

**The Relationships of Perceived Risk to Personal Factors, Knowledge of Destination,
and Travel Purchase Decisions in International Leisure Travel**

by

Jiho Y. Han

Dissertation submitted to the faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Hospitality and Tourism Management

Committee Chair: Dr. Pamela A. Weaver

Committee Members:

Dr. Candice E. Clemenz

Dr. James Littlefield

Dr. Ken W. McCleary

Dr. Suzanne K. Murrmann

April 22, 2005

Blacksburg, Virginia

Keywords: Perceived Risk, Psychographics, Language Ability, Past Experience,
Familiarity/Expertise, Travel Purchase Decisions, International Leisure Travel

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(ABSTRACT)

In the last five years, the world has experienced unexpected tragic events and natural disasters. However, international tourism is expected to grow continually and tourists are therefore becoming more concerned with safety and security during their international travel.

This dissertation investigated individuals' risk perception of vacationing at two scenario international destinations, Australia and Japan. While ten dimensions of perceived risk in international leisure travel were identified in the literature and one additional dimension of "Communication Risk" was proposed for this study, only seven dimensions were found in this study: "Health Risk," "Value Risk," "Psychological Risk," "Social Risk," "Terrorism Risk," "Equipment Risk," and "Communication Risk." The other four dimensions – "Financial Risk," "Time Risk," "Satisfaction Risk," and "Political Instability Risk" – were either merged into other dimensions or did not appear as an independent dimension in this study. The "Communication Risk" which was proposed in this study was found to be a valid dimension of perceived risk in vacationing at international destinations.

The relationships of perceived risk to other factors were also examined. Individuals' characteristics of novelty seeking were negatively related to their risk perception, as were individuals' proficiency of the destination's native language. Those who have experience visiting the destination tended to perceive less risk in vacationing at the destination; the more familiarity/expertise with the destination, the less risk was perceived. When an individual

perceived a higher level of risk towards a destination, s/he was less likely to vacation at the destination. Individuals were more likely to choose a packaged tour than independent travel when they had a higher level of risk perception towards vacationing at a particular international destination.

DEDICATION

To My Mother, Mi-Young Yun and My Father, In-Soo Han

“The body travels more easily than the mind, and until we have limbered up our imagination, we continue to think as though we had stayed at home. We have not really budged a step until we take up residence in someone else’s point of view.”

John Erskine (1879-1971:192) ‘The Complete Life’

ACKNOWLEDGEMENTS

It has been eight years since I first started my graduate education at Rikkyo University in Tokyo, Japan. Although I decided to continue higher education to become able to help others, I only have been helped by so many people in so many ways during the last eight years. The acknowledgements go to....

Dr. Pamela A. Weaver, my committee chair and my academic mother. Without her constant care and perfect guidance for my academic and personal life, I could not have completed this long journey. It is a joy of lifetime to have her as the role model of an outstanding researcher, teacher, and woman. My utmost respect, gratitude, and love will always be hers.

My fantastic committee members: Dr. Ken W. McCleary, without his encouragement, I could not have survived my first semester at VT. Since the first class with him, he has been and will always be my hero; Dr. Suzanne K. Murrmann provided the initial idea of developing the model of this dissertation and supplied valuable knowledge to elaborate the research design; Dr. James Littlefield offered his intellectual support during the research process and also taught me what true global mind is; and Dr. Candice E. Clemenz kindly presented a valuable learning opportunity of joint publication and her thoughtful encouragement throughout this dissertation process should be greatly appreciated. Working with my harmonious and well-balanced committee members has been always stimulating and enjoyable.

Dr. Lisa Leslie who had read every single draft page of this dissertation, for not only teaching me how to write academically but also contributing many helpful ideas to improve

this study. It was a blessing to earn a special friend through a painful process of working on this dissertation.

Dr. Muzaffer Uysal, Dr. Cheri Becker, Dr. David Chang, and Mr. Jin Huh helpfully cooperated for data collection in the stages of scale purification. Three friends of mine kindly helped me preparing and sending out my survey: Hyunjeong Lee, Philippe Wong, and Jeongshin Y. Weon. Dr. Sukbin Cha and Dr. Seehyung Kim contributed valuable ideas to designing the survey and data analysis. I would like to thank every single person who filled out my survey. They encouraged me and helped me in the most practical way. I am greatly indebted to them. Dr. Hyungil Jung, for his moral support and kind help for the last five years.

My mentors in Japan: Professor Kazuo Murakami, my Master's thesis advisor, for his excellent guidance and kind help for my career; Dr. Shigeru Shirasaka, for his valuable advice and warm encouragement; and Dr. Sang-Chul Chun, who opened the very first door to Virginia Tech for me, for his thoughtful advice.

Dr. Kaye Chon, to him I owe my greatest thanks for recognizing my potential and guiding me to realize my wishes.

My dear friends in Blacksburg, Heejin J. Chun and her family, Dr. Sunghyun Weon's family, Soyoun, Dr. Youngok Ahn, and sisters and brothers at Korean Baptist Church at Blacksburg, for precious memories that we shared together and will have in the future.

