaire were identified by the RPTS 202 students in the first round of the pilot test: 1) The end points were missing from one of the scales (i.e., *strongly disagree, neutral and strongly agree* were missing in Question #1 in Section IV); and 2) There was a spelling error in one of the questions (Question 3 in Section VI: People see *my* as the sort of person who is…). These mistakes were corrected and revised questionnaires were distributed to the students in other classes.

The data was entered into SPSS following the data collection. Two procedures were conducted to purify and identify the dimensions of the scales: exploratory factor analysis and reliability tests. Factor analysis with a varimax rotation was first performed on all measurement items to validate the a-priori assignment of items into constructs of interests by the seven expert

judges. Four dimensions were identified (self-congruity, functional congruity, constraints to cruising, and constraint negotiation strategies) and all items loaded on their hypothesized constructs respectively with no cross-loadings. This indicates that all the items were measuring the constructs that they were hypothesized to measure. The items of each construct were further submitted to exploratory factor analysis to test the dimensionality and reliability of each scale. Items which cross-loaded on different factors or with low factor loadings (< .4) were considered for elimination (e.g., Gursoy and Gavcar 2005; Chen and Hsu 2001). The reliability of the scales were tested by item-to-total correlations and reliability coefficients, which are two of the most commonly used methods for testing reliability (Netemeyer, Bearden, and Sharma 2003). While item-to-total correlations are concerned with the degree of correlations of each item to a construct of measurement, reliability coefficients reveal the interrelatedness among a set of items designed to measure a single construct (Netemeyer, Bearden, and Sharma 2003). Thus, items with corrected item-to-total correlations lower than .5 (Zaichkowsky 1985) and factors with lower than .7 Cronbach's Alph were considered for elimination (Netemeyer, Bearden, and Sharma 2003). The following paragraphs report the test results for each construct.

Self-congruity

7-point semantic differential scales were used to measure each dimension of self-congruity. For instance, when measuring the congruity between actual self-image and affective cruising image for the "arousing 1 2 3 4 5 6 7 sleepy" dimension, respondents were asked to choose the most appropriate number to best describe their feelings toward cruising and their actual self-image respectively. Consistent with literature (Birdwell 1968; Ross 1971; Dolich 1969), "D-measure" was used to measure self-congruity in which the absolute arithmetic

difference between the two concepts along the same measurement item was computed. “0” refers to high congruence while “6” refers to low congruence between the two concepts. For the purpose of consistent direction of scaling and easier interpretation, the data were reversely coded so that “6” referred to high congruence and “0” referred to low congruence.

Varimax exploratory factor analysis was performed on the data collected from the pilot test with 293 undergraduate students. The measurement items of all self-congruity constructs (actual self, ideal self, social self, and social ideal self) loaded on their expected factor with a greater than .8 (.883, .916, .855, .884) Cronbach’s Alpha (Table 20). “Romantic-Realistic” was deleted from the scale due to its consistent low item-total correlation (< .5) across all self-constructs.

TABLE 20
CRONBACH’S ALPHAS OF SELF-CONGRUITY CONSTRUCTS

Congruity constructs	Coefficient α	Factor loading	Item-to-total correlations	Mean	S.D.[a]
Actual self-congruity	.883				
Arousing – Sleepy		.615	.529	4.717	1.298
Exciting – Gloomy		.786	.710	4.968	1.155
Pleasant – Unpleasant		.770	.678	4.964	1.192
Relaxing – Distressing		.597	.507	4.755	1.263
Enjoyable – Not enjoyable		.847	.774	5.076	1.112
Comforting – Uncomforting		.735	.645	4.896	1.160
Calming – Annoying		.722	.640	4.757	1.195
Fun – Boring		.804	.729	5.051	1.191
Adventurous – Unadventurous		.624	.537	4.609	1.430
Ideal self-congruity	.916				
Arousing – Sleepy		.710	.649	4.741	1.239
Exciting – Gloomy		.865	.816	5.014	1.177
Pleasant – Unpleasant		.823	.754	5.108	1.179
Relaxing – Distressing		.751	.673	5.127	1.103
Enjoyable – Not enjoyable		.881	.826	5.279	1.140
Comforting – Uncomforting		.782	.712	4.740	1.235
Calming – Annoying		.806	.742	4.775	1.251
Fun – Boring		.784	.721	5.123	1.204
Adventurous – Unadventurous		.690	.626	4.554	1.572

TABLE 20
CONTINUED

Congruity constructs	Coefficient α	Factor loading	Item-to-total correlations	Mean	S.D.[a]
Social self-congruity	.855				
Arousing – Sleepy		.597	.602	4.756	1.217
Exciting – Gloomy		.768	.472	4.835	1.151
Pleasant – Unpleasant		.734	.765	4.928	1.096
Relaxing – Distressing		.561	.683	4.749	1.208
Enjoyable – Not enjoyable		.797	.819	5.050	1.060
Comforting – Uncomforting		.675	.709	4.921	1.092
Calming – Annoying		.697	.722	4.746	1.167
Fun – Boring		.747	.705	5.015	1.154
Adventurous – Unadventurous		.659	.664	4.609	1.472
Ideal social self-congruity	.884				
Arousing – Sleepy		.671	.600	4.776	1.222
Exciting – Gloomy		.558	.497	4.877	2.344
Pleasant – Unpleasant		.836	.774	5.051	1.212
Relaxing – Distressing		.769	.696	5.164	1.148
Enjoyable – Not enjoyable		.882	.826	5.204	1.166
Comforting – Uncomforting		.794	.722	4.776	1.237
Calming – Annoying		.804	.715	4.767	1.251
Fun – Boring		.777	.714	5.131	1.164
Adventurous – Unadventurous		.742	.646	4.531	1.605

[a]. S.D. refers to standard deviation

Functional congruity

The same data cleaning procedures used for self-congruity were applied to functional congruity. The distances between the two concepts along the same set of attributes were computed and reverse coding was performed. Varimax exploratory factor analysis resulted in five factors. The first factor integrated "Services" and "Food" dimensions in Table 21 into one dimension which was termed as "Service". Since staff service is part of the dining experience, the integration of service and food was no surprise. Five measurement items were retained in the dimension and all item-to-total correlations were larger than .5. Cronbach's Alpha for this factor was .837. "Cruise ships are clean" also loaded on the "Service" dimension. Although it had satisfying factor loading (.622) and item-to-total correlation (.524), it was judged to be more

associated with cruise ship's condition rather than service dimension. Therefore, it was excluded from the list.

The second dimension resulted from factor analysis was termed as "Convenience" which consisted of "I don't have to wait for a long time for embarkation or debarkation if I cruise", "I don't have to wait for a long time for my baggage if I cruise", and "Cruising means I only have to unpack once." However, since the factor had a lower than .6 Cronbach's Alpha, the factor was excluded from the final measurement scale due to its low reliability.

The third dimension was termed as "Space" and contained "Cruises have comfortable accommodations", "The cabin on a cruise is spacious", "There is a lot of open space on a cruise ship", and "There will be a small number of passengers and lots of staff on a cruise." The Cronbach's Alpha for this factor was .711 and all items had higher than .4 item-to-total correlations. Although "There will be a small number of passengers and lots of staff on a cruise" was predicted to belong to the dimension of "service", it might have been misinterpreted by the respondents to refer to crowding. Therefore, the item was reworded to "There will be a small number of passengers on a cruise."

The fourth dimension was "Activities" which was comprised of four items: "Cruising has a variety of activities available", "Cruising provides me an opportunity to engage in activities different from those available at home", "Cruising has a wide range of itineraries for everybody", and "Cruising has good entertainment." The Cronbach's Alpha for this dimension was .727 and all item-to-total correlations were larger than .4.

The last dimension consisted of two items: "Cruising means eating constantly" and "I can arrive at destinations without any effort with cruising." This dimension was excluded from

analysis due to its lack of meaningful interpretations. Therefore, the resulted measurement items for functional congruity are shown in Table 21.

TABLE 21
COEFFICIENT AND ITEM-TO-TOTAL CORRELATION OF FUNCTIONAL CONGRUITY MEASUREMENT SCALE

Measures	Coefficient α	Factor loading	Item-to-total correlation	Mean	S.D.[a]
Services:	.837				
• Cruise ships provide excellent service.		.752	.717	5.243	.789
• I'll have higher than average service if I go on a cruise		.699	.637	5.035	.884
• Cruising means lots of eating options.		.710	.647	5.194	.843
• Cruise ship staff will care for my needs.		.689	.552	5.168	.764
• Cruising provides me an opportunity to eat good food.		.686	.589	5.219	.822
Space:	.711				
• Cruises have comfortable accommodations.		.406	.436	4.929	.839
• The cabin on a cruise is spacious.		.695	.573	4.000	1.228
• There is a lot of open space on a cruise ship.		.737	.535	4.463	1.156
• There will be a small number of passengers on a cruise.		.761	.468	4.343	1.170
Activities:	.727				
• Cruising has a variety of activities available.		.455	.528	5.359	.801
• Cruising provides me an opportunity to engage in activities different from those available at home.		.706	.560	5.342	.853
• Cruising has a wide range of itineraries for everybody.		.651	.477	5.000	.907
• Cruising has good entertainment.		.473	.505	5.211	.821

[a]. S.D. refers to standard deviation.

Constraints to cruising

Varimax exploratory factor analysis was performed on the scale items measuring constraints to cruising. The items loaded on five factors. The first factor was termed "Intrapersonal constraints" and consisted of seven items with a .787 Cronbach's Alpha and all item-to-total correlations were greater than .4 (Table 22).

Consistent with Kerstetter, Yen, and Yarnal (2005), the second factor was "Not an option" which was comprised of six items. However, "I prefer flying directly to the destinations instead of cruising" was deleted from analysis due to its cross-loading on another factor. The Cronbach's Alpha for this factor was .820 and all item-to-total correlations were larger than .5.

The third factor was "Structural constraints" which consisted of four items. The Cronbach's Alpha of this factor was .706. Although "Cruising is too expensive" had lower than .4 item-to-total correlation, it was retained in the measurement scale to be consistent with the literature (Kerstetter, Yen, and Yarnal 2005; Park 2006).

The fourth factor was "Interpersonal constraints" and contained four items. Since "I don't socialize well with strangers" was cross-loaded on "Intrapersonal constraints", it was dropped from future analysis. The Cronbach's Alpha was .679 and all item-to-total correlations were greater than .4. Although "I don't cruise because my spouse/partner has poor health" was loaded on intrapersonal constraint dimension, a review by an expert who specializes in leisure constraints suggested to classify this item in the category of interpersonal constraints. Therefore, the resultant measurement scale for the interpersonal constraints contained five items.

Since the last factor produced by the factor analysis consisted of only one item: "I am interested in cruising, but I'd like to do it when I am old," it was excluded from the measurement scale for constraints to cruising.

TABLE 22
COEFFICIENT AND ITEM-TO-TOTAL CORRELATION OF CRUISING CONSTRAINTS MEASUREMENT SCALE

Measures	Coefficient α	Factor loading	Item-to-total correlation	Mean	S.D.[a]
Intrapersonal constraints:	.787				
• I can't cruise because I have poor health.		.810	.657	1.335	.722
• I don't cruise because I have claustrophobia.		.695	.612	1.625	.986
• I have sea-sickness/motion-sickness.		.565	.511	1.890	1.191
• *I don't cruise because my spouse/partner has poor health* *		.760	.611	1.340	.769
• I have a fear of the water/ocean.		.656	.478	1.760	1.108
• I need a special diet that is not available on a cruise.		.482	.419	1.421	.819
• I worry about security on cruise ships.		.439	.442	2.038	1.179
Interpersonal constraints:	.679				
• I might not like my dinner companions on a cruise.		.607	.401	1.983	1.129

TABLE 22
CONTINUED

Measures	Coefficient α	Factor loading	Item-to-total correlation	Mean	S.D.[a]
• I have no companion to go on a cruise with.		.675	.502	2.017	1.222
• I might be lonely on a cruise.		.714	.595	1,815	1.012
Structural constraints:	.706				
• It's difficult for me to find time to cruise.		.768	.559	3.138	1.313
• I don't cruise due to my work responsibilities.		.746	.591	2.564	1.331
• I don't cruise because I have too many family obligations.		.622	.483	2.271	1.186
• Cruising is too expensive.		.597	.342	3.517	1.203
Not an option:	.820				
• There are many other travel alternatives that I'd like to do before cruising.		.715	.566	2.959	1.338
• I am not interested in cruising.		.683	.645	1.791	1.122
• My family/friends do not cruise.		.592	.529	2.540	1.284
• Cruising never occur to me as a travel option.		.729	.690	2.495	1.282
• Cruising is not my family's lifestyle.		.785	.645	2.486	1.335

***** Item moved to category of "Interpersonal constraints" based on expert's opinion.
[a]. S.D. refers to standard deviation

Chapter Summary

This chapter presented how the measurement scales were derived at the preliminary stages of instrument measures development. The results of interviews, panel of experts' review, and pilot test were also discussed, and the detailed procedures for developing the measurement scales were revealed. Measurement items were first generated from both interviews and a review of the literature. Then, the scales were reviewed and judged by an expert panel. A pilot test with undergraduate students followed, and based on which, EFA and reliability tests were performed to further purify the measurement scales.

CHAPTER V

FINDINGS

An online panel survey was conducted following the pilot test (Appendix V). Descriptive analyses were first conducted with the **S**tatistical **P**ackage for the **S**ocial **S**ciences (SPSS 15.0) to understand the sample profile. Next, the measurement scales were tested for reliability and validity before testing the conceptual model and hypothesized relationships. **S**tructural **E**quation **M**odeling (SEM) was then performed with **A**nalysis of **MO**ment **S**tructures (AMOS 7.0) to determine the overall fit of the proposed model with the data, including the causal relationships between major variables measured, and the influences of constructs of interest on behavioral intentions.

Demographic Profile of Respondents

After data cleaning, the total sample size was 897 with 333 non-cruisers and 564 cruisers. As was requested, approximately one half of respondents were female (48.3%). The average age of respondents was 48.9 and ranged from 25 to 90 years old. More than half of all respondents were employed full-time (58.9%), followed by retirees (21.1%), part-time workers (9.3%) and full-time homemakers (6.9%). Most respondents were Caucasian (86.3%) and were married (68.7%). The average annual household income of respondents was US$62,000. Table 23 displays the sample's profile in detail.

TABLE 23
DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

	Frequency	Percentage	Average	Median
Gender				
Male	434	51.6%		
Female	463	48.4%		
Age			48.9	47
25 – 29	76	8.5%		
30 – 39	209	23.3%		
40 – 49	200	22.3%		
50 – 59	193	21.5%		
60 – 74	147	16.4%		
75+	72	8.0%		
Income			$62,000	$50,000
$25,000 to less than $40,000	155	17.3%		
$40,000 to less than $50,000	116	12.9%		
$50,000 to less than $60,000	229	25.5%		
$75,000 to less than $100,000	163	18.2%		
$100,000 to less than $200,000	200	22.3%		
$200,000+	34	3.8%		
Marital status				
Married	616	68.7%		
Separated	9	1.0%		
Single/never married	152	16.9%		
Widowed	27	3.0%		
Divorced	93	10.4%		
Employment status				
Employed full-time	528	58.9%		
Employed part-time	83	9.3%		
Full-time homemaker	62	6.9%		
Not currently employed	19	2.1%		
Retired	189	21.1%		
Student	6	.7%		
Other	10	1.1%		
Education background				
Less than high school	8	.9%		
Some college, not completed	191	21.3%		
Completed high school	162	18.1%		
Completed college	329	36.7%		
Post graduate work started or completed	207	23.1%		
Ethnic background				
African American	30	3.3%		
Caucasian	774	86.3%		
Native American	6	.7%		
Hispanic	34	3.8%		
Asian	46	5.1%		
Other	7	.8%		

Assessment of Reliability and Validity of Measurement Scales

The measurement scales developed in the earlier stages were further validated with the data collected from the online panel survey. Confirmatory factor analysis (CFA) was performed in AMOS 7.0 to purify the measurements. The composite reliability of the factors for each construct, which also refers to the internal consistency of indicators measuring the underlying factors (Fornell and Larcker 1981), was examined in confirmatory factor analysis (Reuterberg and Gustafsson 1992). According to Bagozzi and Kimmel (1995), a factor displays its reliability if its composite reliability is greater than .6. The composite reliability and Cronbach alphas of all constructs in this study were found to be larger than .70 (Table 24). Below is the formula that was used to compute composite reliability (Hatcher 1994):

$$\text{Composite reliability} = \frac{(\Sigma L_i)^2}{(\Sigma L_i)^2 + \Sigma \text{Var}(E_i)}$$

where L_i = the standardized factor loadings for that factor

$\text{Var}(E_i)$ = the error variance associated with the individual indicator variables.

TABLE 24
RELIABILITY OF MEASUREMENT SCALES

	Composite reliability	Cronbach's alpha
Travel Intentions	.911	.938
Constraints		
Intrapersonal constraints	.819	.840
Interpersonal constraints	.711	.755
Structural constraints	.730	.784
Not an option	.830	.881
Constraint Negotiation		
Improving finances	.810	.825
Changing interpersonal relations	.820	.869
Time management	.934	.954
Functional congruity		
Services	.913	.869
Space	.707	.742
Activities	.864	.796
Actual self-congruity	.856	.881
Ideal self-congruity	.920	.934
Social self-congruity	.872	.893
Social ideal self-congruity	.913	.929

Convergent validity refers to the extent of correlation between the intended measure and other measures used to measure the same construct (Clark-Carter 1997). To establish convergent validity, the magnitude of factor loadings should be greater than .60 (Bagozzi and Yi 1988) even though .5 is often perceived to be acceptable in studies at an exploratory stage (Lai 2007). Convergent validity can be examined by the predictive power of each item on its assigned factors using t-tests (Bollen 1989). A statistically significant contribution of an item to its posited underlying construct or a factor loading significant at the .01 level (Netemeyer, Boles, and McMurrian 1996) suggests adequate convergent validity of the measurement (Marsh and Grayson 1995; Anderson and Gerbing 1988). To investigate the convergent validity of the scales, confirmatory factor analysis (CFA) was performed in AMOS. The CFA outputs suggested that most factor loadings were greater than .60, and all factor loadings were statistically significant ($p < .001$) (Table 25). Five items ("Cruising is too expensive (C4)", "Try to get a better job so I can

afford to cruise (N11)", "There will be a small number of passengers on a cruise (FC1)", "Adventurous—Unadventurous (ASC9)" and "Arousing—Sleepy (SSC1)") with factor loadings lower than .5 (.473, .383, .447, .485, .349) were deleted from final analysis. To maintain the consistency of measurement across different types of self-congruity (i.e., actual, ideal, social, and social ideal self-congruity), items which had low factor loadings on one self-congruity scale were also excluded from the other self-congruity scale (i.e., "ASC1", "ISC1", "SSC1", "SISC1", "ASC9", "ISC9", "SSC9", and "SISC9" were excluded from final measurement scale). This resulted in seven measurement items for each of the self-congruity constructs.