Catherine Snyder, her faithful prayers supported me most powerfully since the day I met her and her warmest heart comforted me when I was going through the hardest time.

My beloved friends in Korea, Jeehye, Anna, Junghyun, Jaehyun, Yousook, Hye-Sun, Young-Jin, Hyewon, Dr. Hyungsook You, Eunmi, Hyunjun, and Byunghwa, for their unchangeable faith in me that supported me to finish this arduous task.

My good friends in Japan, Reverend Miyama's family, Yukio and Mirei Miyazaki, Hosokawa family, the family of Humi Katsube, and the family of Misako Sekiguchi, for showing me unconditional friendship for the last five years from the other side of the globe.

My brother, Sung-Joo and My sister-in-law, Jean, for their everlasting love and unfailing faith in me. My father, In-Soo Han, his honest and diligent life has been and will always be my pride.

My late brother Sung-Ho, the loveliest person in my life, always makes me want to be a better person. Although I have to wait many years to see him again face to face, I'll do my best to be a person of whom he can be proud in heaven.

My mother, Mi-Young Youn, who is beautiful in every way, never failed to have trust in me at any single moment since I was born. She has been the biggest challenge to me while being the best supporter at the same time. I've always wanted to become like her and have her wisdom, humor, and brilliance but now I'm only happy to be her daughter.

Finally, I'm most grateful to God for my life and faith.

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CHAPTER I

INTRODUCTION

Travel has been described as an essential phenomenon in modern western society, and modern tourist travel has developed rapidly around the world (Cohen, 1995). The World Tourism Organization's *Tourism 2020 Vision* (WTO, 2003a) forecasts that international tourist arrivals are expected to reach over 1.56 billion in the year 2020. This is more than twice the number in 2000.

Planning and anticipation time before the trip can be as exciting and enjoyable as the trip itself (Goeldner, Ritchie, & McIntosh, 2000; Plog, 1991). However, making travel decisions is not a simple task since a tourist must make decisions regarding timing, transportation mode, budget, secondary destinations, and activities in addition to the primary destination. Moreover, every potential traveler faces a certain level of risk in traveling because the travel experience relies on intangible services that are consumed simultaneously with production (Zeithaml, 1981). When buying goods, a consumer can test the quality, but services cannot be tested as goods (Guseman, 1981). Therefore, consumers face a dilemma when selecting one of many services that vary in their quality, creating a higher degree of risk than buying goods (Guseman, 1981; Zeithaml, 1981).

With the development of information technology, the tourism industry now can offer "virtual experiences of destinations and attractions" to reduce a certain level of potential visitors' perceived risk. Cho (2002) investigated the effects of this virtual experience. Through an experiment, he found that virtual tours of a destination helped individuals to have more positive functional and psychological images of the destination. More practically,

Hampton Inn, one of the major hotel chains in the U.S., offers a “100% Satisfaction Guarantee” program (Zeithaml & Bitner, 2000). If customers are not satisfied with their stay, they do not have to pay for the room. Although this aggressive promotion tool may appeal to customers since it can reduce the perceived financial risk in staying at a hotel, it still cannot guarantee 100% satisfaction. If a customer is not satisfied, that experience with the hotel cannot be changed or removed from the customer’s memory.

Although the new millennium has started with the anticipation of growth in global tourism, the first four years have experienced catastrophic events. People around the world still have a vivid memory of the terrors on September 11, 2001 in New York, Pennsylvania, and Washington D.C.; there were many domestic and foreign travelers who became victims of the tragic events. Tourist arrivals in the U.S. were expected to take more than 5 years to recover to the number of visitors before the terrorist attacks (TIA, 2003). International visitors to the U.S. in 2004 were estimated 10% fewer than in 2000 (CNN, 2005). Additionally, international travel in the Asia-Pacific region during the first half of 2003 was devastated by Severe Acute Respiratory Syndrome and the Iraqi War. Although international tourism showed a positive rebound in 2004 from 2003, the year of 2004 ended with the tragic seaquake and following tsunami in many South Asian countries (WTO, 2005). While there are reports that give a positive outlook on recovery of tourism in these regions (*Assessing the Economic Damage of the South Asia Megatsunami*, 2005; WTO, 2005), these events have negatively affected individuals’ perceived risk in international travel.

Tourism providers should know that perceived risk caused by an event might become a large source of stress to travelers. There also exists a strongly influential “generalization effect” of perceived risk which can result in serious economic losses. While the construct of

perceived risk has been widely employed in the study of consumer behavior in marketing research, research on perceived risk related to international tourism has been neglected (Lepp & Gibson, 2003; Verhage, Yavas, & Green, 1990; Yavas, 1987). Thus, investigating the factors related to perceived risk is beneficial to both travelers and marketers.

This dissertation investigates the factors influencing leisure travel purchase decisions in international travel. The role of perceived risk in travel decision making is the main focus of this research; “communication risk,” a proposed construct of perceived risk, is also evaluated in this study. Additionally, personal factors and the knowledge of destinations are to be examined to see if they influence individuals’ perceived risk as antecedent factors.