TABLE 25
FACTOR LOADINGS OF MEASUREMENT ITEMS

	Factor loading [a]	S.E. [b]	Mean	S.D. [c]	C.R. [d]	p
Travel Intentions						
• I'll say positive things about cruising to other people. (Intent1)	.871	--	3.940	1.080	--	--
• I intend to cruise in the next 3 years. (Intent2)	.786	.038	3.612	1.407	30.612	***
• I'll recommend cruising to others. (Intent3)	.987	.027	3.824	1.239	49.020	***
• I'll encourage friends and relatives to go on a cruise. (Intent4)	.941	.028	3.803	1.258	44.234	***
Constraints						
Intrapersonal constraints						
• I worry about security on cruise ship. (C19)	.639	--	2.111	1.233	--	--
• I need a special diet that is not available on a cruise. (C12)	.720	.046	1.494	.909	17.940	***
• I have a fear of the weather/ocean. (C1)	.668	.059	1.877	1.183	16.902	***
• I have sea-sickness/motion-sickness. (C17)	.647	.063	1.030	1.270	16.485	***
• I don't cruise because I have claustrophobia. (C5)	.796	.052	1.590	.986	19.323	***
• I can't cruise because I have poor health. (C3)	.698	.049	1.560	.964	17.517	***
Interpersonal constraints						
• I might not like my dinner companions on a cruise. (C14)	.617	--	2.142	1.216	--	--
• I have no companion to go on a cruise with. (C10)	.681	.076	1.929	1.339	16.049	***
• I might be lonely on a cruise. (C16)	.801	.070	1.867	1.170	17.764	***
• I don't cruise because my spouse/partner has poor health. (C18)	.612	.055	1.543	.992	14.839	***
Structural constraints						
• It's difficult for me to find time to cruise. (C11)	.794	--	2.391	1.349	--	--
• I don't cruise due to my work responsibilities. (C9)	.845	.042	1.971	1.220	23.044	***
• I don't cruise because I have too many family obligations. (C2)	.677	.041	2.193	1.282	19.604	***

TABLE 25
CONTINUED

	Factor loading [a]	S.E. [b]	Mean	S.D. [c]	C.R. [d]	p
Not an option						
• There are many other travel alternatives that I'd like to do before cruising. (C15)	.708	--	2.627	1.296	--	--
• I am not interested in cruising. (C6)	.861	.047	1.946	1.220	24.188	***
• My family/friends do not cruise. (C13)	.622	.048	2.166	1.263	17.680	***
• Cruising never occurs to me as a travel option. (C8)	.836	.049	2.115	1.260	23.553	***
• Cruising is not my family's lifestyle. (C7)	.858	.049	2.183	1.257	24.113	***
Constraint Negotiation						
Improving finances						
• Save up money to cruise. (N10)	.887	--	2.988	1.277	--	--
• Budget my money for cruising. (N1)	.862	.025	2.709	1.160	35.719	***
• Find a cruise that best fits within my budget. (N2)	.858	.026	3.101	1.219	35.413	***
• Learn to live in my financial means. (N12)	.518	.035	3.127	1.285	16.635	***
Changing interpersonal relations						
• Try to find people with similar interests to cruise with. (N14)	.823	--	2.538	1.230	--	--
• Find people to cruise with. (N3)	.804	.036	2.586	1.214	26.898	***
• Plan cruising around my family/friend's work time. (N8)	.740	.038	2.769	1.244	24.133	***
• Organize cruising with my own group. (N13)	.813	.036	2.424	1.227	27.295	***
Time management						
• Find a cruise that best fits my time limitations. (N9)	.829	--	3.055	1.263	--	--
• Set aside time for cruising. (N4)	.890	.029	2.855	1.195	34.618	***
• Plan ahead for things so that I can cruise. (N5)	.949	.029	2.855	1.263	38.888	***
• Be organized so that I can cruise. (N6)	.933	.029	3.022	1.240	37.701	***
• Prioritise what I want to do, and make cruising a priority sometimes. (N7)	.900	.030	2.911	1.219	35.313	***
Functional congruity						
Services						
• Cruising provides me an opportunity to eat good food. (FC13)	.740	--	5.484	.766	--	--
• Cruise ship staff provide excellent service. (FC5)	.818	.046	5.429	.775	24.178	***
• I'll have higher than average service if I go on a cruise. (FC6)	.759	.052	5.323	.867	22.349	***
• Cruising means lots of eating options. (FC12)	.683	.047	5.479	.788	19.992	***
• Cruise ship staff will care for my needs. (FC3)	.791	.049	5.484	.766	23.333	***
Space						
• Cruises have comfortable accommodations. (FC11)	.900	--	5.036	.980	--	--
• The cabin on a cruise is spacious. (FC9)	.678	.052	4.471	1.253	18.616	***
• There is a lot of open space on a cruise ship. (FC2)	.519	.042	5.028	1.041	14.526	***
Activities						
• Cruising has good entertainment. (FC7)	.745	--	5.385	.799	--	--
• Cruising has a variety of activities available. (FC4)	.687	.042	5.543	.720	19.655	***
• Cruising provides me an opportunity to engage in activities different from those available at home. (FC8)	.662	.048	5.443	.823	18.918	***
• Cruising has a wide range of itineraries for everybody. (FC10)	.715	.046	5.391	.786	20.476	***

TABLE 25
CONTINUED

	Factor loading [a]	S.E. [b]	Mean	S.D. [c]	C.R. [d]	p
Actual self-congruity						
• Exciting—Gloomy (ASC2)	.590	--	4.732	1.127	--	--
• Pleasant—Unpleasant (ASC3)	.778	.077	4.998	1.162	17.623	***
• Relaxing—Distressing (ASC4)	.670	.073	4.865	1.150	15.957	***
• Enjoyable—Not enjoyable (ASC5)	.850	.076	4.963	1.105	18.550	***
• Comforting—Uncomforting (ASC6)	.759	.074	4.925	1.130	17.349	***
• Claming—Annoying (ASC7)	.711	.070	4.994	1.092	16.621	***
• Fun—Boring (ASC8)	.688	.075	4.904	1.180	16.247	***
Ideal self-congruity						
• Exciting—Gloomy (ISC2)	.725	--	5.056	1.089	25.955	***
• Pleasant—Unpleasant (ISC3)	.865	.036	5.069	1.190	31.084	***
• Relaxing—Distressing (ISC4)	.824	.049	5.088	1.153	24.653	***
• Enjoyable—Not enjoyable (ISC5)	.903	.048	5.126	1.148	27.113	***
• Comforting—Uncomforting (ISC6)	.837	.051	4.885	1.209	25.061	***
• Claming—Annoying (ISC7)	.818	.050	4.939	1.172	24.452	***
• Fun—Boring (ISC8)	.811	.048	5.151	1.126	24.234	***
Social self-congruity						
• Exciting—Gloomy (SSC2)	.628	--	4.758	1.109	--	--
• Pleasant—Unpleasant (SSC3)	.798	.067	4.934	1.142	19.426	***
• Relaxing—Distressing (SSC4)	.719	.064	4.869	1.120	17.984	***
• Enjoyable—Not enjoyable (SSC5)	.865	.067	4.951	1.115	20.503	***
• Comforting—Uncomforting (SSC6)	.758	.066	4.855	1.139	18.720	***
• Claming—Annoying (SSC7)	.723	.064	4.947	1.117	18.055	***
• Fun—Boring (SSC8)	.697	.065	4.904	1.136	17.565	***
Social ideal self-congruity						
• Exciting—Gloomy (SISC2)	.712	--	4.987	1.076	--	--
• Pleasant—Unpleasant (SISC3)	.863	.053	5.058	1.172	25.089	***
• Relaxing—Distressing (SISC4)	.790	.051	5.067	1.126	22.979	***
• Enjoyable—Not enjoyable (SISC5)	.909	.051	5.105	1.133	26.393	***
• Comforting—Uncomforting (SISC6)	.806	.054	4.899	1.206	23.460	***
• Claming—Annoying (SISC7)	.788	.052	4.958	1.149	22.932	***
• Fun—Boring (SISC8)	.807	.050	5.103	1.122	23.494	***

[a]. Items with factor loading lower than .5 were excluded from final scale.
[b]. S.E. refers to standard error.
[c]. S.D. refers to standard deviation.
[d]. C.R. refers to critical ratio or t-value.
*** $p < .001$

Discriminant validity refers to the extent of dissimilarity between the intended measure and the measures used to indicate different constructs (Clark-Carter 1997), and can be examined by comparing correlations among the constructs to the square root of the average variance

extracted for each of the factors (Fornell and Larcker 1981). If the latter is greater than the former, its discriminant validity of the factors can be established (Fornell and Larcker 1981). The formula for calculating variance extracted is (Hatcher, 1994):

$$\text{Variance extracted} = \frac{\Sigma L_i^2}{\Sigma L_i^2 + \Sigma \text{Var}(E_i)}$$

where L_i = the standardized factor loadings for that factor

$\text{Var}(E_i)$ = the error variance associated with the individual indicator variables.

Table 26 demonstrates the results of calculation. All factors' discriminant validity was established with four exceptional cases. For travel constraints, the correlations between intrapersonal and interpersonal constraints (.792) and between interpersonal constraints and not an option (.650) were slightly higher than their corresponding square root of average variance extracted, which signaled a minor violation of discriminant validity. For constraint negotiation and the functional congruity constructs, the correlation between improving finances and time management and between services and activities were .910 and .905 respectively, which were higher than their corresponding square root of average variance extracted. Therefore, their discriminant validity was also questionable.

TABLE 26
DISCRIMINANT VALIDITY OF MEASUREMENT SCALE

	Correlations				Square root of average variance extracted
	Intrapersonal constraints	Interpersonal constraints	Structural constraints	Not an option	
Intrapersonal constraints	1				0.657
Interpersonal constraints	**0.792**	1			0.620
Structural constraints	0.591	0.570	1		0.690
Not an option	0.659	**0.650**	0.481	1	0.706
	Improving Finances	Changing interpersonal Relations	Time management		
Improving finances	1				0.705
Changing interpersonal relations	0.757	1			0.730
Time management	**0.910**	0.783	1		0.860
	Services	Space	Activities		
Services	1				0.824
Space	0.646	1			0.677
Activities	**0.905**	0.671	1		0.784

Modification of measurement scales and models are often conducted to enhance the performance of a model being investigated (Netemeyer, Bearden, and Sharma 2003). To identify problematic measurement items and misfitting parameters in the original hypothesized model, modification indices (e.g., Byrne 1998; Maruyama 1998) and EFA (e.g., Lai 2007; Li 2006) have been recommended. However, scholars have suggested that respecification on the hypothesized model should only be made when they make logical and theoretical sense (Byrne 1998; Kline 2005; Jöreskog and Sörbom 1996).

Both modification indices and EFA were used as a reference for respecification in the current study. The results of EFA confirmed the four-factor structure of travel constraints. All constraint items loaded on predicted factors except two cross-loading cases. “C12” cross-loaded on “Interpersonal constraint” while “C14” cross-loaded on “Not an option.” Therefore, they were dropped from the measurement scales. “C18” loaded on “Intrapersonal constraints,” which was

in accordance to the result of EFA at the pilot test stage prior to the suggestion provided by a leisure constraint expert. Thus, it was recategorized as one measurement item of "Intrapersonal constraints." These procedures resulted in six measurement items for "Intrapersonal constraints", two items for "Interpersonal constraints", three measurement items for "Structural constraints", and five items for "Not an option" (Table 27).

TABLE 27
MODIFIED MEASUREMENT SCALE

	Factor loading	S.E.[a]	Mean	S.D.[b]	C.R.[c]	p
Constraints						
Intrapersonal constraints						
• I worry about security on cruise ship. (C19)	.637	--	2.111	1.233	--	--
• I can't cruise because I have poor health. (C3)	.705	.049	1.560	.964	17.496	***
• I don't cruise because I have claustrophobia. (C5)	.810	.053	1.590	.986	19.357	***
• I have sea-sickness/motion-sickness. (C17)	.654	.064	1.030	1.270	16.508	***
• I have a fear of the weather/ocean. (C1)	.687	.060	1.877	1.183	17.151	***
• I don't cruise because my spouse/partner has poor health. (C18)	.684	.051	1.543	.992	17.091	***
Interpersonal constraints						
• I have no companion to go on a cruise with. (C10)	.730	--	1.929	1.339	--	--
• I might be lonely on a cruise. (C16)	.949	.064	1.867	1.170	17.859	***
Structural constraints						
• It's difficult for me to find time to cruise. (C11)	.795	--	2.391	1.349	--	--
• I don't cruise due to my work responsibilities. (C9)	.841	.042	1.971	1.220	22.857	***
• I don't cruise because I have too many family obligations. (C2)	.681	.041	2.193	1.282	19.677	***
Not an option						
• There are many other travel alternatives that I'd like to do before cruising. (C15)	.708	--	2.627	1.296	--	--
• I am not interested in cruising. (C6)	.861	.047	1.946	1.220	24.161	***
• My family/friends do not cruise. (C13)	.620	.048	2.166	1.263	17.616	***
• Cruising never occurs to me as a travel option. (C8)	.835	.049	2.115	1.260	23.518	***
• Cruising is not my family's lifestyle. (C7)	.860	.049	2.183	1.257	24.143	***
Constraint Negotiation						
Improving finances and time management						
• Find a cruise that best fits my time limitations. (N9)	.834	--	3.055	1.263	--	--
• Budget my money for cruising. (N1)	.803	.030	2.709	1.160	29.583	***
• Find a cruise that best fits within my budget. (N2)	.807	.031	3.101	1.219	29.816	***
• Save up money to cruise. (N10)	.834	.032	2.988	1.277	31.400	***
• Set aside time for cruising. (N4)	.885	.029	2.855	1.195	38.992	***
• Plan ahead for things so that I can cruise. (N5)	.942	.029	2.855	1.263	38.992	***
• Be organized so that I can cruise. (N6)	.925	.029	3.022	1.240	37.702	***
• Prioritise what I want to do, and make cruising a priority sometimes. (N7)	.901	.029	2.911	1.219	35.905	***
Changing interpersonal relations						
• Try to find people with similar interests to cruise with. (N14)	.886	--	2.538	1.230	--	--
• Organize cruising with my own group. (N13)	.861	.039	2.424	1.227	24.802	***
Functional congruity						
Services and activities						
• Cruising has good entertainment. (FC7)	.704	--	5.385	.799	--	--
• Cruise ship staff provide excellent service. (FC5)	.793	.049	5.429	.775	22.217	***
• I'll have higher than average service if I go on a cruise. (FC6)	.736	.055	5.323	.867	20.695	***

TABLE 25
CONTINUED

	Factor loading	S.E.[a]	Mean	S.D.[b]	C.R.[c]	p
• Cruising means lots of eating options. (FC12)	.693	.050	5.479	.788	19.524	***
• Cruise ship staff will care for my needs. (FC3)	.780	.052	5.484	.766	21.870	***
• Cruising provides me an opportunity to eat good food. (FC13)	.741	.048	5.484	.766	20.809	***
• Cruising has a variety of activities available. (FC4)	.681	.045	5.543	.720	19.178	***
• Cruising provides me an opportunity to engage in activities different from those available at home. (FC8)	.630	.052	5.443	.823	17.781	***
• Cruising has a wide range of itineraries for everybody. (FC10)	.678	.050	5.391	.786	19.111	***
Space						
• There is a lot of open space on a cruise ship. (FC2)	.757	--	5.028	1.041	--	--
• The cabin on a cruise is spacious. (FC9)	.539	.085	4.471	1.253	10.046	***

[a]. S.E. refers to standard error; b. C.R. refers to critical ratio or t-value.
[b]. S.D. refers to standard deviation.
[c]. C.R. refers to critical ratio or t-value.
*** $p < .001$

Further investigation of the two-item interpersonal constraints factor was conducted to check if the factor had met Bollen's (1989, pp. 244) two-indicator rule which suggests that "having two indicators per latent variable is sufficient to identify the measurement model provided that the factor complexity of each x_i is one and that there are no zero elements in Φ." Factor complexity refers to "number of variables that have moderate or high loadings" (Rummel 1970) and Φ refers to variance-covariance matrix among the exogenous factors (Bryne 1998). Since both items of "Interpersonal constraints" had moderate or high factor loadings (.730 and .949), which met the requirement of factor complexity, and none of the elements in Φ were zero which met the second requirement of the two-indicator rules, it was decided that it was valid to measure "Interpersonal constraints" with two indicators.

To improve the discriminant validity of constraint negotiation and functional congruity, the latent factors which did not discriminate from each other were merged into one factor: "Improving finances and time management". "N12" was dropped from the factor due to its low factor loading (< .5). EFA was performed on the measurement items of constraint negotiation and functional congruity. The results supported a two-factor structure for both constructs.

However, since “N11” cross-loaded on “Changing interpersonal relations” and “N3” and “N8” cross-loading on “Improving finances and time management”, they were excluded from the final measurement scale. This resulted in eight measurement items for the “Improving finances and time management” construct and two items for “Changing personal relations” (Table 27). Since the EFA output suggested that “FC11” cross-loaded on “Services and Activities”, it was deleted from analysis. This resulted in nine items for “Services and activities” and two items for “Space” (Table 27).

The integration of latent variables resulted in a significant reduction of factor correlations and substantial improvement of discriminant validity (Table 28). However, the lack of discriminant validity of the “Space” factor of functional congruity implied that a one-factor structure might be a better measurement of functional congruity. Therefore, CFA was performed on all items and based on the results, “FC9” and “FC2” were eliminated due to their low factor loadings (<.5). This resulted in nine indicators measuring functional congruity (Table 29). The composite reliability of the new constructs were all above .6 which suggests that they were reliable (Table 30).

TABLE 28
DISCRIMINANT VALIDITY OF MODIFIED MEASUREMENT SCALE

	Correlations				Square root of average variance
	Intrapersonal constraints	Interpersonal constraints	Structural constraints	Not an option	
Intrapersonal constraints	1				0.656
Interpersonal constraints	.582	1			0.767
Structural constraints	.571	.461	1		0.690
Not an option	.646	.532	.482	1	0.705
		Improving finances & time management		Changing interpersonal Relations	
Improving finances & time management		1			0.819
Changing interpersonal relations		.665		1	0.825
		Services & activities		Space	
Services and activities		1			0.792
Space		**.642**		1	0.589

TABLE 29
FINAL MEASUREMENT SCALE OF FUNCTIONAL CONGRUITY

Measurement items	Factor loading	S.E.[a]	Mean	S.D.	C.R.[b]	p
• Cruising has a variety of activities available. (FC4)	.684	--	5.543	.720	--	--
• Cruise ship staff provide excellent service. (FC5)	.797	.058	5.429	.775	21.502	***
• I'll have higher than average service if I go on a cruise. (FC6)	.734	.065	5.323	.867	19.990	***
• Cruising means lots of eating options. (FC12)	.698	.058	5.479	.788	19.099	***
• Cruise ship staff will care for my needs. (FC3)	.778	.061	5.484	.766	21.053	***
• Cruising provides me an opportunity to eat good food. (FC13)	.745	.057	5.484	.766	20.256	***
• Cruising provides me an opportunity to engage in activities different from those available at home. (FC8)	.629	.061	5.443	.823	17.343	***
• Cruising has a wide range of itineraries for everybody. (FC10)	.672	.058	5.391	.786	18.449	***
• Cruising has good entertainment. (FC7)	.698	.059	5.385	.799	19.096	***

[a]. S.E. refers to standard error.
[b]. C.R. refers to critical ratio or t-value.
*** $p < .001$

TABLE 30
COMPOSITE RELIABILITY OF MODIFIED MEASUREMENT SCALES

	Composite reliability	Cronbach's alpha
Constraints		
Intrapersonal constraints	.818	.904
Interpersonal constraints	.740	.814
Structural constraints	.730	.811
Not an option	.830	.881
Constraint Negotiation		
Improving finances & time management	.942	.961
Changing interpersonal relations	.810	.865
Functional congruity	.938	.904

To further validate the scales, CFA was performed on all scales at once. The results indicated that the square root of the average variance extracted for all factors were larger than their correlations with other factors (Table 31). This implies that all the measurement scales in the current study have discriminant validity.

TABLE 31
EXAMINING VALIDITY WITH ALL FACTORS AT ONCE

	Correlations								
	Intrapersonal constraints	Interpersonal constraints	Structural constraints	Not an option	Improving finances & time	Changing interpersonal relations	FC[a]	ASC[b]	Travel intention
Intrapersonal constraints	**.655**								
Interpersonal constraints	.572	**.771**							
Structural constraints	.571	.450	**.690**						
Not an option	.645	.523	.483	**.706**					
Improving finances and time	-.125	-.163	-.169	-.499	**.819**				
Changing Interpersonal relations	.102	.036	.013	-.203	.665	**.825**			
FC	-.109	-.120	-.156	-.310	.281	.173	**.792**		
ASC	-.028	-.035	.006	-.184	.269	.257	.215	**.679**	
Travel intention	-.314	-.291	-.211	-.704	.606	.267	.339	.267	**.852**

[a]. FC refers to functional congruity.
[b]. ASC refers to actual self-congruity
c. Numbers displayed in bold are the square root of the average variance extracted for that factor.

Model Fitting and Hypotheses Testing

SEM contains two major components of analysis: confirmatory factor analysis and multiple regression analysis (Byrne 2001). Confirmatory factor analysis is used to determine latent constructs based on observed variables. The interpretation of the relationships between measured and latent variables is termed measurement model (Byrne 1998) which has been depicted in the previous paragraphs. Regression analysis is used to interpret the relationships among the latent constructs. The model which represents links among the latent variables is termed as a structural model or a latent variable model (Byrne 1998; Bollen 1989).

The fit of the proposed model was examined with the data using the following fit indices: Chi-square (χ^2), Root Mean Square Error of Approximation (RMSEA) (Steiger and Lind 1980), and Comparative Fit Index (CFI) (Bentler 1990). Since Chi-square index has been found to be sensitive to sample size (Byrne 2001), including other fit indices is necessary in order to gain a holistic understanding of the overall fit between the tested model and data. Although no definite rule has been set to determine what constitutes an adequate fit of a model, some general rules of thumb can be used as guidelines for model fit interpretation (Maruyama 1998; Schermelleh-Engel, Moosbrugger, and Müller 2003).

Measurement model

Measurement models test how well manifest variables are linked to their underlying latent variables (Bryne 1998; Bollen 1989). The results of CFA is an indication of the effects of latent variables on observed items. The magnitude of regression coefficients (i.e., λ_i or lambda) represent the "magnitude of the expected change in the observed variable for a one unit change in the latent variable" (Bollen 1989, pp. 17). The factor loadings of each measurement model and

other findings of CFA have been reported in the previous section. This section provides graphic representation and fit indices of the models.

Travel constraints. There are two types of measurement models: first-order and second-order (Bollen 1989). First-order models depict the relationship between latent variables and observed variables. Second-order models represent a higher level of analysis in which the latent variables in first-order models are further predicted by another latent factor.

Figure 10 presents the first-order measurement model for travel constraints. The path between error terms of "C3" (I can't cruise because I have poor health) and "C18" (I don't cruise because my spouse/partner has poor health) was free for estimation. Since both items were measuring the limitation of health on travel, they might have shared similarity of meanings and thus were correlated to each other. This additional path has resulted significant improvement of model fit. The χ^2 decreased 100.5 with the gaining of one degree of freedom. RMSEA (.084), NFI (.908), CFI (.920), GFI (.909), and AGFI (.872) were all in the acceptable range after freeing the correlation parameter estimate between these two errors terms (Table 32).

FIGURE 10
FIRST-ORDER MEASUREMENT MODEL OF TRAVEL CONSTRAINTS

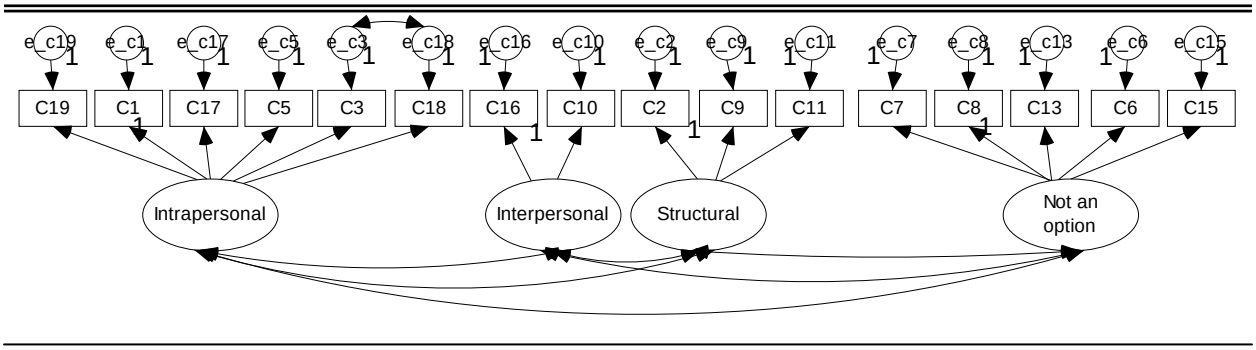
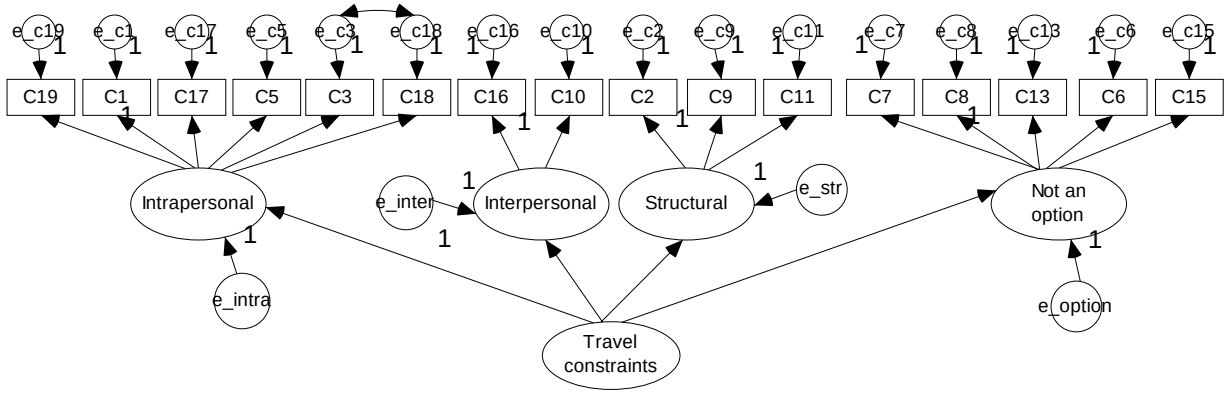


TABLE 32
ESTIMATION OF FIT INDICES OF TRAVEL CONSTRAINT MEASUREMENT MODELS

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
Constraint (1st order)	703.5 (97)	.084	.908	.920	.909	.872
Constraint (2nd order)	704.7 (99)	.083	.908	.920	.909	.875

In the second-order measurement model of travel constraints (Figure11), the four latent variables in the first-order measurement model were further predicted by a higher order of latent variable: Travel constraints. The fit indices (RMSEA = .083; NFI = .908; CFI = .920; GFI = .909; AGFI = .875) again suggested that the model had an acceptable fit (Table 32).

FIGURE 11
SECOND-ORDER MEASUREMENT MODEL OF TRAVEL CONSTRAINTS



Constraint negotiation. The measurement model of constraint negotiation was also represented by two orders. In the first-order measurement model, eight manifest variables were explained by "Finances & time" latent variable and two manifest variables were predicted by "Changing interpersonal relations" (Figure 12). The path between the error terms of "N1" (Budget my money for cruising) and "N2" (Find a cruise that best fits within my budget), "N2"

and “N10” (Save up money to cruise), “N1” and “N10”, and “N5” (Plan ahead for things so that I can cruise) and “N6” (Be organized so that I can cruise) were freed for estimation. The first three items were correlated because they all referred to improving financial means for cruising. The latter two items were correlated because both of them referred to time management. The adding of paths among these error terms resulted in a decrease of 321.2 in χ^2 while gaining four degrees of freedom. RMSEA (.068) indicated an acceptable fit of model to the data, as well as the other fit indices (NFI = .983; CFI = .986; GFI = .968; AGFI = .941) (Table 33).

FIGURE 12
FIRST-ORDER MEASUREMENT MODEL OF CONSTRAINT NEGOTIATION

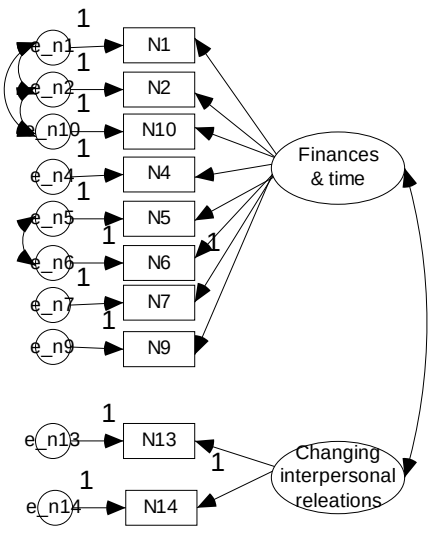
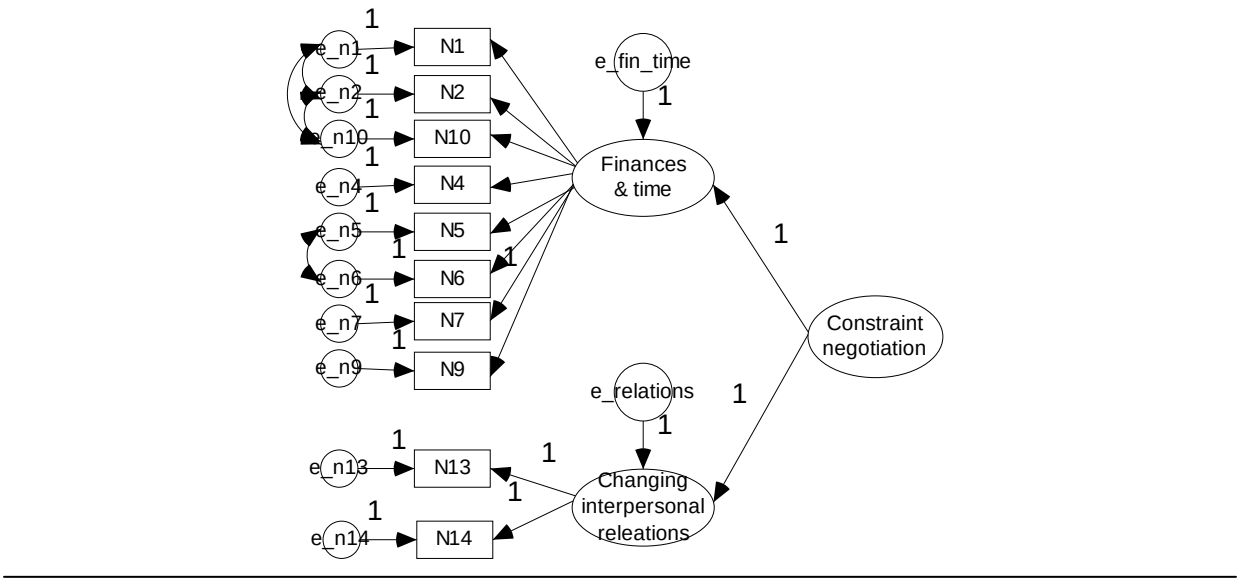


TABLE 33
ESTIMATION OF FIT INDICES OF CONSTRAINT NEGOTIATION MEASUREMENT MODELS

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
Constraint negotiation (1st order)	153.0 (30)	.068	.983	.986	.968	.941
Constraint negotiation (2nd order)	153.3 (31)	.066	.983	.987	.968	.942

The second-order of measurement model of constraint negotiation (Figure 13) suggested that the latent variables in the first-order constraint negotiation model were further explained by a higher level latent variable: Constraint negotiation. Again, while RMSEA (.066) indicated an acceptable fit of model to the data, the other fit indices (NFI = .983; CFI = .987; GFI = .968; AGFI = .942) suggested that the model had a good fit to the data (Table 33).

FIGURE 13
SECOND-ORDER MEASUREMENT MODEL OF CONSTRAINT NEGOTIATION



Functional congruity. There was only one order for the measurement model for functional congruity (Figure 14). The rational of deriving the measurement scale has been discussed in the previous section. Nine indicators were generated from the measurement scale development process to measure functional congruity. Three additional paths were added between the error terms of "FC13" (Cruising provides me an opportunity to eat good food) and "FC12" (Cruising means lots of eating options), "FC3" (Cruise ship staff will care for my needs) and FC5" (Cruise ship staff provide excellent service), and "FC5" and "FC6" (I'll have higher

than average service if I go on a cruise) respectively. “FC13” and “FC12” were correlated since both of them were referring to food experience on cruise. Correlations among “FC3”, “FC5” and “FC6” were due to the shared similarity of items on service aspect of cruising experience. The free estimations of these paths resulted in a decrease of 238.2 in χ^2 value while gaining three degrees of freedom as well as a better fit of the model. While RMSEA (.074) indicated a satisfactory fit of model, NFI (.966), CFI (.971), GFI (.965), and AGFI (.934) suggested that the model had a good fit to the data (Table 34).

FIGURE 14
MEASUREMENT MODEL OF FUNCTIONAL CONGRUITY

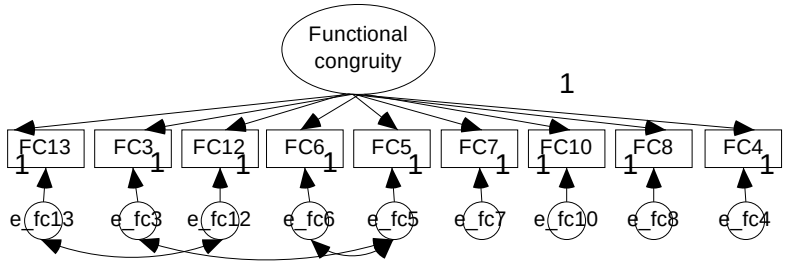


TABLE 34
ESTIMATION OF FIT INDICES OF FUNCTIONAL CONGRUITY MEASUREMENT MODEL (1ST ORDER)

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
Functional congruity	142.3 (24)	.074	.966	.971	.965	.934

Self-congruity. Four types of congruity were investigated in the current study: actual self-congruity (ASC), ideal self-congruity (ISC), social self-congruity (SSC), and social ideal self-congruity (SISC). Each type of congruity was measured by seven indicators based on the rationales provided in the previous section. Two additional paths were added to correlate the

errors terms of "ASC2" (Exciting—Gloomy) and "ASC8" (Fun—Boring) and of "ASC6" (Comforting—Uncomforting) and "ASC7" (Calming—Annoying) (Figure 15). The correlations among the error terms might be because exciting events are perceived to be fun and calming sentiments may bring comfortable feelings to individuals. The additional paths resulted in a deduction of 103 in χ^2 value while gaining two degrees of freedom as well as substantial improvement of model fit (Table 35). The fit indices (RMSEA = .064; NFI = .978; CFI = .982; GFI = .978; AGFI = .950) suggested that the model had a moderate to good fit to the data.

FIGURE 15
MEASUREMENT MODEL OF ACTUAL SELF-CONGRUITY

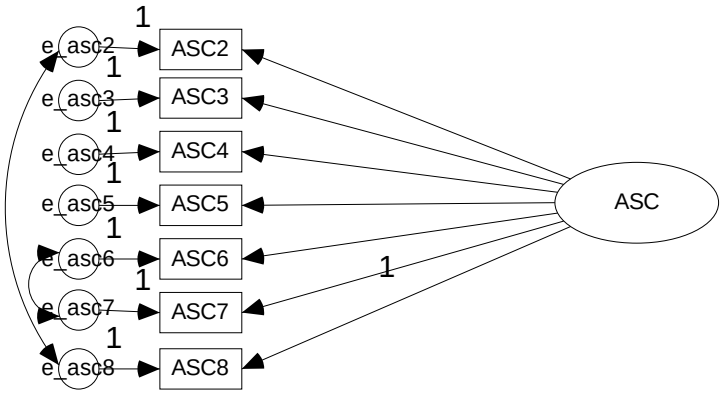


TABLE 35
ESTIMATION OF FIT INDICES OF SELF-CONGRUITY MEASUREMENT MODELS

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
Actual self-congruity	66.0 (12)	.064	.978	.982	.978	.950
Ideal self-congruity	69.3 (12)	.073	.987	.989	.977	.947
Social self-congruity	78.8 (12)	.079	.977	.980	.976	.943
Social ideal self-congruity	92.6 (12)	.087	.981	.983	.970	.931

Since the purpose of the study was to compare the performance of the measurement model across different types of self-congruity concepts, the same measurement model structure was applied to ideal self-congruity, social self-congruity, and ideal social self-congruity. The fit indices in Table 35 suggested that all the self-congruity models had a moderate to good fit to the data.

Travel intention. Travel intention was measured with four items (Figure 16). No modification to the model was made based on the output of analysis. While RMSEA (.064) indicated an acceptable model fit, all other fit indices (NFI = .998; CFI = .998; GFI = .995; AGFI = .975) suggested that the measurement model for travel intention had a good fit to the data (Table 36).

FIGURE 16
MEASUREMENT MODEL OF TRAVEL INTENTIONS

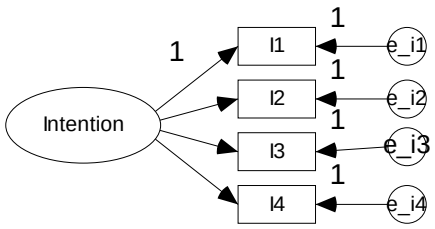


TABLE 36
ESTIMATION OF FIT INDICES OF TRAVEL INTENTION MODEL

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
Travel intention	9.3 (2)	.064	.998	.998	.995	.975

Structural model

While measurement models are concerned with the relationships between latent variables and observed variables, a structural model presents the regression structure among latent variables (Bryne 1998). This is where the interrelations among latent variables are examined and hypotheses are tested. The relevant paths of analysis in this study were: travel constraints → travel intention; travel constraints → constraint negotiation effort; travel motivation → constraint negotiation effort; travel motivation → travel intention; constraint negotiation → travel intention. In chapter II, a theoretical model was reasoned and nine hypotheses were proposed. This section tests the hypothesized relationships among latent variables and the overall fit of the proposed model to the data.

In the regression analysis, R square was used to examine how much variance in the dependent variable was explained by the independent variable(s). The contribution of each independent variable was evaluated with the resultant standardized coefficients (β). The hypotheses were tested with absolute t-values. Regression paths were deemed statistically significant when the t-values were greater than 1.96 ($p > .05$), 2.58 ($p > .01$), or 3.29 ($p > .001$).

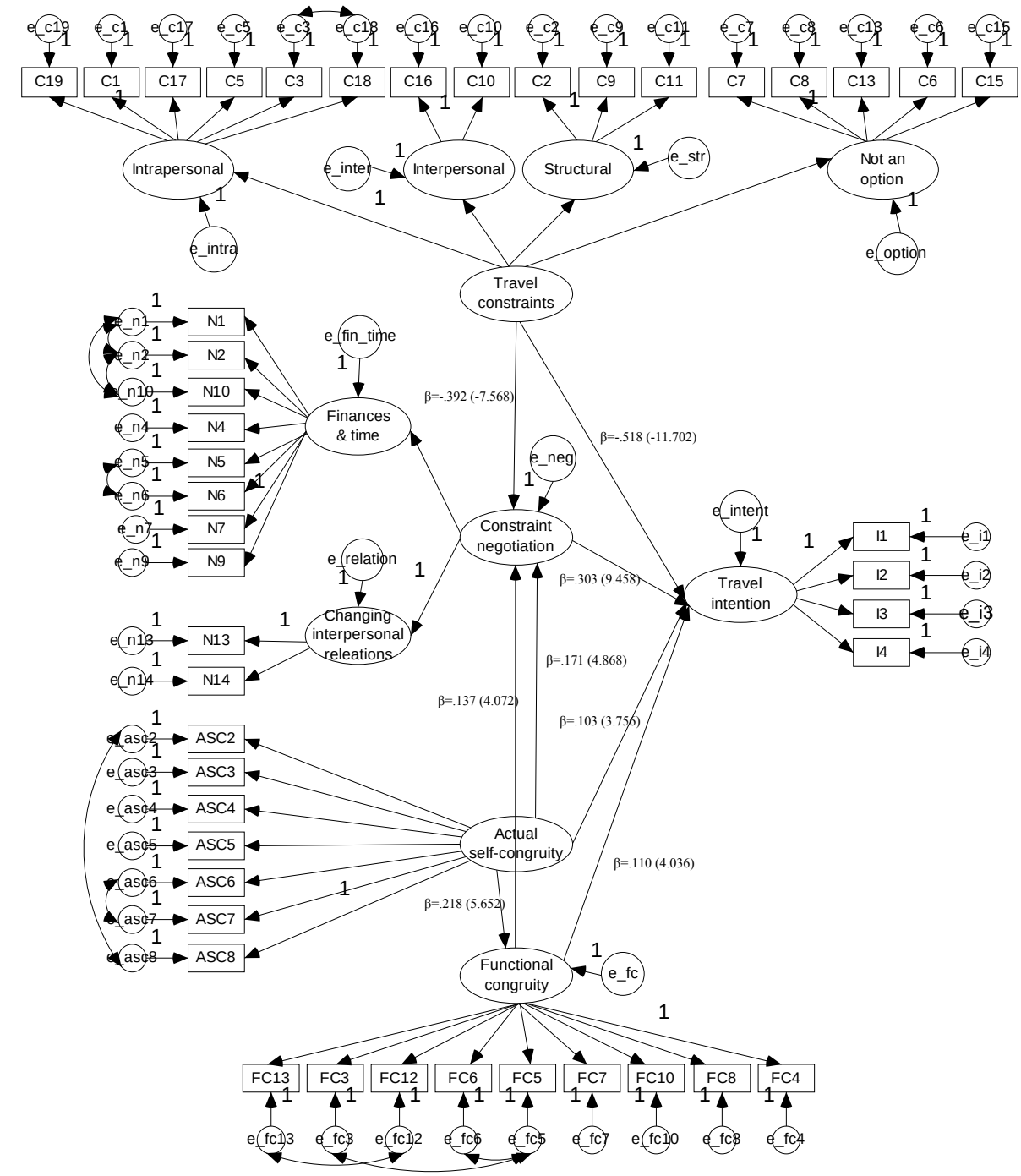
Testing overall fit of the MOA model. To examine the overall fit of the MOA model, the grand model with all constructs of interest (Self-congruity, functional congruity, travel constraints, constraint negotiation, and travel intentions) and hypothesized relationships was tested at once in AMOS (Figures 17, 18, 19, 20). The model was tested with each of the four types of self-congruity (i.e., actual, ideal, social, and social ideal self-congruity) separately. The fit indices (RMSEA, NFI, CFI, and AGFI) suggested that the model had an acceptable fit to the data (Table 37).

TABLE 37
ESTIMATION OF FIT INDICES OF THE MOA MODEL

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
MOA model (with ASC[a] in the model)	2768.7 (96)	.046	.909	.938	.876	.862
MOA model (with ISC[b] in the model)	2858.9 (96)	.047	.912	.940	.873	.858
MOA model (with SSC[c] in the model)	2796.5 (96)	.046	.909	.938	.874	.859
MOA model (with SISC[d] in the model)	2870.4 (96)	.047	.911	.939	.872	.857

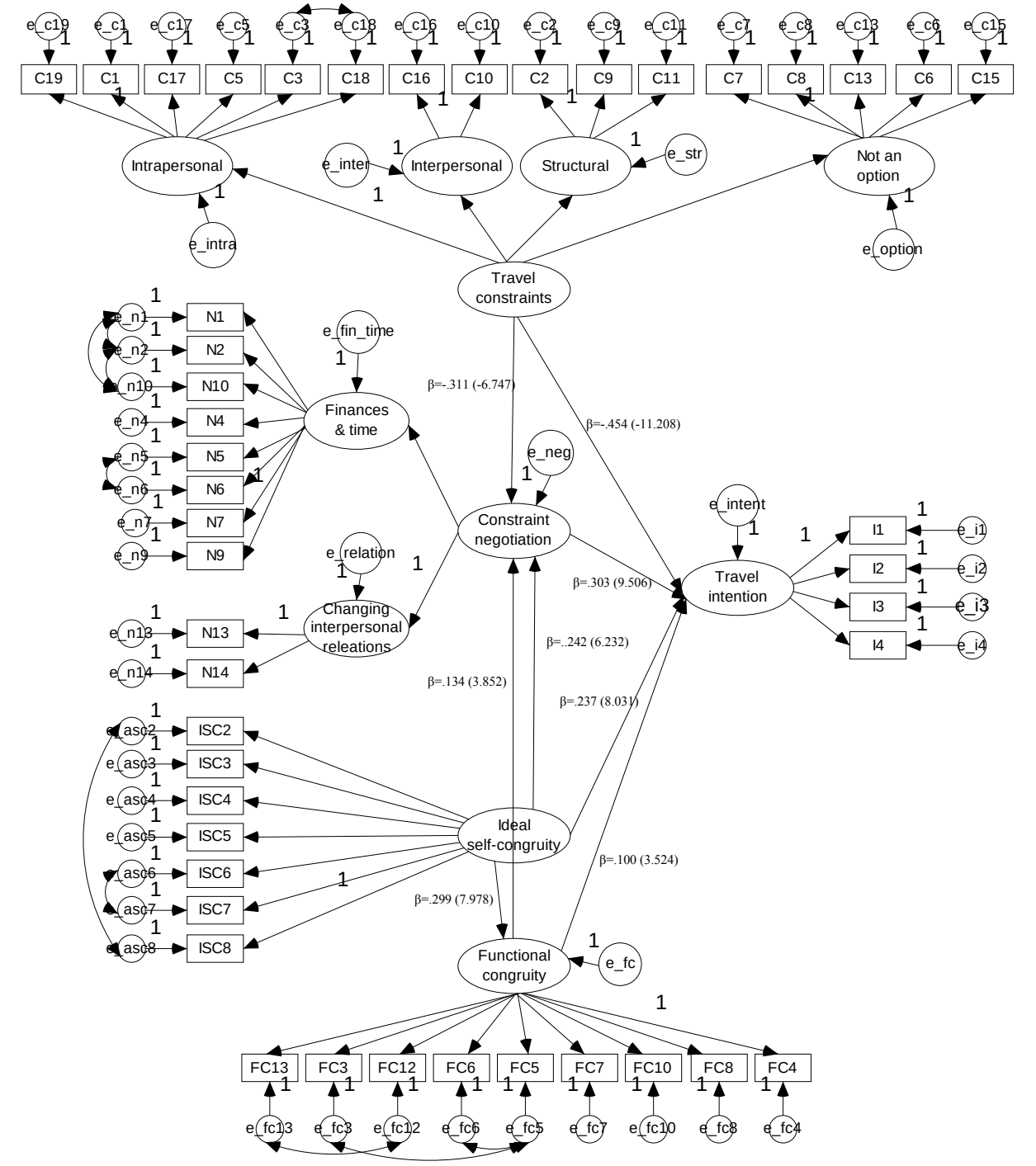
[a]. ASC refers to actual self-congruity.
[b]. ISC refers to ideal self-congruity.
[c]. SSC refers to social self-congruity.
[d]. SISC refers to Social ideal self-congruity.