Statement of the Problem

Prior studies (Fesenmaier & Jeng, 2000; J. Jeng & Fesenmaier, 2002; Moutinho, 1987) identified that trip decisions embrace a series of sub-decisions, such as (1) extent and nature of information search; (2) whether or not to take children; (3) length of stay/trip; (4) date/timing of year to travel; (5) mode(s) of transportation; (6) travel budget; (7) activities; (8) accommodation(s)/lodging; and (9) destination(s). However, it is not clear what factors influence individuals’ trip decisions and sub-decisions. Also, factors affecting travel choice may be more complicated for international than domestic travel (Hsieh, O’Leary, & Morrison, 1994).

This dissertation focuses on perceived risk as a dominant factor affecting travel decisions. One of the major influencing factors in travel decisions, communication problems while traveling in international destinations, is caused by language barriers. Language barriers impact every stage of travel; from planning the trip to satisfaction with the trip in international

travel (Cohen & Cooper, 2004). From this observation, this study added the proposed “communication risk” as a dimension of perceived risk, and examined its feasibility.

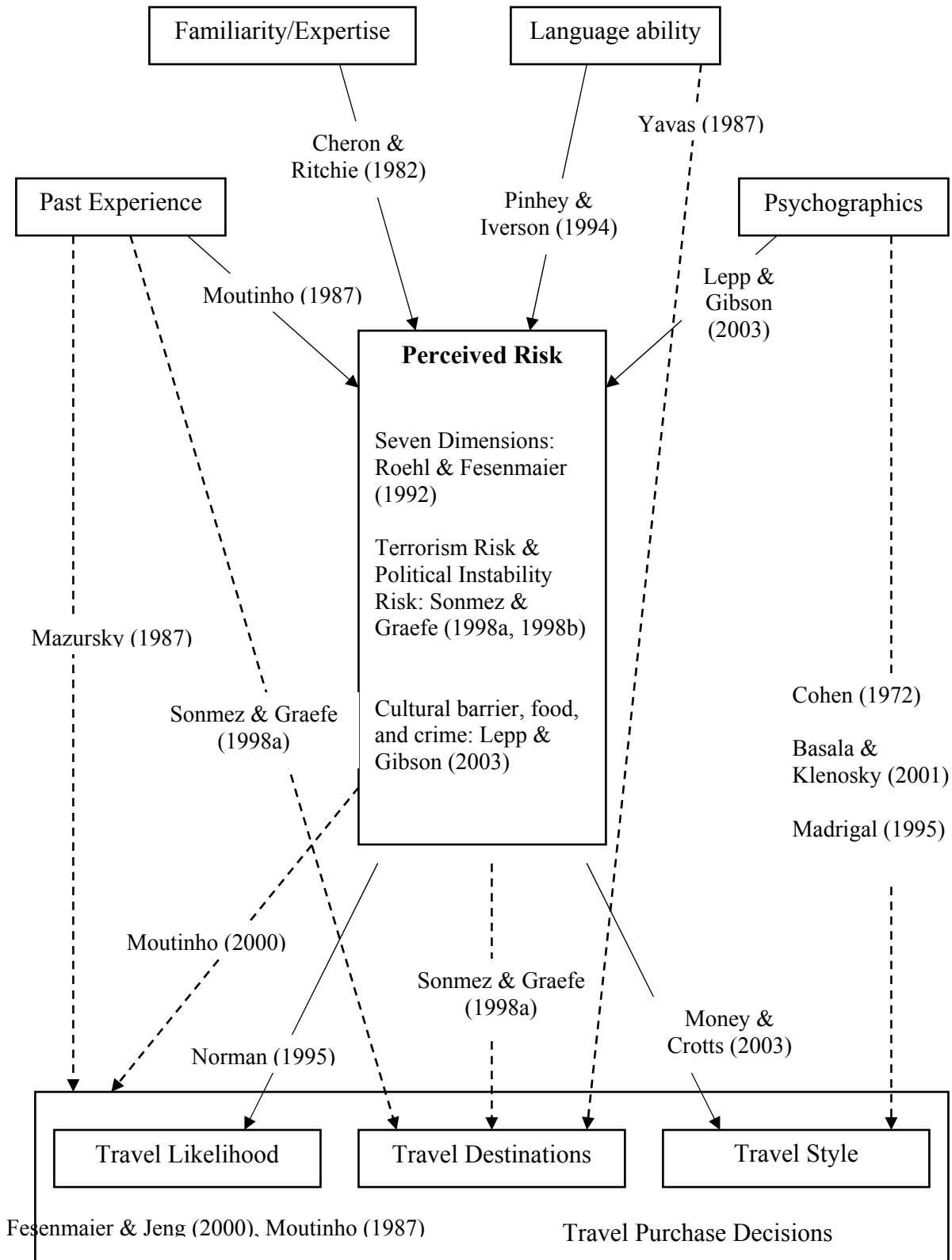
To attract visitors, destination marketers and travel service providers need accurate information on travelers’ potential perceived risks. Knowing the relationship between prospective visitors’ perceived risks and their travel decisions will help destination marketers understand the impact of perceived risk on destination choices and sub-decisions of trip planning. This, in turn, will aid them in designing marketing tools to eliminate or reduce prospective visitors’ perceived risk.