FIGURE 17
TESTING THE MOA MODEL WITH ACTUAL SELF-CONGRUITY



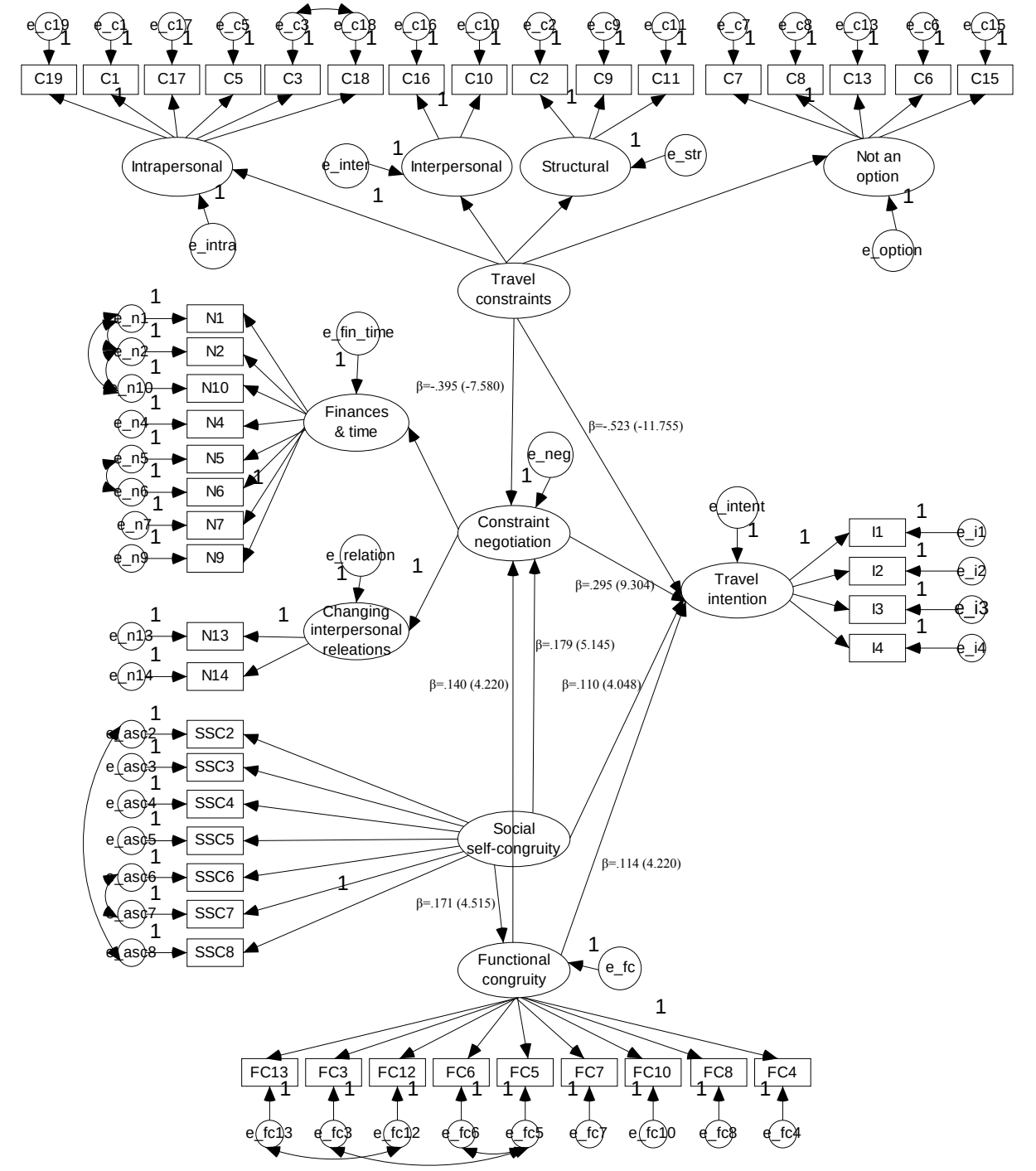
Note: t-values are stated in parenthesis.

FIGURE 18
TESTING THE MOA MODEL WITH IDEAL SELF-CONGRUITY



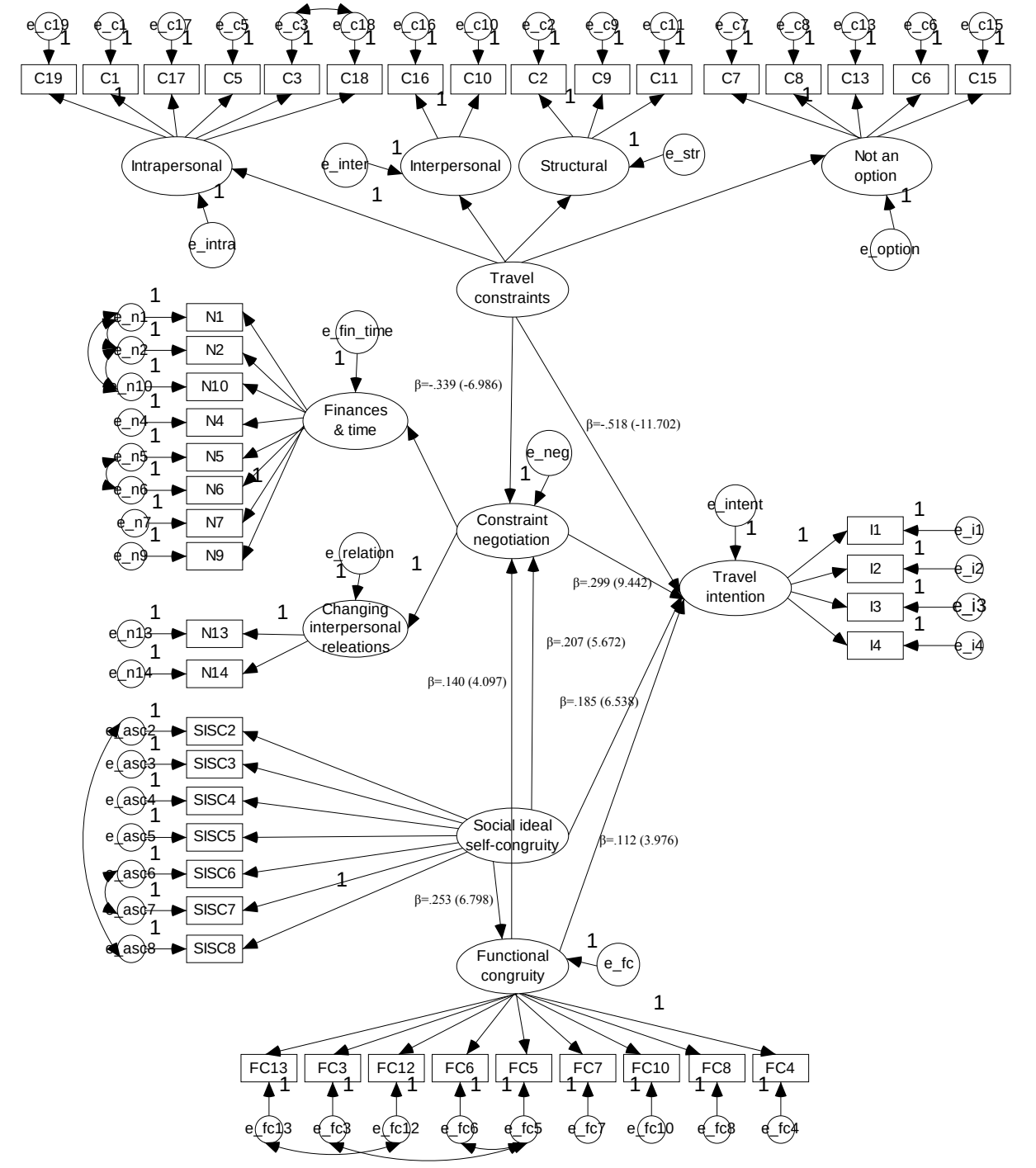
Note: t-values are stated in parenthesis.

FIGURE 19
TESTING THE MOA MODEL WITH SOCIAL SELF-CONGRUITY



Note: t-values are stated in parenthesis.

FIGURE 20
TESTING THE MOA MODEL WITH SOCIAL IDEAL SELF-CONGRUITY



Note: t-values are stated in parenthesis.

Squared multiple correlation (R^2) is an indication of how much variance of an endogenous variable is explained by exogenous variables. The R^2 of the three endogenous latent variables (i.e., travel intention, constraint negotiation, and functional congruity) in the MOA model are shown in Table 38. These numbers refer to the total variance of an endogenous variable explained by all relevant exogenous variables.

The test results suggested that the exogenous variables (travel constraints, constraint negotiation, self-congruity, and functional congruity) explained over 50% of the variance in travel intention. In addition, about 20% of the variance in constraint negotiation was explained by travel constraints, self-congruity, and functional congruity. However, only a small amount (< 10%) of variance in functional congruity was explained by self-congruity.

TABLE 38
SQUARED MULTIPLE CORRELATION OF ENDOGENOUS VARIABLES

	Squared multiple correlation (R^2)			
Endogenous variables	Actual self-congruity model	Ideal self-congruity model	Social self-congruity model	Social ideal self-congruity model
Travel intention	.535	.518	.537	.517
Constraint negotiation	.212	.193	.216	.192
Functional congruity	.047	.089	.029	.064

Hypotheses testing. Further effort was invested in testing the hypothesized relationships among the constructs in the overall model. The regression paths for the grand model are displayed in Table 39.

TABLE 39
REGRESSION PATHS OF THE MOA MODEL

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Actual self-congruity → Travel intention	.103	.031	3.756	p < .001
Functional congruity → Travel intention	.110	.050	4.036	p < .001
Actual self-congruity → Functional congruity	.218	.024	5.652	p < .001
Constraints → Travel intention	-.518	.074	-11.702	p < .001
Constraints → Negotiation	-.392	.062	-7.568	p < .001
Actual self-congruity → Negotiation	.171	.028	4.868	p < .001
Functional congruity → Negotiation	.137	.044	4.072	p < .001
Negotiation → Travel intention	.303	.045	9.458	p < .001
With Ideal self-congruity in the model				
Ideal self-congruity → Travel intention	.237	.029	8.031	p < .001
Functional congruity → Travel intention	.100	.051	3.524	p < .001
Ideal self-congruity → Functional congruity	.299	.021	7.978	p < .001
Constraints → Travel intention	-.454	.061	-11.208	p < .001
Constraints → Negotiation	-.311	.051	-6.747	p < .001
Ideal self-congruity → Negotiation	.242	.027	6.232	p < .001
Functional congruity → Negotiation	.134	.045	3.852	p < .001
Negotiation → Travel intention	.303	.044	9.506	p < .001
With Social self-congruity in the model				
Social self-congruity → Travel intention	.110	.032	4.048	p < .001
Functional congruity → Travel intention	.114	.049	4.220	p < .001
Social self-congruity → Functional congruity	.171	.024	4.515	p < .001
Constraints → Travel intention	-.523	.075	-11.755	p < .001
Constraints → Negotiation	-.395	.063	-7.580	p < .001
Social self-congruity → Negotiation	.179	.029	5.145	p < .001
Functional congruity → Negotiation	.140	.043	4.220	p < .001
Negotiation → Travel intention	.295	.045	9.304	p < .001
With Social ideal self-congruity in the model				
Social ideal self-congruity → Travel intention	.185	.028	6.538	p < .001
Functional congruity → Travel intention	.112	.050	3.976	p < .001
Social ideal self-congruity → Functional congruity	.253	.021	6.798	p < .001
Constraints → Travel intention	-.483	.066	-11.455	p < .001
Constraints → Negotiation	-.339	.055	-6.986	p < .001
Social ideal self-congruity → Negotiation	.207	.026	5.672	p < .001
Functional congruity → Negotiation	.140	.044	4.097	p < .001
Negotiation → Travel intention	.299	.044	9.442	p < .001

H1: The congruity between self-images and affective destination images influences people's travel intentions. The more congruent images are, the more likely people would like to travel to the destination.

Hypothesis 1 examined the relationship between self-congruity and travel intentions. It was hypothesized in the study that there would be a positive relationship between these two constructs. The AMOS outputs suggested that this relationship was statistically significant ($p < .001$) (Table 40). The standard regression coefficients for the impacts of actual, ideal, social, and social ideal self-congruity on travel intentions were .103, .237, .110, and .185 respectively, which means that for each unit increase of actual, ideal, social, and social ideal self-congruity, the corresponding increases of travel intention were .103, .237, .110, and .185 units respectively. The positive regression coefficients signal positive influences of self-congruity on travel intention as predicted in hypothesis 1. Thus, hypothesis 1 was accepted.

TABLE 40
TESTING RESULTS OF HYPOTHESIS 1

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
Actual self-congruity → Travel intention	.103	.031	3.756	$p < .001$
Ideal self-congruity → Travel intention	.237	.029	8.031	$p < .001$
Social self-congruity → Travel intention	.110	.032	4.048	$p < .001$
Social ideal self-congruity → Travel intention	.185	.028	6.538	$p < .001$

H2: The congruity between ideal functional images of destination attributes and cognitive destination images along the same attributes influences people's travel intentions. The more congruent images are, the more likely people would like to travel to the destination.

Hypothesis 2 tested the relationship between functional congruity and travel intentions. It was hypothesized in the study that functional congruity would have a positive influence on travel intentions. This relationship was supported by the data ($p < .001$) (Table 41), and suggests that people who have higher congruity between their perfect image of cruising attributes and

cognitive image of cruising along the same attributes are more likely to travel than those who have lower congruity. The standard path coefficients were .110, .100, .114, and .112 respectively for the models with different types of self-congruity (i.e., actual, ideal, social, and social ideal self-congruity), which means that by increasing one unit of functional congruity, travel intention increases .110, .100, .114, and 112 units correspondingly.

TABLE 41
TESTING RESULTS OF HYPOTHESIS 2

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Functional congruity → Travel intention	.110	.050	4.036	p < .001
With Ideal self-congruity in the model				
Functional congruity → Travel intention	.100	.051	3.524	p < .001
With Social self-congruity in the model				
Functional congruity → Travel intention	.114	.049	4.220	p < .001
With Social ideal self-congruity in the model				
Functional congruity → Travel intention	.112	.050	3.976	p < .001

H3: Functional congruity is positively affected by self-congruity. People who have higher congruence between their self images and affective destination images are more likely to have higher functional congruity toward the destination.

Hypothesis 3 was concerned with the relationship between self-congruity and functional congruity. It was expected in the study that the experience of congruity between self-images and destination images could distort the evaluation of functional congruity toward the destination. The AMOS output suggested that this was the case. The paths between functional congruity and all four dimensions of self-congruity (actual, ideal, social, and social ideal self-congruity) were

positive (.218, .299, .171, and .253) and statistically significant ($p < .001$) (Table 42). This indicates that the higher the congruity people experienced between their self-images and destination affective image (i.e., self-congruity), the more congruent they perceived their perfect images of cruising attributes and cognitive images of cruising (i.e., functional congruity).

TABLE 42
TESTING RESULTS OF HYPOTHESIS 3

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
Actual self-congruity → Functional congruity	.218	.024	5.652	$p < .001$
Ideal self-congruity → Functional congruity	.299	.021	7.978	$p < .001$
Social self-congruity → Functional congruity	.171	.024	4.515	$p < .001$
Social ideal self-congruity → Functional congruity	.253	.021	6.798	$p < .001$

The standard path coefficients further revealed how much change in functional congruity occurred in corresponding to the changes of self-congruity. For instance, the standard regression coefficient for the path between actual self-congruity and functional congruity was .218, which means that for every unit increase of actual self-congruity, functional congruity increased .218 units.

H4: Travel constraints negatively influence travel intentions. The higher the level of travel constraints a person experiences, the less likely the person would like to travel.

Hypothesis 4 investigated the relationship between travel constraints and travel intentions. It was hypothesized that there was a negative relationship between these two constructs, which means that the more constraints people had toward travel, the less likely they would like to travel.

This hypothesis was supported by the study. The path between travel constraints and travel intentions was found to be statistically significant ($p < .001$) (Table 43). The standard path coefficients for the models with the four types of self-congruity were -.518, -.454, -.523, and -.483 respectively, which suggested that travel intention decreased -.518, -.454, -.523, and -.483 units respectively for every unit increase of travel constraints. The negative notation in the regression coefficients signaled a negative relationship between these two constructs, which was predicted.

TABLE 43
TESTING RESULTS OF HYPOTHESIS 4

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Constraints → Travel intention	-.518	.074	-11.702	$p < .001$
With Ideal self-congruity in the model				
Constraints → Travel intention	-.454	.061	-11.208	$p < .001$
With Social self-congruity in the model				
Constraints → Travel intention	-.523	.075	-11.755	$p < .001$
With Social ideal self-congruity in the model				
Constraints → Travel intention	-.483	.066	-11.455	$p < .001$

A further investigation was conducted to find out which factor (i.e., "intrapersonal constraints", "interpersonal constraints", "structural constraints", or "not an option") was the most important element in explaining travel constraints. Standardized path coefficients and R^2 were compared across the four constraint factors (Table 44). It was found that "not an option" had the highest path coefficients (.976, .912, .979, and .938) and R^2 (.952, .833, .959, and.880). This suggests that it was the best predictor of travel intentions.

TABLE 44
PERFORMANCE OF TRAVEL CONSTRAINT FACTORS

Paths	Standard path Coefficient	Standard error	Critical ratio (t-value)	p	Squared multiple correlations (R^2)
With Actual self-congruity in the model					
Intrapersonal → Travel constraints	.686	--	--	--	.471
Interpersonal → Travel constraints	.560	.095	12.099	***	.314
Structural → Travel constraints	.523	.081	10.339	***	.273
Not an option → Travel constraints	.976	.135	14.329	***	.952
With Ideal self-congruity in the model					
Intrapersonal → Travel constraints	.740	--	--	--	.547
Interpersonal → Travel constraints	.611	.090	12.888	***	.373
Structural → Travel constraints	.578	.078	10.996	***	.334
Not an option → Travel constraints	.912	.115	14.600	***	.833
With Social self-congruity in the model					
Intrapersonal → Travel constraints	.683	--	--	--	.466
Interpersonal → Travel constraints	.558	.095	12.056	***	.311
Structural → Travel constraints	.521	.081	10.312	***	.271
Not an option → Travel constraints	.979	.137	14.305	***	.959
With Social ideal self-congruity in the model					
Intrapersonal → Travel constraints	.718	--	--	--	.516
Interpersonal → Travel constraints	.591	.092	12.571	***	.349
Structural → Travel constraints	.556	.079	10.736	***	.309
Not an option → Travel constraints	.938	.122	14.502	***	.880

*** $p < .001$

H5: The presence of travel constraints initiates adoption of constraint negotiation strategies. The more constrained a person is, the more likely the person will use negotiation strategies.

This hypothesis examined the interaction between travel constraints and constraint negotiation. It was hypothesized in the study that the experience of travel constraints would stimulate the use of constraint negotiation strategies. In other words, there would be a positive relationship between these two constructs. The more constrained a person was to travel, the more likely he/she would adopt constraint negotiation strategies. This hypothesis was not supported by the study. Although the relationship between travel constraints and constraint negotiation was

found to be significant ($p < .001$), the relationship was found to be negative instead of positive (β = -.392, -.311, -.39, and -.339) (Table 45). This indicates that the more constrained a person feels, the less likely he/she will adopt constraint negotiation strategies.

TABLE 45
TESTING RESULTS OF HYPOTHESIS 5

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Constraints → Negotiation	-.392	.062	-7.568	p < .001
With Ideal self-congruity in the model				
Constraints → Negotiation	-.311	.051	-6.747	p < .001
With Social self-congruity in the model				
Constraints → Negotiation	-.395	.063	-7.580	p < .001
With Social ideal self-congruity in the model				
Constraints → Negotiation	-.339	.055	-6.986	p < .001

H6: Self-congruity positively influences constraint negotiation. The higher the level of self-congruity, the more likely a person will adopt constraints negotiation strategy.

Hypothesis 6 tested the relationship between self-congruity and constraint negotiation. Self-congruity, which refers to the hedonic/affective aspect of travel motivation, was expected to have a positive influence on constraint negotiation. The results supported this hypothesis ($p < .001$) (Table 46), which implies that the more congruent people feel about their self-images and destination images, the more likely they will use constraint negotiation strategies to negotiate their limitations to travel. The standard path coefficients for the models of constraint negotiation and different types of self-congruity (actual, ideal, social, social ideal self-congruity) were .171, .242, .179, and .207 respectively. These numbers represented the units of change in

constraint negotiation corresponding to every unit of change in self-congruity. Since all the numbers were positive, it was concluded that the direction of the relationship was also positive.

TABLE 46
TESTING RESULTS OF HYPOTHESIS 6

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
Actual self-congruity → Negotiation	.171	.028	4.868	$p < .001$
Ideal self-congruity → Negotiation	.242	.027	6.232	$p < .001$
Social self-congruity → Negotiation	.179	.029	5.145	$p < .001$
Social ideal self-congruity → Negotiation	.207	.026	5.672	$p < .001$

H7: Functional congruity positively influences constraint negotiation. The higher the level of functional congruity, the more likely a person will adopt constraint negotiation strategy.

Hypothesis 7 investigated the relationship between functional congruity and constraint negotiation. Functional congruity, which refers to the utilitarian/cognitive aspect of motivation, was hypothesized to have a positive influence on constraint negotiation. In other words, the higher the functional congruity that people experience, the more likely they would adopt constraint negotiation strategies. This hypothesis was supported by the study ($p < .001$) (Table 47), and suggests that there is a positive relationship between these two constructs. The standard path coefficients for models with different types of congruity (i.e., actual, ideal, ideal, social ideal self-congruity) were .137, .134 .140, and .140 respectively, which implies that for a unit increase of functional congruity, constraint negotiation also increases .137, .134 .140, and .140 units accordingly.

TABLE 47
TESTING RESULTS OF HYPOTHESIS 7

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Functional congruity → Negotiation	.137	.044	4.072	p < .001
With Ideal self-congruity in the model				
Functional congruity → Negotiation	.134	.045	3.852	p < .001
With Social self-congruity in the model				
Functional congruity → Negotiation	.140	.043	4.220	p < .001
With Social ideal self-congruity in the model				
Functional congruity → Negotiation	.140	.044	4.097	p < .001

H8: Constraint negotiation positively influence travel intentions. The more constraint negotiation strategies a person adopts, the more likely the person would like to travel.

This hypothesis examined the influence that constraint negotiation had on travel intention. It was hypothesized that constraint negotiation would be positively related to travel intention, suggesting that the more negotiation strategies people used to reduce their travel constraints, the more likely people would like to travel. The results of the study supported the hypothesis ($p < .001$) (Table 48). The standard path coefficients for models with different types of self-congruity (i.e., actual, ideal, social, and social ideal self-congruity) were .303, .303, .295, and .299 respectively, which suggests that travel intention respectively increases .303, .303, .295, and .299 respectively when there was a unit increase in constraint negotiation. The coefficient was positive, which signaled a positive relationship between these two constructs.

TABLE 48
TESTING RESULTS OF HYPOTHESIS 8

Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p
With Actual self-congruity in the model				
Negotiation → Travel intention	.303	.045	9.458	p < .001
With Ideal self-congruity in the model				
Negotiation → Travel intention	.303	.044	9.506	p < .001
With Social self-congruity in the model				
Negotiation → Travel intention	.295	.045	9.304	p < .001
With Social ideal self-congruity in the model				
Negotiation → Travel intention	.299	.044	9.442	p < .001

H9: People who have higher self-efficacy are more likely to invest their efforts in negotiating travel constraints than those who have lower self-efficacy.

The effect of the moderator, self-efficacy, on constraint negotiation was performed by using invariance testing. Respondents were divided into two groups: high and low self-efficacy. The structural model was tested across these two groups to determine if the structural paths performed differently across the two groups. To accomplish this, the study followed three steps of invariance testing (Kyle et al 2004; Bollen 1989): 1) a baseline model was first tested with an aggregated sample; 2) the baseline model was then tested separately with each group of sample; and 3) the equivalence of the regression coefficients was tested across the two groups. The first two steps were to test the plausibility of the model structure with both an aggregated sample and two sample groups; the last step was to test hypothesis 9, which was concerned with the equality of path coefficients across high and low self-efficacy groups.

Chi-square change was recorded when an invariance test was performed to determine if the regression paths were significantly variant across the two groups. In addition to testing

equivalence of structural weights, invariance tests can be expanded to test equivalence of factor loadings, structural covariances, structural residuals, and measurement residuals (Kyle et al. 2004; Bollen 1989; Arbuckle 2007). In AMOS, these tests can be performed either separately or simultaneously (Arbuckle 2007).

Constructing a baseline model fit of both groups was a prerequisite for later invariance testing on the hypothesized model across high and low self-efficacy groups. To accomplish this task, the structural model (Figure 19) was first tested with the pooled sample. RMSEA (.046, .047, .046, and .047), NFI (.909, .912, .909, and .911), CFI (.938, .940, .909, and .911) and AGFI (.862, .858, .859, and .857), indicated that the MOA model with four different self-congruity constructs (i.e., actual, ideal, social, and social ideal self-congruity) respectively had an acceptable fit to the pooled data (Table 49).

The baseline model was then tested separately with high-efficacy and low-efficacy groups. Both RMSEA (High efficacy group: .049, .051, .050, and .050; Low efficacy group: .050, .051, .050, and .051) and CFI (High efficacy group: .925, .924, .922, and .925; Low efficacy group: .921, .926, .923, and .925) consistently suggested that the model with different types of self-congruity (i.e., actual, ideal, social, and social ideal self-congruity) respectively had an acceptable fit to each sample group. This implied a similar factor structure across high and low self-efficacy groups. Therefore, the hypothesized model provided a basic structure for the subsequent invariance tests.

TABLE 49
ESTIMATION OF FIT INDICES OF BASELINE MODEL

Model	χ^2 (df)	RMSEA	NFI	CFI	GFI	AGFI
With Actual self-congruity in the model						
Baseline model	2768.7 (96)	.046	.909	.938	.876	.862
High-efficacy group	2088.3 (96)	.049	.870	.925	.842	.823
Low-efficacy group	1939.6 (96)	.050	.854	.921	.825	.803
With Ideal self-congruity in the model						
Baseline model	2858.9 (96)	.047	.912	.940	.873	.858
High-efficacy group	2181.6 (96)	.051	.872	.924	.841	.822
Low-efficacy group	1958.7 (96)	.051	.865	.926	.822	.801
With Social self-congruity in the model						
Baseline model	2796.5 (96)	.046	.909	.938	.874	.859
High-efficacy group	2158.0 (96)	.050	.867	.922	.837	.817
Low-efficacy group	1932.2 (96)	.050	.857	.923	.824	.803
With Social ideal self-congruity in the model						
Baseline model	2870.4 (96)	.047	.911	.939	.872	.857
High-efficacy group	2157.2 (96)	.050	.872	.925	.840	.820
Low-efficacy group	1962.1 (96)	.051	.863	.925	.822	.800

The invariance testing on the structural coefficient estimates (β) of the path from "Travel constraints" to "Constraint negotiation" across the two groups was performed after testing the baseline model. The purpose of invariance testing is to find out if regression paths perform equivalently across two groups. If the hypothesis is supported, then the conclusion of an invariant path across the two groups can be made. If the invariance hypothesis is rejected, then regression coefficients are different across groups of testing.

The path in the high-efficacy group was forced to be invariant to the low-efficacy group in the test. The chi-square of the regression path invariance testing model was recorded and was compared to the chi-square obtained in the baseline model. The results suggested that there was statistically a significant change in chi-square ($\Delta\chi^2$ = 8.244, 5.174, 7.006, and 7.006; Δdf = 1) for actual, ideal, social, and social ideal self-congruity models respectively (Table 50). The

significant chi-square change indicated that the regression paths were not equivalent across high and low self-efficacy groups.

TABLE 50
RESULTS OF INVARIANCE TESTING ON PATH OF INTEREST

Model	χ^2	df	$\Delta\chi^2$	Δdf	p
With Actual self-congruity in the model					
Unconstrained	4028.008	1930	--	--	--
Measurement weights	4101.270	1967	73.262	37	***
Structural weights	4126.579	1979	25.309	12	*
Travel constraints→ Constraint negotiation	4118.335	1978	8.244	1	**
With Ideal self-congruity in the model					
Unconstrained	4140.393	1930	--	--	--
Measurement weights	4231.775	1967	91.382	37	***
Structural weights	4272.552	1979	40.777	12	***
Travel constraints→ Constraint negotiation	4267.378	1978	5.174	1	*
With Social self-congruity in the model					
Unconstrained	4090.235	1930	--	--	--
Measurement weights	4164.675	1967	74.44	37	***
Structural weights	4186.957	1979	22.282	12	*
Travel constraints→ Constraint negotiation	4179.951	1978	7.006	1	**
With Social ideal self-congruity in the model					
Unconstrained	4119.336	1930	--	--	--
Measurement weights	4218.803	1967	99.467	37	***
Structural weights	4247.366	1979	28.563	12	**
Travel constraints→ Constraint negotiation	4240.36	1978	7.006	1	**

* $p < .05$, ** $p < .01$, *** $p < .001$

Results of the invariance tests suggested that the interested regression paths were variant across the two groups. Further investigation was conducted to reveal if the high self-efficacy group was more likely to negotiate their constraints. Similar to hypothesis 5, results showed that travel constraints had a negative influence on constraint negotiation (Table 51). This implied that the more constraints a person experienced toward cruising, the less likely he/she would spend efforts on negotiating constraints, regardless the level of self-efficacy. The higher standard regression weights in the high efficacy group suggest that this negative relationship was more

significant in the high self-efficacy group than in the low self-efficacy group. In other words, for the same degree of increase in travel constraints, the decrease in constraint negotiation in the high self-efficacy group was higher than in the low self-efficacy group.

TABLE 51
STANDARDIZED REGRESSION WEIGHTS

	Std. regression weight	Error	Critical value (t)	p
With Actual self-congruity in the model				
Aggregated sample: Constraints → Negotiation	-.392	.062	-7.568	***
High efficacy group: Constraints → Negotiation	-.338	.091	-4.955	***
Low efficacy group: Constraints → Negotiation	-.219	.102	-3.422	***
With Ideal self-congruity in the model				
Aggregated sample: Constraints → Negotiation	-.311	.051	-6.747	***
High efficacy group: Constraints → Negotiation	-.121	.055	-2.503	*
Low efficacy group: Constraints → Negotiation	-.083	.075	-1.434	
With Social self-congruity in the model				
Aggregated sample: Constraints → Negotiation	-.395	.063	-7.580	***
High efficacy group: Constraints → Negotiation	-.340	.091	-4.906	***
Low efficacy group: Constraints → Negotiation	-.229	.104	-3.521	***
With Social ideal self-congruity in the model				
Aggregated sample: Constraints → Negotiation	-.339	.055	-6.986	***
High efficacy group: Constraints → Negotiation	-.176	.060	-3.356	***
Low efficacy group: Constraints → Negotiation	-.170	-.086	-2.831	*

* $p < .05$
*** $p < .001$

Further investigation was conducted to check if self-efficacy had any moderating effects on other regression paths. It was found that the paths "Self-congruity→ Constraint negotiation" and "Functional congruity→ Negotiation" for both high and low self-efficacy groups were variant across all four self-congruity models (Table 52). This suggests that there was a moderating effect of self-efficacy on these two negotiation paths.

TABLE 52
RESULTS OF INVARIANCE TESTING ON ALL REGRESSION PATHS

Model	χ^2	df	$\Delta\chi^2$	Δdf	p
With Actual self-congruity in the model					
Travel constraints→ Travel intention	4125.614	1978	0.965	1	invariant
Constraint negotiation→ Travel intention	4126.542	1978	0.037	1	invariant
Actual self-congruity→ Functional congruity	4125.794	1978	0.785	1	invariant
Actual self-congruity→ Travel intention	4125.616	1978	0.963	1	invariant
Actual self-congruity→ Constraint negotiation	4120.712	1978	5.867	1	*
Functional congruity→ Travel intention	4126.459	1978	0.120	1	invariant
Functional congruity→ Negotiation	4114.748	1978	11.831	1	***
With Ideal self-congruity in the model					
Travel constraints→ Travel intention	4271.201	1978	1.351	1	invariant
Constraint negotiation→ Travel intention	4272.024	1978	0.528	1	invariant
Ideal self-congruity→ Functional congruity	4270.520	1978	2.032	1	invariant
Ideal self-congruity→ Travel intention	4270.229	1978	2.323	1	invariant
Ideal self-congruity→ Constraint negotiation	4252.041	1978	20.511	1	***
Functional congruity→ Travel intention	4271.375	1978	1.177	1	invariant
Functional congruity→ Negotiation	4256.769	1978	15.783	1	***
With Social self-congruity in the model					
Travel constraints→ Travel intention	4185.753	1978	1.204	1	invariant
Constraint negotiation→ Travel intention	4186.928	1978	0.029	1	invariant
Social self-congruity→ Functional congruity	4186.892	1978	0.065	1	invariant
Social self-congruity→ Travel intention	4185.882	1978	1.135	1	invariant
Social self-congruity→ Constraint negotiation	4182.597	1978	4.360	1	*
Functional congruity→ Travel intention	4186.902	1978	0.055	1	invariant
Functional congruity→ Negotiation	4176.925	1978	10.032	1	**
With Social ideal self-congruity in the model					
Travel constraints→ Travel intention	4246.311	1978	1.055	1	invariant
Constraint negotiation→ Travel intention	4247.234	1978	0.132	1	invariant
Social ideal self-congruity→ Functional congruity	4246.998	1978	0.368	1	invariant
Social ideal self-congruity→ Travel intention	4247.294	1978	0.072	1	invariant
Social ideal self-congruity→ Constraint negotiation	4237.981	1978	9.385	1	**
Functional congruity→ Travel intention	4246.941	1978	0.425	1	invariant
Functional congruity→ Negotiation	4234.432	1978	12.934	1	***

* $p < .05$, ** $p < .01$, *** $p < .001$

Standardized regression weights of significant regression paths (i.e., "Self-congruity→ Constraint negotiation" and "Functional congruity→ Negotiation") were further compared across the two groups (Table 53). It was found that the high self-efficacy group had consistently higher regression estimates than the low self-efficacy group, which suggests that while in both groups, people who were more motivated to cruise were also more likely to negotiate their constraints,

this relationship was amplified in the high self-efficacy group. In addition, although the "Self-congruity→ Constraint negotiation" path was significant across all four types of self-congruity in both sample groups, the "Functional congruity→ Negotiation" path was not significant for the low self-efficacy group in ideal, social, and social ideal self-congruity models. This implies that when self-efficacy levels are too low, functional congruity does not initiate efforts to negotiate constraints to cruising.

TABLE 53
STANDARDIZED REGRESSION WEIGHTS OF SIGNIFICANT PATHS

	Std. regression weight	Error	Critical value (t)	p
With Actual self-congruity in the model				
Aggregated sample: Self-congruity → Negotiation	.171	.028	4.868	***
High efficacy group: Self-congruity → Negotiation	.227	.045	4.121	***
Low efficacy group: Self-congruity → Negotiation	.150	.040	2.747	**
Aggregated sample: Functional congruity → Negotiation	.137	.044	4.072	***
High efficacy group: Functional congruity → Negotiation	.246	.071	4.367	***
Low efficacy group: Functional congruity → Negotiation	.075	.063	1.497	
With Ideal self-congruity in the model				
Aggregated sample: Self-congruity → Negotiation	.242	.027	6.232	***
High efficacy group: Self-congruity → Negotiation	.359	.057	5.494	***
Low efficacy group: Self-congruity → Negotiation	.222	.037	3.763	***
Aggregated sample: Functional congruity → Negotiation	.134	.045	3.852	***
High efficacy group: Functional congruity → Negotiation	.252	.075	4.411	***
Low efficacy group: Functional congruity → Negotiation	.087	.072	1.610	
With Social self-congruity in the model				
Aggregated sample: Self-congruity → Negotiation	.179	.029	5.145	***
High efficacy group: Self-congruity → Negotiation	.213	.050	3.920	***
Low efficacy group: Self-congruity → Negotiation	.153	.037	2.895	**
Aggregated sample: Functional congruity → Negotiation	.140	.043	4.220	***
High efficacy group: Functional congruity → Negotiation	.239	.070	4.273	***
Low efficacy group: Functional congruity → Negotiation	.083	.060	1.707	
With Social ideal self-congruity in the model				
Aggregated sample: Self-congruity → Negotiation	.207	.026	5.672	***
High efficacy group: Self-congruity → Negotiation	.284	.047	4.809	***
Low efficacy group: Self-congruity → Negotiation	.169	.035	3.072	**
Aggregated sample: Functional congruity → Negotiation	.140	.044	4.097	***
High efficacy group: Functional congruity → Negotiation	.273	.076	4.598	***
Low efficacy group: Functional congruity → Negotiation	.086	.064	1.680	

* $p < .05$, *** $p < .001$

The analyses above suggested that self-efficacy had moderating effects on the constraint negotiation paths. However, its effect on "Travel constraints → Constraint negotiation" was different from what was predicted. The relationship between travel constraints and constraint negotiation was negative rather than positive, and the higher self-efficacy a person has, the less likely he/she would spend efforts on constraint negotiation. The further investigations suggested that self-efficacy moderated the paths of self-congruity and functional congruity to constraint negotiation. It was found that for the same level of travel motivation, those who had higher self-efficacy were more likely to negotiate their constraints than those who had low self-efficacy. Therefore, hypothesis 9 was partially supported.

Chapter Summary

This chapter further assessed the reliability and validity of the measurement scales. An online panel survey was conducted and based on which, reliability and validity tests were performed. In addition, the overall fit of the proposed model to the data and hypothesized relationships among the constructs were tested by using the SEM technique in AMOS. The results indicated that 1) the measurement scales were both reliable and valid; 2) the MOA model had an acceptable fit to the data; and 3) most hypotheses were supported by the data.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

This section first reviews and discusses the findings generated from the previous sections. Then, both theoretical and practical implications are suggested based on the study results. Finally, some insights on the limitations of the current study and directions for future research are provided.

Review of the Findings

The purposes of the study were to propose and empirically test an alternative travel decision-making model (i.e., the MOA model), and to examine the influences of different factors including travel constraints, constraint negotiation, self-congruity, functional congruity, and self-efficacy on travel intentions. The study was initiated by the observation of a low percentage (17%) of the U.S. population who have cruised despite over 60% of them indicating that they were interested in taking a cruise vacation. Thus, identifying travel constraints associated with cruising was essential to the understanding of this discrepancy and for providing strategic direction for implementing marketing strategies to reach the potential market.

However, it was believed a broader understanding of travel constraints and travel decision-making was more likely to be achieved if the study was guided by theory. Travel constraints are not the sole source of influence on travel decisions. Thus, identifying other influential factors and their interactions were essential to gain a holistic understanding of travel decision-making. The MOA (motivation-opportunity-ability) model was introduced in the current study and was adopted as a guiding framework for the investigation. This model

provided a theoretical framework in which influential factors of travel decision-making were examined. Nine hypotheses were proposed after a comprehensive literature review and were subsequently tested with empirical data.

The study incorporated both qualitative and quantitative methodologies to understand the factors influencing travel decision-making and to develop measurement scales for the constructs of interest. Semi-structured interviews were conducted with both cruisers and non-cruisers with a convenience sample obtained on campus at Texas A&M as well as at Port Everglades in Fort Lauderdale, Florida. In addition to past literature, the interviews provided another source of information for developing measurement scales.

The study adopted a comprehensive procedure of developing measures as recommended by Churchill (1979). The developed measurement items were reviewed by a panel of experts to establish the face validity of the scales. A pilot study with undergraduate students at Texas A&M University was conducted and EFA was subsequently performed on the data to purify the measurement. The reliability and validity of measurement were further examined with the data yielded from an online panel survey with a sample comprised of both cruisers and non-cruisers.

Following measurement scale development, nine hypotheses were tested. In all seven hypotheses were supported, one partially supported, and one was rejected (Table 54). Hypothesis 1 suggested that there was a positive relationship between self-congruity and likelihood of travel. This hypothesis was supported by the study. Along with previous self-congruity studies in tourism (e.g., Beerli, Menesses, and Gil 2007; Kastenholz 2004; Sirgy and Su 2000), this study confirmed that the implications of self-congruity are not limited to tangible goods. Rather, it can be extended to travel experiences.