Research Questions

This study addresses the following research questions:

1. What are the underlying dimensions of perceived risk in international leisure travel?
2. Do relationships exist between personal factors and perceived risk in international leisure travel?
3. Do relationships exist between knowledge of a destination and perceived risk in international leisure travel?
4. Do relationships exist between perceived risk and travel purchase decisions in international leisure travel?

Figure 1: Theoretical Framework for the Study



Theoretical Framework for the Study

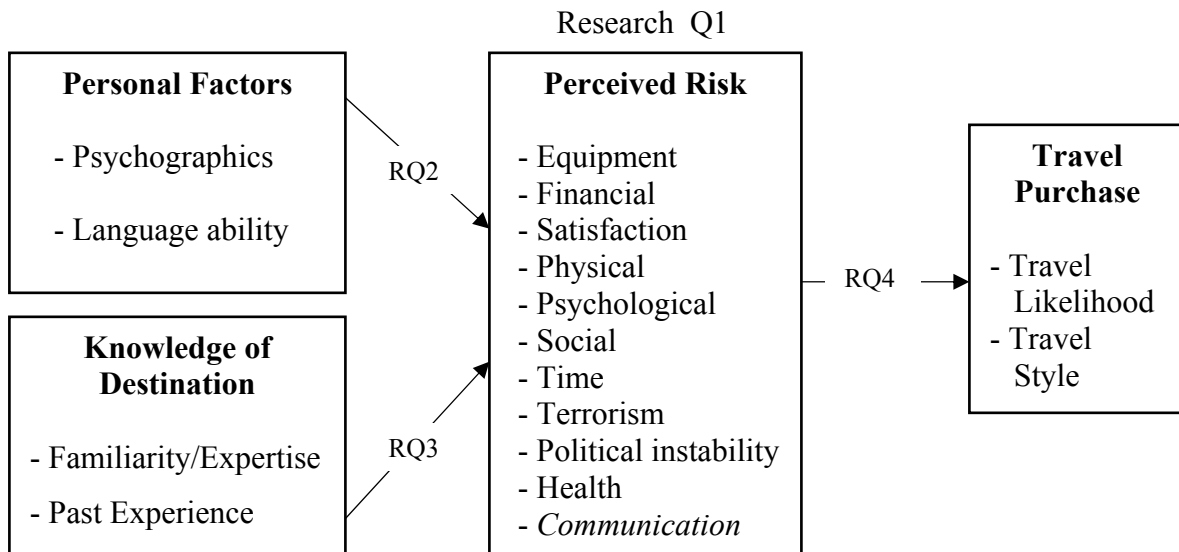
Figure 1 describes the theoretical framework for this study and the most relevant literature is introduced in this section; the detailed discussions on each construct are provided in Chapter II. Although all relationships of the constructs in the model are presented, the relationships signified by the dotted lines are excluded from the proposed model for this study. While many studies identified different dimensions of perceived risk in pleasure travel (Roehl & Fesenmaier, 1992) and international leisure travel (Lepp & Gibson, 2003; Sonmez & Graefe, 1998a, 1998b), those dimensions have never been examined all together. The influence of familiarity on perceived risk was suggested by Cheron and Ritchie (1982). Language ability was identified to impact perceived risk (Pinhey & Iverson, 1994) and also influences destination choices (Yavas, 1987). Psychographics are mainly related to personality and individuals' characteristics (Chandler & Costello, 2002) and different measures were developed to operationalize the construct (Cohen, 1972; Jiang, Havitz, & O'Brien, 2000; T.-H. Lee & Crompton, 1992; Mo, Howard, & Havitz, 1993; Plog, 1990; Yiannakis & Gibson, 1992); these scales measure individuals' characteristics of novelty seeking. The relationship between novelty seeking and perceived risk (Lepp & Gibson, 2003) and that of novelty seeking to travel style choices were identified in the literature (Basala & Klenosky, 2001; Cohen, 1972; Madrigal, 1995). The influence of past experience to perceive risk (Moutinho, 1987), travel purchase decisions (Mazursky, 1989), and specific destination choices (Sonmez & Graefe, 1998a) were found in previous studies. Travel purchase decisions were identified to have a multi-staged planning process (Fesenmaier & Jeng, 2000; Moutinho, 1987) and perceived risk influences each stage of the decision process: travel likelihood

(Norman, 1995), destination choice (Sonmez & Graefe, 1998a), and travel style (Money & Crofts, 2003).

Proposed Model

Figure 2 describes the proposed model of this study. The model demonstrates that travelers' perceived risk influences travel purchase decisions on trips to international destinations. The relationships between perceived risk and two affecting factors, personal factors and knowledge of a destination, are investigated in this study. The discussions of each construct are presented in Chapter II.