TABLE 54
SUMMARY OF HYPOTHESIS TESTING

Hypotheses	**Results of testing**
H1: The congruity between self-images and affective destination images influences people's travel intentions. The more congruent images are, the more likely people would like to travel to the destination.	Supported
H2: The congruity between ideal functional images of destination attributes and cognitive destination images along the same attributes influences people's travel intentions. The more congruent images are, the more likely people would like to travel to the destination.	Supported
H3: Functional congruity is positively affected by self-congruity. People who have higher congruence between their self images and affective destination images are more likely to have higher functional congruity toward the destination.	Supported
H4: Travel constraints negatively influence travel intentions. The higher the level of travel constraints a person experiences, the less likely the person would like to travel.	Supported
H5: The presence of travel constraints initiates adoption of constraint negotiation strategies. The more constrained a person is, the more likely the person will use negotiation strategies.	Rejected
H6: Self congruity positively influences constraint negotiation. The higher the level of self-congruity, the more likely a person will adopt constraints negotiation strategy.	Supported
H6: Self congruity positively influences constraint negotiation. The higher the level of self-congruity, the more likely a person will adopt constraints negotiation strategy.	Supported
H8: Constraint negotiation positively influence travel intentions. The more constraint negotiation strategies a person adopts, the more likely the person would like to travel.	Supported
H9: People who have higher self-efficacy are more likely to invest their efforts in negotiating travel constraints than those who have lower self-efficacy.	Partially supported

However, unlike the previous studies in which measurement of self-congruity was dominated by actual and ideal self-congruity (e.g., Goh and Litvin 2000; Magin et al 2003; Chon 1992), four types of self-congruity were tested in the current study: actual, ideal, social, and social ideal self-congruity. Comparison was made among them to understand which type(s) of self-congruity had a larger effect on travel intentions. It was found that for each unit increase of self-congruity, ideal self-congruity led to higher increases in travel intention than other types of self-congruity, followed by social ideal self-congruity, social self-congruity, and actual self-

congruity. This finding indicates that ideal and social ideal self-congruity may be better predictors than actual and social self-congruity and thus, should be included in the measurement of self-congruity. Based on the study results, it is recommended that congruity scholars may need to change the way they measure self-congruity considering most past studies have used actual and social self-congruity to measure self-congruity.

The second hypothesis tested the positive influence of functional congruity on travel intentions and this hypothesis was supported by the study. Combining the evidence from previous testing, this finding suggests that both rational (functional congruity) and hedonic (self-congruity) aspects of motivation should be considered when modeling travel decision-making. Observing that most past studies have separated the discussion of these two approaches, Sirgy, Grzeskowiak, and Su (2005) suggested that consumer behavior can be better explained if these approaches are treated as complimentary rather than competing theories. This study corresponds with this claim and suggests that integrating both streams of research can enhance our understanding of travel motivation.

Hypothesis 3 suggested that functional congruity was positively influenced by self-congruity. The data suggested that this was the case, as results provided evidence for the interaction between self-congruity and functional congruity predicted by Sirgy et al (1991) and Sirgy and Su (2000). Understanding of the relationship between them is more likely to present a more holistic picture of travel motivation. However, the low squared multiple correlations of functional congruity (.047) also implies that in addition to self-congruity, other factors may have better predicting power for functional congruity. Further investigations will be needed to discover these predicting variables.

Hypothesis 4 investigated the negative influence that travel constraints have on travel intentions. This hypothesis was supported by the current study. The highest standard regression coefficients (-.518, -.454, -.523, -.483) among all constructs in the MOA model indicated that travel constraints might be the most important factor in predicting travel intentions. Although the study of constraints to leisure can be traced back to as early as the 1960s (Buchanan and Allen 1985), the investigation on travel constraints is limited (Kerstetter, Yen, and Yarnal 2005). This study contributes to the constraint literature by demonstrating the applicability of constraints in a tourism context.

A further investigation suggested that "not an option" was the best predictor of travel intentions among all constraint factors. This result was different from Kertetter, Yen, and Yarnal's (2005) findings in which personal constraints was found to explain most of the variance in cruising frequency. The different measurement scales derived from the two studies might have caused the difference. However, the results of both studies suggest that the traditional measurement of leisure constraints in which intrapersonal, interpersonal, and structural constraints were the foci (Crawford and Godbey 1987) may not represent a full picture of leisure constraints. Including "not an option" in the measurement of travel constraints may help us gain a more holistic understanding of constraints.

Hypothesis 5 tested if the experience of travel constraints stimulated the use of constraint negotiation strategies. This hypothesis was rejected by the study. A reverse relationship was found instead, which suggests that the more constraints people perceive that they have, the less likely they would adopt constraint negotiation strategies. This finding was contrary to the positive relationship between travel constraints and constraint negotiation proposed by Hubbard and Mannell (2001) in their constraint-effects-mitigation model. This might be because there are

many other travel or recreational alternatives available to people. Therefore, when they experience constraints to cruising, they might easily switch to these alternatives instead of negotiating their cruising constraints. A further test on the difference between cruisers and non-cruisers on their experience of travel constraints would help us understand if cruisers have fewer constraints than non-cruisers.

Hypothesis 6 tested the relationship between self-congruity and constraint negotiation. The study found support for the hypothesis postulating a positive relationship. Consistent with the relationship between self-congruity and travel intention, ideal self-congruity had the highest standard regression coefficients among all four types of self-congruity, followed by social ideal self-congruity, social self-congruity, and actual self-congruity. This finding further validated the role of ideal and social ideal self-congruity in travel decision-making.

Hypothesis 7, which investigated the influence of functional congruity on constraint negotiation, was supported by the data. This suggests that the experience of functional congruity (i.e., the congruity between image of ideal cruise vacation and perceived cognitive image of cruising) motivated people to negotiate their constraints. Along with hypothesis 6, this study suggests that both hedonic (i.e., self-congruity) and rational (i.e., functional congruity) dimensions of travel motivation stimulated the use of constraint negotiation strategies. In other words, people were more likely to negotiate their constraints when they were highly motivated to travel.

The results from previous testing consolidated the role of motivation in constraint negotiation. In their proposition, Jackson, Crawford, and Godbey (1993) suggested that constraint negotiation can be stimulated by both the presence of constraints and leisure motivations. While hypothesis 5 rejected the positive relationship assumed between travel

constraints and constraint negotiation, both hypothesis 6 and 7 supported the positive influence that motivations have on constraint negotiation. Further investigations in other study contexts will be needed in order to provide more insights on the relationships between travel constraints and constraint negotiation as well as between travel motivation and constraint negotiation.

Hypothesis 8 examined the influence constraint negotiation had on travel intentions. The study provided evidence for this relationship, which implied that people who put more effort on negotiating their constraints were also more likely to travel than those who invested less effort on constraint negotiation. Together with hypotheses 6 and 7, the results of this hypothesis suggest that constraint negotiation can have both a direct and indirect effect on travel intentions. In other words, constraint negotiation can be a direct predictor of travel intention, or a mediator of the relationship between travel motivation and travel intention. Therefore, further testing on the mediating effect of constraint negotiation is needed.

The findings from hypotheses 4 to 8 validated Hubbard and Mannell's (2001) constraint-effects-mitigation model except for the path between travel constraints and constraint negotiation. Using self-congruity and functional congruity to measure travel motivation, this study provides further evidence of the influences of both "positive" and "negative" factors on travel intention, which corresponds with Jackson's (2005a) call on taking both aspects into account when investigating leisure/travel behaviors.

Hypothesis 9 tested the moderating effect of self-efficacy on the path between travel constraints and constraint negotiation. The sample was divided into high-efficacy and low efficacy groups for an invariance testing. Although a moderating effect of self-efficacy was found for the path between travel constraints and constraint negotiation, the direction of influence was opposite to what was predicted. This result was consistent with the test results of

hypothesis 5 in which travel constraints were found to be negatively related to constraint negotiation. The abundant availability of travel and recreational alternatives might have caused people to choose other alternatives rather than spending their efforts on negotiating constraints.

Since past constraint negotiation studies have suggested that travel motivation can influence the persistence of leisure preferences along the line of constraint negotiation processes (Jackson, Crawford, and Godbey 1993), the current study investigated whether self-efficacy moderated the relationship between travel motivation and constraint negotiation. This was found to be true in the current study. In other words, self-efficacy moderated the paths between self-congruity and constraint negotiation as well as between functional congruity and constraint negotiation. This suggests that self-efficacy played a role in modeling travel decision. However, the influence of self-efficacy on constraint negotiation was via travel motivation instead of travel constraints. In summary, the results supported Jackson, Crawford, and Godbey's (1993) proposition on the role of self-efficacy in constraint negotiation process.

The overall fit of the MOA model was also tested in the study, and the results suggest that the model had an acceptable fit to the data. This provided evidence for validating the MOA model, and suggests that travel decisions are a function of travel motivation (i.e., self-congruity and functional congruity), travel opportunity (i.e., travel constraints), and ability to travel (i.e., self-efficacy). Therefore, the MOA model appeared to be a useful framework for understanding the influences on travel decisions and how the factors interact with each other.

Theoretical Implications

Traditional decision-making models usually interpret tourist decision-making as a multistage process through which tourists derive their travel decisions logically and rationally

without considering the hedonic aspect of decisions. Taking another approach, this study included both rational and hedonic aspects of motivation by investigating how self-congruity and functional congruity influence travel intentions. While both refer to the motivation component of the MOA model, self-congruity is the hedonic component of motivation while functional congruity refers to the rational aspect of motivation. Past studies have often separated the discussion of self-congruity and functional congruity, while the current study incorporated both to hopefully present a broader picture of decision-making.

It is argued that the MOA model provides a parsimonious structure in which decision-making can be explained. This model is comprised of three components: motivation, opportunity, and ability. In this study, motivation was measured by self-congruity and functional congruity; opportunity was measured by travel constraints and constraint negotiation; and ability was measured by self-efficacy. It is further argued in this study that this approach is straight forward and can be easily understood by scholars and practitioners.

The application of self-congruity in the current study integrates the discussion of "push" and "pull" factors, which are two fundamental travel motivations depicted in past tourism literature. While "push" factors refer to intrinsic travel motivations (i.e., why people want to travel), "pull" factors refer to the destination attributes which entice people to choose a particular location to travel. Although relevant past studies have highlighted the important role of these two constructs in explaining decision-making, the discussion of these two aspects of motivation have often been separated. Thus, there is a lack of understanding on how the "pull" factors or destination attributes may respond to "push" of potential visitors to a destination.

The application of congruity (both self-congruity and functional congruity) in travel decisions can potentially bridge the gap between these two approaches since it implies that the

congruence between travelers' self-images and destination images as well as perfect destination image and perceived destination image provide fundamental motives for visiting a particular place. In other words, people are more likely to travel to places which have images congruent with their own images and/or ideal destination image.

Another theoretical contribution of the study is the provision of a theoretical and conceptual framework for studying destination image. Although there is vast research on destination image, a thorough literature review found that no explanations have been provided for the influences of destination image on decision-making. Applying self-congruity concept to the current study, it was found that a particular destination is chosen not only because of its positive image, but also because it matches tourists' self-images and contributes to their psychological well-being.

Although self-congruity theory's history can be traced back to the1950s, there is limited research in examining self-congruity theory in tourism contexts. This study demonstrated that self-congruity has positive influence on travel intentions. Therefore, the study contributes to the self-congruity literature in the sense that it demonstrates its applicability in explaining travel decisions. In addition, most studies have measured self-congruity with actual self-congruity and ideal self-congruity and there is a lack of attention on social self-congruity and social ideal self-congruity. By situating all four types of self-congruity in one study, this study provides a comparison basis for different types of congruity and thus, broadens the spectrum of analysis.

Further, despite the importance of destination image in the concept of self-congruity in tourism, past studies have not situated self-congruity in destination image research. In other words, there is a disconnect in the conceptualization and measurement of self-destination image congruity. Different dimensions of destination image such as affective and cognitive images

have been identified by destination image scholars. However, congruity studies in tourism do not seem to correspond to the destination image literature and make no differentiation on different types of destination image. This study addresses this limitation by integrating self-congruity with affective destination image and functional congruity with cognitive destination image based on the rationale depicted in Chapter II. It is argued that this integration provides a clearer picture of how destination image influences travel decisions through the mechanism of congruity theory.

The study also contributes to the leisure constraints literature by expanding its implication to a cruise tourism context. The results of the study suggest that travel constraints are an important variable influencing travel decision-making and therefore, should be incorporated in studies of travel decision-making.

Practical Implications

The significant relationship between self-congruity and travel intentions implies that marketers should understand the images that target markets hold about themselves, and to promote destinations in a way which can enhance, maintain, or reinforce travelers' self-images. For instance, to respond to one's actual self-congruity, promotional materials could portray cruise vacation as a mode of travel in which people can do things they feel comfortable with and based upon their true self. To respond to ideal self-congruity, the promotional message can first state what people want to themselves to be, followed by highlighting how the cruise companies help them realize their ideal self.

The higher path coefficients of ideal and social ideal self-congruity over other self-congruity constructs suggests that people perceive that cruising offers them the opportunity to be the person they most want themselves to be and be the person they would most like other people

to perceive themselves. In other words, cruising may be perceived by the market as a type of vacation which can release one's inner self and/or be their ideal self. The desire to be themselves and the inability to realize this in their ordinary life could be what motivates people to go on a cruise. Therefore, incorporating this message in promotional materials is likely to be effective in attracting this target market. The liberation on a cruise can be compared with the mundane life in an ordinary environment in order to entice people to cruise.

Functional congruity also had a positive influence on travel intentions. Thus, understanding what images people hold toward a perfect cruising experience is essential to the design of cruising products or services. The interviews conducted in the current study suggested that destinations play a vital role in forming perfect images of cruising. However, food, entertainment, and activities were the major components of a perceived cruising experience. This indicates a discrepancy between what is desired by the market and what is being delivered by cruiselines. Marketers should invest their efforts on repositioning cruising services or adjusting promotional massages in order to bridge the gap. For instance, promotional messages could include exotic destinations and unique cultures in the destinations used to arouse interest in cruising.

Different constraints associated with cruising were reported in the interviews. These constraints shed some light on why only a small portion of North Americans go on a cruise even though most of them are interested in cruising. It was found in the study that "not an option" was the most influential predictor among all constraint factors, which implies that most people do not cruise because 1) they are not interested in cruising; 2) cruising is not their lifestyle; 3) cruising never occurs to them as a travel option; 4) there are many other travel alternatives that they would like to do before cruising; and/or 5) their family/friends do not cruise. Since this set of

people do not consider cruising as a travel option (i.e., no demand), promoting cruising to this market is unlikely to be successful. Rather, more efforts should be invested in converting the latent demand (i.e., those who are interested but can't cruise due to the experience of some constraints) to effective demand (i.e., become cruisers).

The study also demonstrates that constraints have negative impacts on travel intentions and is the strongest predictor of travel intentions among all constructs in the MOA model. Therefore, marketers should design and deliver services in a way which can reduce perceived travel constraints. For instance, some people reported that they did not cruise because of a lack of a companion. Cruiselines should spend more efforts on promoting cruise vacation to organizations, interest clubs, or retirement communities to generate interests of group travel. Incentives could also be offered to the current customers who encourage their friends to take a cruise vacation with them.

Some people did not cruise due to their work responsibilities. While offering internet access on cruise ship may enable them to continue to work while they are on vacation, promoting cruising benefits to corporations or companies may be an alternative way to reduce this constraint. Cruising can be suggested as a reward to employees' hard work and/or for improving their work efficiency. Cruise ships can also be promoted as a new venue on which different events such as conferences, business meetings, celebrations, and weddings can be held. Although some of these tactics have been implemented by cruise companies, wider promotion is necessary in order to explore the business vacationers' market.

To attract more people on board, efforts should also be invested in helping target customers negotiate their constraints. Since constraints were found to be negatively related to constraint negotiation, promoting cruising as a more desired travel mode than other travel

alternatives may motivate people to negotiate their constraints. Although direct interference from marketers to help target markets surmount their constraints may not be possible, indirect strategies such as changing the negative images of cruising or redesigning cruising services may be more effective in reducing their constraints. For instance, some participants in the interviews suggested that cruising does not provide much opportunity to understand local cultures of the destination. Thus, cultural displays, local food testing, or learning local crafts may help in building a cultural component to cruise tourism.

Since self-efficacy was found to moderate the relationship between travel motivation and constraint negotiation, promotional messages which could potentially boost target market's confidence in cruising could help them sustain travel motivations despite the influence of travel constraints. For instance, to increase their confidence in time management, messages could describe how cruising responds to people's limited time by offering flexible cruising schedules and different durations of cruising holidays. Also, to increase their confidence in financing cruise vacations, the promotional campaigns could emphasize the value of cruise packages.

Since different people have different interests and it is impossible to fulfill everyone's needs on one ship, it may be more effective to differentiate markets by offering special interest tours to cater to the needs of different markets. For instance, for nature lovers, tour to places full of natural beauty may be of interest; for party lovers, focus may need to be shifted to on-board activities and interaction opportunities with staff and other cruise passengers; for people who travel with their kids, educational and learning opportunities such as backstage tours or classes on life in the ocean or environmental protection may be appreciated by both the parents and their children.

Both current markets and unexplored markets are essential to sustaining cruising business. Baby boomers have been suggested in past studies as a lucrative market for experiential products including travel (Chilean American Chamber of Commerce 2007; Sawchuck 1995). Cruising, which offers opportunities to see the world with a convenient travel mode, has been the interest of this market. However, more research should be done to understand what baby boomers want from a cruising experience and how to retain this market. Research has suggested that despite the substantial potential for the senior market, insufficient effort has been spent by both marketers and scholars on understanding older consumers (Niemlä-Nyrhinen 2007). Due to the limited research on older adults, stereotypes are often used to infer their characteristics, mindsets and consumption behavior (e.g., Czaja and Sharit 1998; Vuori and Holmlund-Rytkönen 2005). This tactic is risky and could be costly since they may not be a true representation of the older market and thus, marketing strategies based on these stereotypes are likely to fail. Thus, more research should be conducted on the topic of senior cruise market.

To explore untapped cruise markets, cruiselines could extend their promotions to other countries or to those international travelers who are already in the North America. However, more research should be conducted to understand what the market potential is and if international cruise markets differ from the local market. Since new markets are more likely to have a lack of understanding of cruising, information should be provided to help them make decisions. For instance, virtual tours could be provided on the cruise companies' websites so that potential customers will have a better understanding of what to expect when they go on a cruise. The trip advisors who write reviews online or on newspaper columns can also be invited for a familiarization tour.

Limitations of Present Study

The current study was an initial attempt to apply the MOA model to the context of cruise tourism. The study setting was in the United States. Therefore, the results are limited to the U.S. population. Further testing in other contexts will be needed in order to generalize the results to other settings.

An online panel survey was conducted to collect data for testing the proposed model and hypothesized relationships among the constructs of interest. Since online panels are typically characterized by those who have registered with online panel companies or those who have internet access and computer skills, it does not necessarily represent the whole U.S. population.

Another drawback of the study is that the online panel company performed sampling and contacted panel members on behalf of the investigator. Therefore, compromises needed to be made due to the company's policies. For instance, the company terminated surveys once a requested number of responses was reached. Arbitrary termination of a survey may result in not taking late responses into account. In addition, the company was unwilling to disclose non-respondents' information. A non-response bias check would have been more straight-forward if the company had given the researcher the information.

At the preliminary stage of the study, interviews were conducted with both cruisers and non-cruisers. Since only two cruiseline companies (i.e., Holland America Line and Princess Cruises) granted the researcher permission to interview their passengers, passengers of other cruiselines were unable to be reached and thus, were excluded from the study sample. Therefore, the interview results should only be generalized to the passengers of these two cruiseline companies.

Recommendations for Future Research

This study proposed and empirically tested an alternative travel decision-making model in a cruise tourism context. Although the study results supported the proposed model and most hypothesized relationships, further investigation will be needed to validate the model in other study contexts. The same study can be conducted to evaluate why people choose a particular place for visitation and if the congruity concept has an effect on the activities they choose to do on vacation.

The study used self-congruity and functional congruity to measure travel motivation. However, in the tourism literature, travel motivations have been measured with multiple other motivation scales including the one conceptualized by Crompton (1979a). Without direct comparison, it is unknown which measurements are more effective in measuring travel motivation. Therefore, further investigation on comparing different motivation would contribute to this body of knowledge.

Studies have also suggested that repeaters and first timers are different in many aspects such as their perceived value and quality (Petrick 2004), travel motivations and intended activities (Lau and McKercher 2004), and visitation pattern (Oppermann 1997). It would be interesting to investigate if the MOA model performs differently across non-cruiser, first-timer and repeated cruisers.

Conclusions

In summary, this study explored different factors which influence a cruise vacation decision. An alternative travel decision model was proposed and empirical tested. The proposed model was constructed based on the MOA framework, in which behavior is affected by three

antecedents: motivation, opportunity, and ability. In the current study, motivation was measured by both self-congruity and functional congruity; opportunity was measured by constraints to cruising; and ability was measured by self-efficacy. Both qualitative and quantitative methods were utilized to develop appropriate measurement scales and to test the proposed model and hypothesized relationships among the constructs. The proposed model was found to have an acceptable fit to the data, which provided evidence for validating the MOA model. Nine hypotheses were tested and seven were supported, one was partially supported, and one was rejected by the study. Based on the study results, both theoretical and practical implications were recommended and directions for future research were outlined.

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APPENDIX I

PERMISSION REQUEST PROPOSAL

Permission Request Proposal

by

Kam Hung, Ph.D. Candidate
Department of Recreation, Park & Tourism Sciences
Texas A&M University

Contacts:
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December 2007

This proposal is prepared to obtain permission from Holland America Line to conduct interviews with cruise passengers. Below is a brief description of my study and research qualifications.

Objectives of study

The main purposes of this study are to unveil the constraints associated with cruise travel and to identify other factors affecting people's travel decision-making. The study consists of two phases. In phase 1, semi-structured interviews with a relatively small sample will be conducted. The information generated from the interviews will be incorporated into the questionnaire design in the later stage. In phase 2, a questionnaire will be designed based on an extensive literature review and narratives generated from the interviews.

To complete the first phase of the study, I am requesting permission from your company to allow me interview approximately 20-25 passengers onboard one of your vessels. I would prefer to conduct the interviews in January, but the dates can be adjusted according to your convenience. The destination can be anywhere, though I prefer to be on a 7-night cruise since this should give me enough time to complete the desired amount of interviews.