Figure 2: Proposed Model



Boundaries

It is necessary to define the boundaries of this study to maximize the generalizability of the results because boundaries limit the application of theory (Bacharach, 1989). As Moutinho (1987) stated, “the tourist’s preliminary judgment about vacation destinations is that they appear to have some potential to satisfy his or her personal travel objectives” (p. 31); tourists use different criteria to decide their travel purchase decisions according to their personal travel objectives. This dissertation focuses on the influence of perceived risk on travel purchase decisions. Therefore, it is necessary to distinguish the two major domains in which individuals may have different levels of perceived risk. The first domain concerns individuals’ purpose of travel, business or leisure, and the second domain involves the type of travel, domestic or international. Consequently, this study sets boundaries within international travel and leisure travel. The following paragraphs explain these two domains more fully.

The two major differences between business and leisure travel are: 1) the tourist pays for the trip expenses in leisure travel but an employer or association pays for business trips, and 2) the tourist decides on the destination for leisure travel but destinations are determined by an employer or association for business travel. Business trips may involve meetings, conferences, conventions, exhibitions, training courses, product launches, and incentive travel (Swarbrooke & Horner, 2001). Chen (2000) investigated the difference in information acquisition due to the different trip purpose, business and leisure, among Japanese, South Korean, and Australian travelers to the U.S. His study revealed that among twelve information sources, only three information sources were commonly used by business and leisure travelers from South Korea, Japan, and Australia: in-flight information, national tourist offices, and state/city tourist offices. Regarding the other nine information sources, there were

differences in utilizing information sources between business and leisure travelers. Also, travelers showed different preferences in using information sources depending on their nationality. It was clear in the study by Kashyap and Bojanic (2000) that business and leisure travelers were different in their value perceptions when they stay at hotels. The quality of public areas significantly affects the overall value perceptions of business travelers, but leisure travelers were more influenced by the quality of the room for their value perceptions.

The second domain concerns the travel experience, domestic or international. The United Nations (*Recommendations on Tourism Statistics*, 1994), defines “international tourism” as consisting of “inbound tourism” and “outbound tourism”: “Inbound tourism involves non-residents traveling in the given country,” and “outbound tourism involves residents traveling in another country” (p. 5). Another definition refers to international tourism as travel by the masses across international borders for pleasure and leisure purposes for a short duration, and it has become an essential phenomenon in the twentieth century (Yavas, 1987). On the other hand, “domestic tourism” is defined as “involving residents of the given region traveling only within that region” (WTO, 1995, p. 35). A recent study (Nicolau & Mas, 2005) found the differences between individuals who tend to choose domestic travel and those who tend to take international vacations: those who have children under the age of sixteen prefer domestic destinations; individuals with a higher education show a greater propensity to take international vacations; and those who are more interested in broadening cultural knowledge are also more likely to vacation abroad. These results imply that various demographic and socio-psychographic characteristics influence individuals’ decisions to select domestic versus international travel.

Organization of the Study

An introduction to the topic of this study was provided in Chapter I along with the statement of the problem, the research questions, the proposed model, and boundaries of the study. Chapter II presents a review of literature related to personal factors (psychographic characteristics), knowledge of a destination, perceived risk including the proposed construct of “communication risk,” and travel purchase decisions. In Chapter III, the methodology is discussed, including sample selection, target sample size, survey design, survey administration and data analysis. Chapter IV consists of data collection, statistical analysis, and the results of the analysis. Chapter V provides findings from the data analysis, implications of the study, and recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter provides the theoretical underpinnings of the constructs employed in this study through a review of the literature in the areas of perceived risk, travelers' personal factors, knowledge of a destination, and travel purchase decisions.

Perceived Risk

Since the concept of risk was introduced in economics in the 1920s (Knight, 1948), it has been successfully used in theories of decision making in economics, finance, and the decision sciences (Dowling & Staelin, 1994). For the analysis of decision making under risk, Expected Utility Theory (Von Neumann & Morgenstern, 1947) had been accepted as a normative model of rational choice (Kahneman & Tversky, 1979) until Prospect Theory (Kahneman & Tversky, 1979) was proposed as an alternative to the expected theory; then Fishburn (1982) provided a new theory called Skew-Symmetric Bilinear (SSB) Utility Theory. Expected Utility Theory established a set of axioms that were the basis for evaluating alternative decisions, and those axioms have been reduced to three basic axioms by a number of researchers: transitivity, independence, and continuity of preferences (Bell & Farquhar, 1986). Prospect Theory allows predictions of behavior that violates the axioms of Expected Utility Theory (Currim & Sarin, 1989). SSB Utility Theory uses axioms "that are

simultaneously weak enough to accommodate observed behavior and strong enough to have normative appeal” (Bell & Farquhar, 1986).

In marketing research, Bauer (1960) first proposed looking at consumer behavior as an instance of risk taking because “consumer behavior involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant” (p. 390). He also noted that “individuals can respond to and deal with risk only as he perceives it subjectively,” and only “perceived risk” influences consumers’ decisions (p. 395). In the Merriam-Webster Dictionary, “Risk” is defined as “possibility of loss or injury.” Knight’s definition of “risk” is having a known probability associated with various decision outcomes while “uncertainty” exists when knowledge of a precise probability is lacking. Bauer’s argument of “perceived risk” and Knight’s definition of “risk” indicate the same concept which excludes an unknown probability of “risk.” Cox (1967) also commented that consumers are rarely in a position to know the probabilities associated with purchases exactly. However, marketers have used the two concepts interchangeably (Mitchell, 1994).

Many researchers employed Hofstede’s (1984) “uncertainty avoidance” as a measure of intolerance for risk; for example, Money and Crotts (2003) used it to investigate international tourists’ purchase behavior. However, Hofstede (2001, p. 148) pointed out that many researchers interpreted “uncertainty avoidance” as “risk avoidance” and also clearly stated that “uncertainty avoidance” does not equal “risk avoidance.” He stated that “risk is often expressed in a percentage or probability that a particular event may happen,” while uncertainty is “a situation in which anything can happen and one has no idea what.” However, the definition of risk still does not seem to be standardized yet, and a recent study suggested

another definition of perceived risk as the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions (Schiffman & Kanuk, 2000). This definition highlights two relevant dimensions of perceived risk: uncertainty and consequences. Yates and Stone (1992) provided three explanations regarding ambiguity about what risk is: (1) while the risk construct has several distinct elements, individual risk elements are often referred to as the entire risk construct; (2) different situations manifest risk in different ways; and (3) the subjective nature of risk causes disagreement on risk depending on the individual.

Since Bauer's seminal discourse, many studies in consumer behavior empirically tested the construct of perceived risk (Brooker, 1984; Jacoby & Kaplan, 1972; Kaplan, Szybillo, & Jacoby, 1974; Laroche, McDougall, Bergeron, & Yang, 2004; Mitchell & Grotorex, 1990; Peter & Ryan, 1976; Roselius, 1971; Stone & Gronhaug, 1993; Verhage et al., 1990) because perceived risk is more powerful at explaining consumer behavior (Mitchell, 1994). Jacoby and Kaplan (1972) first operationalized the construct of perceived risk associated with 12 different consumer products such as televisions, suits, toothpaste, and vitamins, and identified five risk dimensions: psychological, financial, performance, physical, and social risk. They found that performance risk had the highest correlation with overall perceived risk followed by financial risk in tangible products. These results were cross-validated in a later study that used the same risk dimensions and the same 12 products with a new data set (Kaplan et al., 1974). The later study also found that performance risk was the most predictive of overall perceived risk for most products. Another study examined four kinds of loss (time loss, hazard loss, ego loss, and money loss) related to risk and identified brand loyalty and major brand image as the most favorable risk relievers (Roselius, 1971). The relationship between perceived risk and brand loyalty was examined in a situation of

buying a car (Peter & Ryan, 1976). The researchers found that perceived risk is a predictor of brand preference only for consumers who considered it as important. They also suggested that “probability of loss is a handled risk phenomenon and importance of loss is an inherent risk phenomenon” (p. 187). Brooker (1984) examined six types of perceived risk adopted from the two previous studies (Jacoby & Kaplan, 1972; Roselius, 1971). The results of his study revealed that the strongest risk dimensions related to grocery shopping were financial risk and performance risk; physical risk and social risk were the two least related dimensions. Stone and Gronhaug (1993) developed multiple indicators measuring six risk dimensions that were identified in previous studies (Jacoby & Kaplan, 1972; Roselius, 1971). Their study revealed that financial and psychological risk were the most important dimensions influencing overall risk perception in buying a personal computer.