I would be more than happy to share my research findings with your company after completing my study. Below is a list of potential questions that I intend to ask interview participants. For a full description of my study, please refer to the research proposal attached.

1. How often do you travel?
2. How many times did you take a cruise vacation in the past 3 years?
3. Why did you choose a cruise for your vacation?
4. Can you describe your travel decision-making process?
5. Whom are you traveling with?
6. What are the factors which constrained or facilitated your cruise travel decision-making?
7. How did these factors influence your travel experience?
8. What images or characteristics come to mind when you think of cruise as a choice for your vacation?
9. How would you describe the atmosphere or mood that you would expect to experience while you are on a cruise?
10. Please list any distinctive or unique cruise attractions that you can think of.
11. Do you intend to cruise again in the future? Why/why not?

Researcher's background and qualifications

I am a Ph.D. candidate working on my dissertation entitled "Why Haven't You Taken a Cruise? Understanding Cruise Vacation Decision-making". The study is currently funded by a Holland America Line-Westours Research Grant awarded by the America Society of Travel Agents (ASTA). I obtained my Master's degree from the Texas A&M University in 2004. My Master and Ph.D. programs have equipped me with multiple research skills. I have published peer-reviewed journal articles, presented at both national and international conferences, and won national awards. I also have experience in interviewing people from my past research. For more detailed research qualifications, please refer to my resume attached.

APPENDIX II

INTERVIEW PROTOCOLS

Interview Protocol for Cruisers

Time of interview:
Date:
Cruise line:
Interviewee:
Age of interviewee:
Gender of interviewee (by observation): Female_____ Male_____

Socio-demographics Information

1. What is your education level?
2. What is your current job status?
3. What is your marital status?

Section 1. About cruise decision-making

1. Other than business trips, how often do you travel? How many times did you travel in the past 12 months? How many times did you take a cruise vacation in the past 3 years?
2. What motivates you to cruise? Why do/have you chosen a cruise over other types of vacations?
3. Can you describe your cruise decision-making process/How did you make your decision to take a cruise? [follow-ups; did anyone assist you with the process; were others involved in the decision]
4. Did anyone or anything hinder your decision to take a cruise [prompt if needed = time, money, etc]? How did you overcome these constraints? Did you feel confident that you could overcome the constraints [this will most likely need to be explained]?
5. What images or characteristics come to your mind when you think of cruise?
6. How would you describe the atmosphere or mood that you would expect to experience while you are on this cruise?
7. In your perception, what would a perfect cruise vacation be like?
8. Please list any distinctive or unique things that you think you will be experiencing on this cruise.
9. Do you intend to cruise again in the future [if so, how soon]? Why/why not?

Section 2. About self images

One of the purposes of this study is to investigate if travel decision is affected by people's self-images. The following questions are intended to understand how you perceive yourself. [All four of these questions will most likely need prompts, to assist the person, as the questions are quite vague]

1. Can you describe the sort of person you ***actually are*** or the way in which you actually see yourself?
2. Can you describe the sort of person you would ***most like*** to be or the way in which you would like to see yourself?
3. Can you describe the sort of person you are in the eyes of ***others***? Or please describe the sort of person your friends think you are.
4. Can you describe the sort of person you would ***most like*** other people to perceive yourself?
5. Do you think your self-images can influence your travel behavior/decision?
6. What do you usually expect to experience when you travel/visit a place?
7. Can you share your childhood travel experience? Did you travel frequently when you were a child? Do you think your travel experience in your childhood can influence your travel behavior/decision?

Interview Protocol for Non-cruisers

Time of interview:
Date:
Interviewee:
Age of interviewee:
Gender of interviewee (by observation): Female_____ Male_____

Socio-demographics Information

1. What is your education level?
2. What is your current job status?
3. What is your marital status?

Section 1. About cruise decision-making

1. Have you ever cruised?
2. Other than business trips, how often do you travel? How many times did you travel in the past 3 years?
3. What motivates you to travel? Or Why do you travel?
4. Can you describe your travel decision-making process/how did you make your decision to take your most recent trip [follow-ups; did anyone assist you with the process; were others involved in the decision]
5. Why haven't you taken a cruise? Are there any factors which have hindered your ability to take a cruise vacation [prompt = time/money, etc.]? Have you tried to overcome these constraints? If yes, how? Do you feel confident that you can negotiate the constraints [this will most likely need to be explained]?
6. What images or characteristics come to your mind when you think of cruise as a choice for your vacation?
7. How would you describe the atmosphere or mood that you would expect to experience while you are on a cruise?
8. In your perception, what would a perfect cruise vacation be like?
9. Please list any distinctive or unique things that you think you would experience if you went on a cruise.
10. Do you intend to cruise sometime in the future [if so, how soon]? Why/why not?

Section 2. About self images

One of the purposes of this study is to investigate if travel decision is affected by people's self-images. The following questions are intended to understand how you perceive yourself. [All four of these questions will most likely need prompts, to assist the person, as the questions are quite vague]

1. Can you describe the sort of person you *actually are* or the way in which you actually see yourself?
2. Can you describe the sort of person you would *most like* to be or the way in which you would like to see yourself?
3. Can you describe the sort of person you are in the eyes of *others*? Or please describe the sort of person your friends think you are.
4. Can you describe the sort of person you would *most like* other people to perceive yourself?
5. What do you usually expect to experience when you visit a place?
6. Can you share your childhood travel experience? Did you travel frequently when you were a child?

APPENDIX III

PANEL OF EXPERTS

First-round Review

April 5, 2008

To: James Petrick
David Scott
Alex McIntosh
James Leigh
Robert Li
Ulrike Gretzel
John Crompton
Gerard Kyle

From: Kam Hung

Subject: Assistance with content validity check of cruising decision-making measurement scale

INSTRUCTIONS

You are one of eight judges who have been selected to assist with a content validity check of a cruising decision-making scale. The definitions of constructs of interest are provided on the following page.

Would you please perform the following tasks:

(1) In the first column on the item sheets, assign each of the items into one (only one) of the four constructs related to decision-making. If you believe an item does not fit into any dimension, please state so.

(2) In the second column of the item sheets, rate each item as being:
A. Clearly representative of the construct designated in the first column,
B. Somewhat representative of the designated construct, or
C. Not representative of the designated construct.

(3) Suggest any additional items for each construct with which they would fit. Please do this on a separate sheet of paper.

(4) Edit and improve the items to improve their clarity, readability and content.

(5) Identify any items which you believe may be objectionable to respondents.

(6) Offer any suggestions you feel might contribute to improving the study.

*** **It would be appreciated if these tasks could be completed by April 10.**

DEFINITIONS

1. AFFECTIVE IMAGE OF CRUISING: Subjective feelings or emotional response of individuals toward cruising (modified Gartner's (1993) affective image of destination).

2. COGNITIVE IMAGE OF CRUISING: Beliefs or knowledge of cruising (modified Gartner's (1993) cognitive image of destination).

3. CRUISING CONSTRAINTS: The factors causing 1) inability to maintain cruising frequency at, or increase it to, desired level, 2) ceasing cruising, 3) non-cruising, and/or 4) insufficient enjoyment of cruising (modified Jackson and Scott's (1999) leisure constraint definition).

4. CRUISING MOTIVATIONS: The expected results for which people choose to cruise (modified Gnoth's (1997) definition of motivation).

	Task 1	**Task 2**
	Assign the items to one of the 4 following constructs: 1 = Affective image of cruising 2 = Cognitive image of cruising 3 = Cruising constraints 4 = Cruising motivations	How well does each item represent the construct? A = clearly representative B = somewhat representative C = not representative
1. Cruising provides a chance to meet new people.		
2. I can arrive at destinations without any effort with cruising.		
3. I'll talk to strangers on the cruise in ways that I don't at home.		
4. I cruise to experience other cultures		
5. I have a fear of the water/ocean		
6. Cruising has hidden costs		
7. I cruise to enjoy activities that provide a thrill		
8. My friends/family want to cruise		
9. There will be a small number of passengers and lots of staff on a cruise.		
10. Cruising provides an opportunity to learn new things.		
11. I'll have hospitable service if I go on a cruise.		
12. I cruise to interact with friends/family		
13. I don't cruise due to my family commitments		

14. I have poor health		
15. I cruise to increase my feelings of self-worth		
16. I cruise because I want to be pampered		
17. Cruising is expensive		
18. I have claustrophobia		
19. I can be playful on a cruise.		
20. I have cruised once and that was enough		
21. I won't learn anything from cruising		
22. I cruise for warm weather		
23. I am not interested in cruising		
24. I like to meet different people on a cruise ship		
25. I cruise because it has good entertainment		
26. Cruising means I will be treated as royalty.		
27. I cruise because everything is included in one price		
28. Cruising is not my family lifestyle		
29. Cruising provides an opportunity to visit new destinations		
30. I love being on the water		
31. Cruising is relaxing.		
32. I have a lack of knowledge about cruise vacations		
33. Cruising never occurs to me as a travel option		
34. Cruising has a negative impact on the sustainability of local environment		
35. Cruising is romantic.		
36. I cruise because cruising offers different options for me and my companion(s)		
37. I don't cruise due to my work responsibilities		
38. Cruises are crowded.		
39. Cruising is fun.		
40. Cruising is hassle-free.		

41. I cruise to give my mind a rest		
42. Cruising provides an opportunity to be a different person.		
43. I don't have to wait for a long time for my baggage if I cruise.		
44. Cruising provides an opportunity to live a different lifestyle.		
45. I cruise to derive a feeling of accomplishment		
46. I cruise to do something that impresses others		
47. Cruise ship staff will care for my needs.		
48. Cruising offers learning opportunities for children.		
49. I have no companion to go on a cruise with		
50. I don't have to do anything on a cruise if I choose so.		
51. It's difficult for me to find time to cruise		
52. Cruising has a variety of activities available.		
53. Cruising provides excellent service.		
54. Cruising provide a chance to spend time with friends or family		
55. Cruising is exciting.		
56. I cruise to satisfy my curiosity		
57. I'll have higher than average service if I go on a cruise.		
58. I need a special diet that is not available on a cruise		
59. Cruise ships are too confining		
60. Cruising has good entertainment.		
61. I cruise so that I can be free to do whatever I want, whenever I want, and wherever I want		
62. Cruising provides an opportunity to engage in activities different from those available at home.		
63. Cruising provides a chance to indulge myself.		
64. I can see many locations in a small amount of time while cruising.		
65. I am waiting for the right moment to take a cruise		
66. I cruise to escape		

67. I cruise so that I'll have common experience with my friends		
68. My family/friends do not cruise		
69. I might not like my dinner companions		
70. There are many other travel alternatives that I'd like to do before cruising.		
71. I cruise to enjoy the company of the people who came with me		
72. Cruising is arousing.		
73. I'll have a good time with friends or family on a cruise.		
74. Other passengers will be friendly to me on a cruise.		
75. Cruising is for old people		
76. I cruise to be thought more highly of by others for doing this		
77. I might be lonely on a cruise		
78. Cruising has everything included in one price.		
79. Cruising is luxurious.		
80. Cruising is serene.		
81. I cruise to photograph an exotic place to show friends		
82. I cruise to "let my hair down"		
83. I have sea-sickness/motion-sickness		
84. I cruise to have a high status vacation		
85. Cruising means eating constantly.		
86. I cruise to do something new		
87. My spouse/partner has poor health		
88. Cruise ships are clean.		
89. Cruising means I only have to unpack once.		
90. I cruise to have fun		
91. Cruising is calming.		
92. I'll have fun people around me if I go on a cruise.		
93. The room on a cruise is spacious.		
94. I cruise to gain knowledge		

95. Cruising has a wide range of itineraries for everybody.		
96. There are too many people on a cruise ship		
97. I am interested in the destinations more than cruising		
98. Cruising doesn't provide me much opportunity to have contact with nature.		
99. I cruise to enjoy nature		
100. I don't socialize well with strangers		
101. I worry about security on cruise ships		
102. Cruising provides an opportunity to understand local cultures.		
103. Cruising is boring		
104. I cruise to help me feel like a better person		
105. Cruising provides a chance to make new friends.		
106. Cruising is comforting.		
107. Cruising is pleasant.		
108. Everything you want is right there on a cruise ship		
109. Cruising is adventurous.		
110. I am interested in cruising, but I'd like to do it when I am old.		
111. I'll have good dining experience on a cruise.		
112. Cruises have comfortable accommodations.		
113. Cruising means lots of eating options.		
114. Cruising is enjoyable.		
115. Cruising is entertaining.		
116. I prefer flying directly to the destinations instead of cruising		
117. Cruising provides an opportunity to eat good food.		
118. Cruising means I will be pampered.		
119. I don't have to wait for a long time for embarkation or debarkation if I cruise.		
120. People are happy on a cruise.		

Second-round Review

April 15, 2008

To: James Petrick
Kam Hung

Subject: Assistance with content validity check of cruising decision-making measurement scale

You are one of two judges who have been selected to assist with a content validity check of a cruising decision-making scale. The definitions of constructs of interest are provided below.

DEFINITIONS

5. ACTUAL SELF: The way that a person actually sees him/herself (Sirgy, Grzeskowiak & Su, 2005; Sirgy, 1982; Ross, 1971).

6. IDEAL SELF: The way a person would like to be (Sirgy, Grzeskowiak & Su, 2005; Sirgy, 1982; Ross, 1971).

7. SOCIAL SELF: The way a person presents him/herself to others (Sirgy, Grzeskowiak & Su, 2005; Sirgy, 1982).

8. SOCIAL IDEAL SELF: The way that a person would like other people to perceive him/herself (Sirgy, Grzeskowiak & Su, 2005; Sirgy, 1982).

9. FUNCTIONAL ATTRIBUTES OF IDEAL CRUISE VACATION: Cruisers expectation of utilitarian features of ideal cruise vacation (modified Kressmann et al.'s (2006) definition of functional congruity).

INSTRUCTIONS

Would you please perform the following tasks:

(1) In the empty column of the item sheet, would you please rate each item as being: A). Clearly representative, B). Somewhat representative, or C). Not representative of ***Actual Self***, ***Ideal Self***, ***Social Self***, and ***Social Ideal Self***.

	Task
	How well does each item represent the construct? A = clearly representative B = somewhat representative C = not representative
121. Arousing – Sleepy	
122. Exciting – Gloomy	
123. Pleasant - Unpleasant	
124. Relaxing – Distressing	
125. Enjoyable – Not enjoyable	
126. Comforting – Uncomforting	
127. Calming – Annoying	
128. Fun – Boring	
129. Luxurious – Abstemious	
130. Romantic – Realistic	
131. Adventurous - Unadventurous	

(2) In the empty column of the item sheet, would you please rate each item as being: A). Clearly representative, B). Somewhat representative, or C). Not representative of ***Functional Attributes of Ideal Cruise Vacation***.

	Task
	How well does each item represent the construct? A = clearly representative B = somewhat representative C = not representative
1. I can arrive at destinations without any effort with cruising.	
2. There will be a small number of passengers and lots of staff on a cruise.	
3. Cruises are crowded.	
4. I don't have to wait for a long time for my baggage if I cruise.	
5. Cruise ship staff will care for my needs.	
6. Cruising has a variety of activities available.	
7. Cruise ships provide excellent service.	
8. I'll have higher than average service if I go on a cruise.	
9. Cruising has good entertainment.	
10. Cruising provides me an opportunity to engage in activities different from those available at home.	
11. Other passengers will be friendly to me on a cruise.	
12. Cruising is for old people.	
13. Cruising has everything included in one price.	
14. Cruising means eating constantly.	
15. Cruise ships are clean.	
16. Cruising means I only have to unpack once.	
17. The room on a cruise is spacious.	
18. Cruising has a wide range of itineraries for everybody.	
19. Cruising provides me an opportunity to understand local cultures.	
20. Cruising provides me a chance to make new friends.	
21. Everything you want is right there on a cruise ship.	
22. I'll have good dining experience on a cruise.	
23. Cruises have comfortable accommodations.	
24. Cruising means lots of eating options.	
25. Cruising provides me an opportunity to eat good food.	
26. Cruising means I will be pampered.	
27. I don't have to wait for a long time for embarkation or debarkation if I cruise.	
28. People are happy on a cruise.	

APPENDIX IV

PILOT TEST

A Tourism Survey

In cooperation with and sponsored by

Texas A&M University and the American Society of Travel Agents

Thank you for participating in this tourism survey. This study is being conducted by the Department of Recreation, Park, and Tourism Sciences at Texas A&M University to understand what factors influence your decision to cruise. You don't have to be a cruiser in order to participate in this survey because we are also interested in knowing what keeps you from cruising. There are no wrong answers to any questions so please follow your own feelings. Participation in this study is completely voluntary, and you can withdraw from the study at any time. Your identity will remain completely confidential.

Section I. Cruising Behavior

1. How many times have you cruised in your lifetime? _____Times
   (If you have never cruised, please skip the rest of questions in Section I and go to Section II directly.)
2. With how many different cruise lines have you traveled in your lifetime? _____Cruise Lines
3. In what year did you take your first cruise? _____year
4. During the last 3 years, how many times did you cruise? _____Times
5. As a whole, how would you rate your past experiences with cruise? *(circle one)*

   Terrible Poor Good Very Good Outstanding
6. Which cruise lines have you cruised with in the past? *(Check all that apply)*

   ☐ Holland America ☐ Carnival ☐ Celebrity ☐ Crystal ☐ Cunard
   ☐ Norwegian ☐ Princess ☐ Royal Caribbean ☐ Other_____

Section II. Perceived image toward cruising

1. Please circle the most appropriate number for each of the following pairs to best describe your **feelings toward cruising**.

Cruising is…

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Romantic	1	2	3	4	5	6	7	Realistic
Adventurous	1	2	3	4	5	6	7	Unadventurous

2. These questions are concerned with your **perceptions toward cruising**. Please indicate how strongly you agree or disagree with each statement by circling an appropriate number.

	Strongly Disagree		*Neutral*		*Strongly Agree*
I can arrive at destinations without any effort with cruising.	1	2	3	4	5
There will be a small number of passengers and lots of staff on a cruise.	1	2	3	4	5
There is a lot of open space on a cruise ship.	1	2	3	4	5
I don't have to wait for a long time for my baggage if I cruise.	1	2	3	4	5
Cruise ship staff will care for my needs.	1	2	3	4	5
Cruising has a variety of activities available.	1	2	3	4	5
Cruise ships provide excellent service.	1	2	3	4	5
I'll have higher than average service if I go on a cruise.	1	2	3	4	5
Cruising has good entertainment.	1	2	3	4	5
Cruising provides me an opportunity to engage in activities different from those available at home.	1	2	3	4	5
Other passengers will be friendly to me on a cruise.	1	2	3	4	5
During a cruise, I'll be with people similar to myself.	1	2	3	4	5
Cruising has everything included in one price.	1	2	3	4	5
Cruising means eating constantly.	1	2	3	4	5
Cruise ships are clean.	1	2	3	4	5
Cruising means I only have to unpack once.	1	2	3	4	5
The room on a cruise is spacious.	1	2	3	4	5
Cruising has a wide range of itineraries for everybody.	1	2	3	4	5
Cruising provides me an opportunity to understand local cultures.	1	2	3	4	5
Everything you want is right there on a cruise ship.	1	2	3	4	5
Cruises have comfortable accommodations.	1	2	3	4	5
Cruising means lots of eating options.	1	2	3	4	5
Cruising provides me an opportunity to eat good food.	1	2	3	4	5
Cruising means I will be pampered.	1	2	3	4	5
I don't have to wait for a long time for embarkation or debarkation if I cruise.	1	2	3	4	5

3. In your perception, what would a **PERFECT** cruise vacation be like? Please indicate how strongly you agree or disagree with each statement by circling an appropriate number.

	Strongly Disagree				*Strongly Agree*
			Neutral		
I can arrive at destinations without any effort with cruising.	1	2	3	4	5
There will be a small number of passengers and lots of staff on a cruise.	1	2	3	4	5
There is a lot of open space on a cruise ship.	1	2	3	4	5
I don't have to wait for a long time for my baggage if I cruise.	1	2	3	4	5
Cruise ship staff will care for my needs.	1	2	3	4	5
Cruising has a variety of activities available.	1	2	3	4	5
Cruise ships provide excellent service.	1	2	3	4	5
I'll have higher than average service if I go on a cruise.	1	2	3	4	5
Cruising has good entertainment.	1	2	3	4	5
Cruising provides me an opportunity to engage in activities different from those available at home.	1	2	3	4	5
Other passengers will be friendly to me on a cruise.	1	2	3	4	5
During a cruise, I'll be with people similar to myself.	1	2	3	4	5
Cruising has everything included in one price.	1	2	3	4	5
Cruising means eating constantly.	1	2	3	4	5
Cruise ships are clean.	1	2	3	4	5
Cruising means I only have to unpack once.	1	2	3	4	5
The room on a cruise is spacious.	1	2	3	4	5
Cruising has a wide range of itineraries for everybody.	1	2	3	4	5
Cruising provides me an opportunity to understand local cultures.	1	2	3	4	5
Everything you want is right there on a cruise ship.	1	2	3	4	5
Cruises have comfortable accommodations.	1	2	3	4	5
Cruising means lots of eating options.	1	2	3	4	5
Cruising provides me an opportunity to eat good food.	1	2	3	4	5
Cruising means I will be pampered.	1	2	3	4	5
I don't have to wait for a long time for embarkation or debarkation if I cruise.	1	2	3	4	5

Section III. Constraints of cruising

1. Below are some reasons reported by other people for why they don't cruise or were unable to cruise as frequent as they want. We would like to know if these constraints also apply to you. Please indicate how strongly you agree or disagree with each statement by circling an appropriate number.