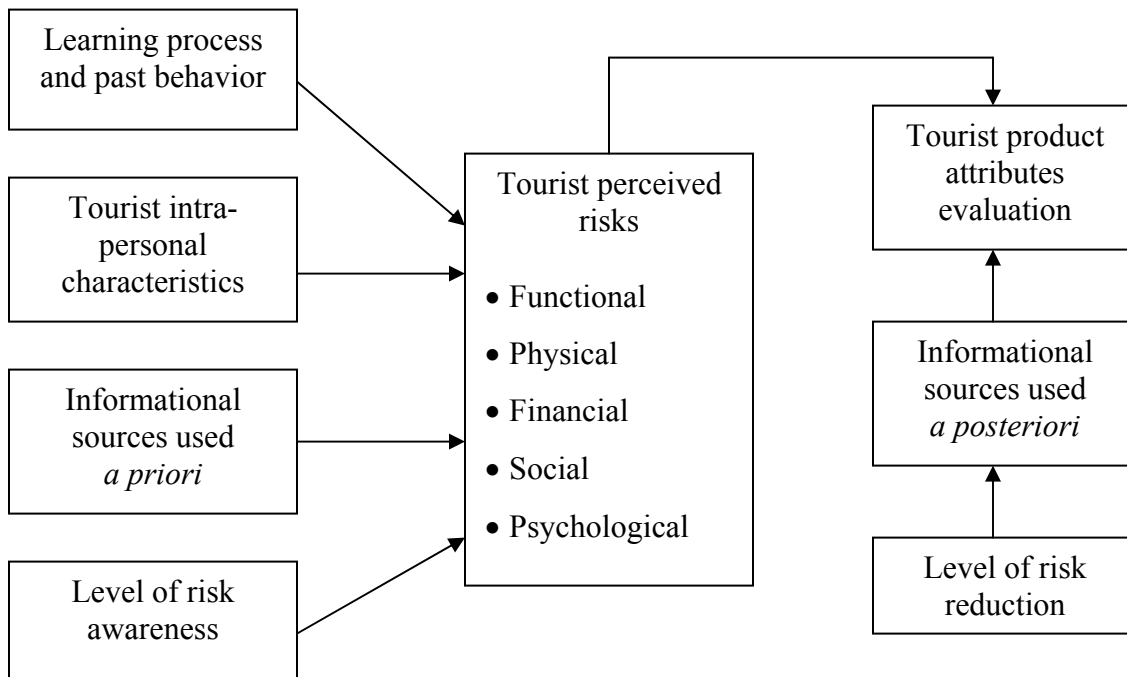
Verhage et al. (1990) examined the presence of perceived risk in four countries (The Netherlands, Saudi Arabia, Thailand, and Turkey). While perceived risk related to buying bath soap and toothpaste was observed in all of the four countries, the relationship between perceived risk and brand loyalty was not found. Also, the degree of risk perception varied between countries. Consumers in Turkey perceived a significantly lower level of risk in purchasing bath soap and toothpaste than consumers in other countries. This study suggested that the concept of perceived risk is cross-nationally valid but the risk reduction strategies should be developed for each individual country. The difference of perceived risk between national and non-national consumers in the U.S. was examined (Mitchell & Groatorex, 1990). Non-nationals had an increased risk perception, and psychological loss was found to be the most different between national and non-national consumers. This study showed that brand

loyalty was the most useful risk reliever and this result is in contrast to the results of the study by Verhage et al., which is introduced above (1990).

Laroche et al. (2004) investigated the impact of intangibility on perceived risk using six generic products selected to represent various degrees of intangibility: jeans and computers (highly tangible goods), music CDs (less tangible goods), pizzeria dinners (tangible services), and checking accounts and internet browsers (intangible services). Among the three dimensions of intangibility (physical intangibility, mental intangibility, and generality), physical intangibility was strongly related to risk dimensions with goods, and mental intangibility was significantly related to risk dimensions of services. This result suggests that the impact of intangibility on perceived risk is different between goods and services.

Risk is viewed as an aspect of involvement that directly affects an information search just as three other dimensions: importance, hedonic (pleasure), and sign value (Gursoy, 2001), and a recent study by Gursoy and Gavcar (2003) found that international tourists' involvement is a three dimensional construct: pleasure/interest, risk probability, and risk importance. However, Chaudhuri (2000) tested four different models for the role of risk in information search: (1) risk as involvement; (2) risk as an antecedent; (3) risk as consequences; and (4) risk as moderator. His study results revealed that risk is divided into two factors, functional and emotional risk; hedonic involvement is directly related to information search; functional risk mediates the importance dimension of involvement and search; and emotional risk is related to the hedonic dimension but does not mediate hedonic involvement and search. These mixed results of involvement and search models need further investigation.

Figure 3: The Relationship of Tourist Risk Variables (Moutinho, 2000)



In tourism research, Moutinho (2000) provides a comprehensive analysis of perceived risk associated with travel behavior. His definition of perceived risk is “a function of uncertainty and consequence,” which is more general than other definitions discussed above. He also listed four aspects of perceived risk: (1) uncertainty inherent in the product; (2) uncertainty in place and mode of purchase; (3) degree of financial and psycho-social consequences; and (4) the subjective uncertainty experienced by the tourist. To understand tourist risk perception involved in purchase decisions, the relationship between risk variables should be examined (Moutinho, 2000). Figure 3 describes the relationships of variables; those variables are the tourist’s past behavior; the tourist’s learning process toward travel-related concepts; the tourist’s intra-personal characteristics; the type of sources used before and after purchase decisions; the tourist’s level of risk awareness; and the tourist’s evaluation of the product attributes.

One area of tourism research which involves risk is destination image (Baloglu, 1996; Baloglu & McCleary, 1999; Beerli & Martin, 2004) but these studies include one single indicator of “personal safety” among the cognitive components of image.