	Strongly Disagree		*Neutral*		*Strongly Agree*
I have a fear of the water/ocean.	1	2	3	4	5
I don't cruise because I have too many family obligations.	1	2	3	4	5
I can't cruise because I have poor health.	1	2	3	4	5
Cruising is too expensive.	1	2	3	4	5
I don't cruise because I have claustrophobia.	1	2	3	4	5
I am not interested in cruising.	1	2	3	4	5
Cruising is not my family's lifestyle.	1	2	3	4	5
I have a lack of knowledge about cruise vacations.	1	2	3	4	5
Cruising never occurs to me as my travel option.	1	2	3	4	5
I don't cruise due to my work responsibilities.	1	2	3	4	5
I have no companion to go on a cruise with.	1	2	3	4	5
It's difficult for me to find time to cruise.	1	2	3	4	5
I need a special diet that is not available on a cruise.	1	2	3	4	5
My family/friends do not cruise.	1	2	3	4	5
I might not like my dinner companions on a cruise.	1	2	3	4	5
There are many other travel alternatives that I'd like to do before cruising.	1	2	3	4	5
I might be lonely on a cruise.	1	2	3	4	5
I have sea-sickness/motion-sickness.	1	2	3	4	5
I don't cruise because my spouse/partner has poor health.	1	2	3	4	5
I don't socialize well with strangers.	1	2	3	4	5
I worry about security on cruise ships.	1	2	3	4	5
I am interested in cruising, but I'd like to do it when I am old.	1	2	3	4	5
I prefer flying directly to the destinations instead of cruising.	1	2	3	4	5

2. It was found in past research that people were still able to go on a cruise even though they experience constraints. Below are some strategies adopted by them to reduce their constraints. We would like to know how frequently you **use** or **intend to use** these strategies.

	Never		*Neutral*		*Very often*
Budget my money for cruising.	1	2	3	4	5
Find a cruise that best fits within budget.	1	2	3	4	5
Find people to cruise with.	1	2	3	4	5
Set aside time for cruising.	1	2	3	4	5
Take shorter cruise vacations to reduce my travel time.	1	2	3	4	5
Use a baby sitter to make free time for cruising.	1	2	3	4	5
Plan ahead for things so that I can cruise.	1	2	3	4	5
Be organized so that I can cruise.	1	2	3	4	5
Get up earlier or stay up later to increase time for my cruise vacations.	1	2	3	4	5
Work hard so that I can have more time for cruising.	1	2	3	4	5
Prioritise what I want to do, and make cruising a priority sometimes.	1	2	3	4	5
Ask my family to share in the chores so that I can cruise.	1	2	3	4	5
Postpone cruising to later since now it is not the right moment.	1	2	3	4	5
Plan cruising around my family/friend's work time.	1	2	3	4	5
Find a cruise that best fits within my time limitations.	1	2	3	4	5
Take medication when I am seasick on a cruise ship.	1	2	3	4	5
Find times when a cruise ship is not crowded.	1	2	3	4	5

3. Using a confidence scale (0% to 100%), please tell us how confident you are in your ability to use the following strategies to successfully overcome constraints to cruising. 0% means "Very uncertain" while 100% means "Very certain."

	Very Uncertain (%)										*Very Certain (%)*
Budget my money for cruising.	0	10	20	30	40	50	60	70	80	90	100
Find a cruise that best fits within my budget.	0	10	20	30	40	50	60	70	80	90	100
Find people to cruise with.	0	10	20	30	40	50	60	70	80	90	100
Set aside time for cruising.	0	10	20	30	40	50	60	70	80	90	100
Take shorter cruise vacations to reduce my travel time.	0	10	20	30	40	50	60	70	80	90	100
Use a baby sitter to make free time for cruising.	0	10	20	30	40	50	60	70	80	90	100
Plan ahead for things so that I can cruise.	0	10	20	30	40	50	60	70	80	90	100
Be organized so that I can cruise.	0	10	20	30	40	50	60	70	80	90	100
Get up earlier or stay up later to increase time for my cruise vacation.	0	10	20	30	40	50	60	70	80	90	100
Work hard so that I can have more time for cruising.	0	10	20	30	40	50	60	70	80	90	100
Prioritise what I want to do, and make cruising a priority sometimes.	0	10	20	30	40	50	60	70	80	90	100
Ask my family to share in the chores so that I can cruise.	0	10	20	30	40	50	60	70	80	90	100
Postpone cruising to later since now it is not the right moment.	0	10	20	30	40	50	60	70	80	90	100
Plan cruising around my family/friend's work time.	0	10	20	30	40	50	60	70	80	90	100
Find a cruise that best fits within my time limitations.	0	10	20	30	40	50	60	70	80	90	100
Take medication when I am seasick on a cruise ship.	0	10	20	30	40	50	60	70	80	90	100
Find times when a cruise ship is not crowded.	0	10	20	30	40	50	60	70	80	90	100

Section IV. Behavioral intentions

1. Please indicate the extent of your agreement to the following.

	Strongly Disagree		*Neutral*		*Strongly Agree*
I'll say positive things about cruising to other people.	1	2	3	4	5
I intend to cruise in the next 3 years.	1	2	3	4	5
I'll recommend cruising to others.	1	2	3	4	5
I'll encourage friends and relatives to go on a cruise.	1	2	3	4	5

Section V. Cruising motivations for cruisers & non-cruisers

We would like to know what motivates or **could** motivate you to cruise. Please indicate the extent of your agreement to the following statements.

	Strongly Disagree		*Neutral*		*Strongly Agree*
Cruising provides me a chance to meet new people.	1	2	3	4	5
I cruise to experience other cultures.	1	2	3	4	5
I cruise to enjoy activities that provide a thrill.	1	2	3	4	5
I cruise because my friends/family want to cruise.	1	2	3	4	5
I cruise to interact with friends/family.	1	2	3	4	5
I cruise to increase my feelings of self-worth.	1	2	3	4	5
I cruise because I want to be pampered.	1	2	3	4	5
I cruise for warm weather.	1	2	3	4	5
I cruise because I like to meet different people on a cruise ship.	1	2	3	4	5
I cruise because it has good entertainment.	1	2	3	4	5
I cruise because cruising offers different options for me and my companion(s).	1	2	3	4	5
I cruise to give my mind a rest.	1	2	3	4	5
I cruise to derive a feeling of accomplishment.	1	2	3	4	5
I cruise to do something that impresses others.	1	2	3	4	5
I cruise to satisfy my curiosity.	1	2	3	4	5
I cruise so that I can be free to do whatever I want.	1	2	3	4	5
I cruise to escape.	1	2	3	4	5
I cruise so that I'll have common experiences with my friends.	1	2	3	4	5
I cruise to enjoy the company of the people who came with me.	1	2	3	4	5
I cruise to be thought more highly of by others for doing this.	1	2	3	4	5
I cruise to photograph an exotic place to show friends.	1	2	3	4	5
I cruise to "let my hair down".	1	2	3	4	5
I cruise to have a high status vacation.	1	2	3	4	5
I cruise to do something new.	1	2	3	4	5
I cruise to have fun.	1	2	3	4	5
I cruise to gain knowledge.	1	2	3	4	5
I cruise to enjoy nature.	1	2	3	4	5
I cruise to help me feel like a better person.	1	2	3	4	5

Section VI. Your self-images

1. This section is intended to understand how you perceive yourself. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you actually are**.

I am the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Romantic	1	2	3	4	5	6	7	Realistic
Adventurous	1	2	3	4	5	6	7	Unadventurous

2. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you would like to be**.

I would like myself to be …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Romantic	1	2	3	4	5	6	7	Realistic
Adventurous	1	2	3	4	5	6	7	Unadventurous

3. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you are in the eyes of others**.

People see me as the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Romantic	1	2	3	4	5	6	7	Realistic
Adventurous	1	2	3	4	5	6	7	Unadventurous

Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you would like other people to perceive you as.**

I would like to be perceived by others as the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Romantic	1	2	3	4	5	6	7	Realistic
Adventurous	1	2	3	4	5	6	7	Unadventurous

Section VII. Background information

1. Are you? ☐ Female ☐ Male
2. What is your current age? _____years
3. What year in school are you? _____year
4. What is your major? _____

APPENDIX V

ONLINE PANEL SURVEY

A Tourism Survey

In cooperation with and sponsored by

Texas A&M University and the American Society of Travel Agents

INFORMATION SHEET

Thank you for participating in this tourism survey. This study is being conducted by the Department of Recreation, Park, and Tourism Sciences at Texas A&M University to understand what prompts you to take a cruise or not take a cruise. **You don't have to be a cruiser in order to participate in this survey** as we are also interested in knowing what may keep you from cruising. There are no wrong answers to any questions.

The study is interested in U.S. citizens who are 25 years old or over, and will take about 15 minutes to complete. Participation in this study is completely voluntary, and you can withdraw from the study at any time. Your answers will be discarded if you decide to discontinue in the middle of the survey and your identity will remain completely confidential.

If you have any questions or problems in connection with the questionnaire, please contact Kam Hung at (979) 739-6769, kamh@tamu.edu, or Dr. James Petrick at (979) 845-8806, jpetrick@tamu.edu. By participating in this survey, you confirm that you have read and understood the information provided above and that you are giving us the consent to publish the information obtained from this research.

Screening question:

Have you ever cruised before?
(Cruising refers to "trips of a few days or more, and can extend to round-the-world voyages, with commercial cruise lines such as Carnival, Royal Caribbean, and many others.")

☐ Yes ☐ No *(Skip Section I and go directly to Section II)*

Section I. Cruising Behavior

7. How many times have you cruised in your lifetime? _____Times
8. With how many different cruise lines have you traveled in your lifetime? _____Cruise Lines
9. In what year did you take your **most recent** cruise? *(Please fill in 4 digit year)* _____year
10. In what year did you take your **first cruise**? *(Please fill in 4 digit year)* _____year
11. During the **last 3 years**, how many times did you cruise? _____Times
12. As a whole, how would you rate your past cruise experiences? (circle one)

    Terrible Poor Good Very Good Outstanding

13. Which cruise lines have you cruised with in the past? *(Check all that apply)*

    ☐ Carnival ☐ Celebrity ☐ Crystal ☐ Cunard ☐ Holland America
    ☐ Norwegian ☐ Princess ☐ Royal Caribbean ☐ Other_____

Section II. Perceived image toward cruising

4. Please circle the most appropriate number for each of the following pair of words to best describe your **feelings toward cruising**.

Cruising is…

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Adventurous	1	2	3	4	5	6	7	Unadventurous

5. These questions are concerned with your perceptions toward cruising, **even if you have never cruised.** Please indicate how strongly you agree or disagree with each statement by circling the most appropriate number.

	Strongly Disagree		*Neutral*		*Strongly Agree*
There will be a small number of passengers on a cruise.	1	2	3	4	5
There is a lot of open space on a cruise ship.	1	2	3	4	5
Cruise ship staff will care for my needs.	1	2	3	4	5
Cruising has a variety of activities available.	1	2	3	4	5
Cruise ship staff provide excellent service.	1	2	3	4	5
I'll have higher than average service if I go on a cruise.	1	2	3	4	5
Cruising has good entertainment.	1	2	3	4	5
Cruising provides me an opportunity to engage in activities different from those available at home.	1	2	3	4	5
The room on a cruise is spacious.	1	2	3	4	5
Cruising has a wide range of itineraries for everybody.	1	2	3	4	5
Cruises have comfortable accommodations.	1	2	3	4	5
Cruising means lots of eating options.	1	2	3	4	5
Cruising provides me an opportunity to eat good food.	1	2	3	4	5

6. In your perception, what would a **PERFECT** cruise vacation be like? Please indicate how strongly you agree or disagree with each statement by circling an appropriate number.

	Strongly Disagree		*Neutral*		*Strongly Agree*
There will be a small number of passengers on a cruise.	1	2	3	4	5
There is a lot of open space on a cruise ship.	1	2	3	4	5
Cruise ship staff will care for my needs.	1	2	3	4	5
Cruising has a variety of activities available.	1	2	3	4	5
Cruise ship staff provide excellent service.	1	2	3	4	5
I'll have higher than average service if I go on a cruise.	1	2	3	4	5
Cruising has good entertainment.	1	2	3	4	5
Cruising provides me an opportunity to engage in activities different from those available at home.	1	2	3	4	5
The room on a cruise is spacious.	1	2	3	4	5
Cruising has a wide range of itineraries for everybody.	1	2	3	4	5
Cruises have comfortable accommodations.	1	2	3	4	5
Cruising means lots of eating options.	1	2	3	4	5
Cruising provides me an opportunity to eat good food.	1	2	3	4	5

Section III. Constraints to cruising

4. Below are some reasons reported by other people for why they don't cruise or were unable to cruise (called constraints) as frequent as they want. We would like to know if these reasons also apply to you. Please indicate how strongly you agree or disagree with each statement by circling an appropriate number.

	Strongly Disagree		*Neutral*		*Strongly Agree*
I have a fear of the water/ocean.	1	2	3	4	5
I don't cruise because I have too many family obligations.	1	2	3	4	5
I can't cruise because I have poor health.	1	2	3	4	5
Cruising is too expensive.	1	2	3	4	5
I don't cruise because I have claustrophobia.	1	2	3	4	5
I am not interested in cruising.	1	2	3	4	5
Cruising is not my family's lifestyle.	1	2	3	4	5
Cruising never occurs to me as a travel option.	1	2	3	4	5
I don't cruise due to my work responsibilities.	1	2	3	4	5
I have no companion to go on a cruise with.	1	2	3	4	5
It's difficult for me to find time to cruise.	1	2	3	4	5
I need a special diet that is not available on a cruise.	1	2	3	4	5
My family/friends do not cruise.	1	2	3	4	5
I might not like my dinner companions on a cruise.	1	2	3	4	5
There are many other travel alternatives that I'd like to do before cruising.	1	2	3	4	5
I might be lonely on a cruise.	1	2	3	4	5
I have sea-sickness/motion-sickness.	1	2	3	4	5
I don't cruise because my spouse/partner has poor health.	1	2	3	4	5
I worry about security on cruise ships.	1	2	3	4	5

5. It has also been found in past research that people are still able to go on a cruise even though they experience constraints. Below are some strategies that have been adopted to reduce constraints. We would like to know how frequently you **use** or **intend to use** these strategies.

	Never	*Rarely*	*Sometimes*	*Regularly*	*Very Often*
Budget my money for cruising.	1	2	3	4	5
Find a cruise that best fits within my budget.	1	2	3	4	5
Find people to cruise with.	1	2	3	4	5
Set aside time for cruising.	1	2	3	4	5
Plan ahead for things so that I can cruise.	1	2	3	4	5
Be organized so that I can cruise.	1	2	3	4	5
Prioritise what I want to do, and make cruising a priority sometimes.	1	2	3	4	5
Plan cruising around my family/friend's work time.	1	2	3	4	5
Find a cruise that best fits within my time limitations.	1	2	3	4	5
Save up money to cruise.	1	2	3	4	5
Try to get a better job so I can afford to cruise.	1	2	3	4	5
Learn to live in my financial means.	1	2	3	4	5
Organize cruising with my own group.	1	2	3	4	5
Try to find people with similar interests to cruise with.	1	2	3	4	5

6. Using a confidence scale (0% to 100%), please tell us how confident you are in your ability to use the following strategies to successfully overcome constraints to cruising. 0% means "Very uncertain" while 100% means "Very certain."

	Very Uncertain (%)				*Moderately Certain (%)*						*Very Certain (%)*
Budget my money for cruising.	0	10	20	30	40	50	60	70	80	90	100
Find a cruise that best fits within my budget.	0	10	20	30	40	50	60	70	80	90	100
Find people to cruise with.	0	10	20	30	40	50	60	70	80	90	100
Set aside time for cruising.	0	10	20	30	40	50	60	70	80	90	100
Plan ahead for things so that I can cruise.	0	10	20	30	40	50	60	70	80	90	100
Be organized so that I can cruise.	0	10	20	30	40	50	60	70	80	90	100
Prioritise what I want to do, and make cruising a priority sometimes.	0	10	20	30	40	50	60	70	80	90	100
Plan cruising around my family/friend's work time.	0	10	20	30	40	50	60	70	80	90	100
Find a cruise that best fits within my time limitations.	0	10	20	30	40	50	60	70	80	90	100
Save up money to cruise.	0	10	20	30	40	50	60	70	80	90	100
Try to get a better job so I can afford to cruise.	0	10	20	30	40	50	60	70	80	90	100
Learn to live in my financial means.	0	10	20	30	40	50	60	70	80	90	100
Organize cruising with my own group.	0	10	20	30	40	50	60	70	80	90	100
Try to find people with similar interests to cruise with	0	10	20	30	40	50	60	70	80	90	100

Section IV. Behavioral intentions

2. Please indicate the extent of your agreement with each of the following.

	Strongly Disagree		*Neutral*		*Strongly Agree*
I'll say positive things about cruising to other people.	1	2	3	4	5
I intend to cruise in the next 3 years.	1	2	3	4	5
I'll recommend cruising to others.	1	2	3	4	5
I'll encourage friends and relatives to go on a cruise.	1	2	3	4	5

Section V. Cruising motivations for cruisers & non-cruisers

We would like to know what motivates or **could** motivate you to cruise. Please indicate the extent of your agreement with the following statements.

I cruise or would cruise…

	Strongly Disagree		*Neutral*		*Strongly Agree*
To meet new people.	1	2	3	4	5
To experience other cultures.	1	2	3	4	5
To enjoy activities that provide a thrill.	1	2	3	4	5
Because my friends/family want to cruise.	1	2	3	4	5
To interact with friends/family.	1	2	3	4	5
To increase my feelings of self-worth.	1	2	3	4	5
Because I like to meet different people on a cruise ship.	1	2	3	4	5
To give my mind a rest.	1	2	3	4	5
To derive a feeling of accomplishment.	1	2	3	4	5
To do something that impresses others.	1	2	3	4	5
So that I can be free to do whatever I want.	1	2	3	4	5
To escape.	1	2	3	4	5
To enjoy the company of the people who came with me.	1	2	3	4	5
To be thought more highly of by others for doing this.	1	2	3	4	5
To photograph an exotic place to show friends.	1	2	3	4	5
To have a high status vacation.	1	2	3	4	5
To have fun.	1	2	3	4	5
To gain knowledge.	1	2	3	4	5
To enjoy nature.	1	2	3	4	5
To help me feel like a better person.	1	2	3	4	5

Section VI. Your self-images

4. This section is intended to understand how you perceive yourself. Please circle the most appropriate number for each of the following pair of words to best describe **the sort of person you actually are**.

I am the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Adventurous	1	2	3	4	5	6	7	Unadventurous

5. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you would like to be**.

I would like myself to be …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Adventurous	1	2	3	4	5	6	7	Unadventurous

6. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you are in the eyes of others**.

People see me as the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Adventurous	1	2	3	4	5	6	7	Unadventurous

4. Please circle the most appropriate number for each of the following pairs to best describe **the sort of person you would like other people to perceive you as.**

I would like to be perceived by others as the sort of person who is …

Arousing	1	2	3	4	5	6	7	Sleepy
Exciting	1	2	3	4	5	6	7	Gloomy
Pleasant	1	2	3	4	5	6	7	Unpleasant
Relaxing	1	2	3	4	5	6	7	Distressing
Enjoyable	1	2	3	4	5	6	7	Not enjoyable
Comforting	1	2	3	4	5	6	7	Uncomforting
Calming	1	2	3	4	5	6	7	Annoying
Fun	1	2	3	4	5	6	7	Boring
Adventurous	1	2	3	4	5	6	7	Unadventurous

Section VII. Background information

5. Are you? ☐ Female ☐ Male

6. What year were you born? *(Please fill in 4-digit year)* _____year

7. What category best describes your current employment status?

☐ Employed full-time
☐ Employed part-time
☐ Full-time homemaker
☐ Other (Be specified) _____
☐ Student
☐ Retired
☐ Not currently employed

8. What is the highest level of formal education you have completed?

☐ Less than high school
☐ Completed high school
☐ Some college, not completed
☐ Completed college
☐ Post graduate work started or completed

9. What is your ethnic background?

☐ African American
☐ Caucasian
☐ Native American
☐ Hispanic
☐ Asian
☐ Other (Be specified) _____

10. What is your marital status?

☐ Married
☐ Separated
☐ Single, Never Married
☐ Widowed
☐ Divorced

11. What was your approximate total household income last year?

☐ Less than $20,000
☐ $20,000 to less than $25,000
☐ $25,000 to less than $30,000
☐ $30,000 to less than $40,000
☐ $40,000 to less than $50,000
☐ $50,000 to less than $75,000
☐ $75,000 to less than $100,000
☐ $100,000 to less than $125,000
☐ $125,000 to less than $150,000
☐ $150,000 to less than $200,000
☐ $200,000 to less than $250,000
☐ $250,000 or more

VITA

Personal Data

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Education

Ph.D. 2005 – 2008
Department of Recreation, Park & Tourism Sciences, Texas A&M University, College Station, Texas
Major: Tourist Behavior and Psychology; Tourism Marketing
Minor: Marketing; Social Psychology
Title of Dissertation: *Developing an Alternative Decision-making Model: An Implication of Cruise Vacation*
Chair: James F. Petrick, Ph.D.

M.S. 2002-2004
Department of Recreation, Park & Tourism Sciences, Texas A&M University, College Station, Texas
Major: Aging and Leisure
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Chair: John L. Crompton, Ph.D.

B.A. (Honors) 1998-2001
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Major: Hotel and Catering Management
Title of Final Year Project: *Fast Food Operations in Hong Kong*
Chair: Ray Pine, Ph.D.

Research Interests

Tourism marketing
Tourist behavior and psychology