Many studies investigated perceived risk and its components related to leisure activities and international travel, and its relationship to travel decisions (Cheron & Ritchie, 1982; Lepp & Gibson, 2003; Martinez, 2000; Mitchell & Vassos, 1997; 1988; Roehl & Fesenmaier, 1992; Sonmez, 1994; Sonmez & Graefe, 1998a, 1998b; Yavas, 1987, 1990). Cheron and Ritchie (1982) revealed that there exist distinctive differences between the nature of perceived risk related to tangible goods and leisure activities. The psychological dimension of perceived risk was mostly related to overall perceived risk of leisure activities, while performance risk was the most important predictor for tangible products (Jacoby & Kaplan,

1972). Yavas (1987) first examined the relationship of perceived risk to international travel decision making. He presented four reasons that risk perception may be the primary influence in international travel decision making: (1) the inability to infer expected benefits from a trip can result in anxiety; (2) international travel decision making accompanies a high involvement situation; (3) perceived risk has a particularly major impact on first-time international travelers; and (4) cultural differences may cause a higher level of perceived risk. Yavas (1990) compared two groups of Saudis – one group who visited Germany for a vacation and one group who did not – regarding demographic profile, travel patterns to other countries, travel motives, information search behavior and risk perception. In his study, five types of risk in foreign travel were included: ego, money, time, health, and social risks. Although he failed to provide a description of measuring items and an explanation of the reliability of the measures, the results showed that health risk appeared to be the primary concern followed by time risk.

The seven dimensions of types of risk were employed to investigate risk perceptions associated with pleasure travel (Roehl, 1988; Roehl & Fesenmaier, 1992). Roehl and Fesenmaier (1992) identified three risk groups that differed in terms of the most recent trip taken and the benefits sought from travel: a Risk Neutral group, a Functional Risk group, and a Place Risk group. They employed seven perceived risk components that are used as independent variables. These include: physical risk, the possibility that a trip to this destination will result in physical danger, injury or sickness; financial risk, the possibility that a trip to this destination will not provide value for the money spent; social risk, the possibility that a trip to this destination will affect others' opinion of the individual; time risk, the possibility that a trip to this destination will take too much time or be a waste of time;

equipment risk, the possibility that a trip to this destination will result in mechanical or equipment problems; satisfaction risk, the possibility that a trip to this destination will not provide personal satisfaction; and psychological risk, the possibility that a trip to this destination will not reflect an individual's personality or self-image. These dimensions are discussed in a later section, "dimensions of perceived risk."

Mitchell & Vassos (1997) examined the differences of perceived risk and risk reduction in package holiday purchasing between British and Cypriot undergraduate students; the highest risk factor was "your hotel will not be as nice as it appears in the brochure picture," and the two most useful risk-reducing strategies selected were "reading independent travel reviews" and "purchasing some kind of travel insurance." Sonmez and Graefe (1998a) identified that perceptions of risk and feelings of safety during travel have a strong influence on the avoidance of particular regions. They also found that relationships between risk perceptions and travel behavior are situation-specific, which suggest that generalizing the buying behavior of goods to travel decisions may not be appropriate. Martinez (2000) examined the U.S. tourist's subjective assignment to perceptions of risk of criminal victimization on the U.S. side of the U.S.-Mexico Border using the Expected Value Model to examine the consumer's perception of risk; the results showed that U.S. tourists' subjective assessment of the probability of criminal victimization did not equal the objective measure of risk at the border. Most recently, Lepp and Gibson (2003) investigated the relationship between tourists' preference for novelty or familiarity and their perception of risk associated with international tourism.

The following discussion will more fully describe the dimensions of risk identified in tourism research.

Dimensions of Perceived Risk

Many studies adopted five dimensions identified in the study by Jacoby and Kaplan (1972): “Financial Risk,” “Performance Risk,” “Physical Risk,” “Social Risk,” and “Psychological Risk” (Cheron & Ritchie, 1982; Mitra, Reiss, & Capella, 1999; Stone & Gronhaug, 1993; Stone & Mason, 1995). “Time Risk” was added by Roselius (1971). These six dimensions were investigated together in other studies (Stone & Gronhaug, 1993; Stone & Mason, 1995), but one of the dimensions (physical risk) was excluded in some studies (Laroche et al., 2004). “Satisfaction Risk” first appeared in the study regarding perceived risk and leisure activities (Cheron & Ritchie, 1982). Some studies focused on a particular dimension, such as “Political Instability Risk” (McCleary & Whitney, 1994; Seddighi, Nuttall, & Theocharous, 2001; Sonmez & Graefe, 1998b), and “Terrorism Risk” (Sonmez & Graefe, 1998a, 1998b).

In addition to the seven perceived risk types in the study of Roehl & Fesenmaier (1992), Sonmez and Graefe (1998b) added three other types of risk: “Health Risk,” the possibility of becoming sick while traveling to or at the destination; “Political Instability Risk,” the possibility of becoming involved in the political turmoil of the country being visited; and “Terrorism Risk,” the possibility of being involved in a terrorist act.

Four attributes of risk were found to be significant among high-risk Saudi perceivers: (1) being an Arab country; (2) good food; (3) value for money; and (4) ease in renting a flat (Yavas, 1987). Although his study did not use the risk dimensions used in other studies, the result suggests that risk dimensions vary depending on nationality.

While most studies discussed above employed a single measure for each dimension, several studies used multiple scales in measuring perceived risk dimensions (Havlena &

Desarbo, 1991; Laroche et al., 2004; Stone & Gronhaug, 1993; Stone & Mason, 1995). Havlena and DeSarbo (1991) adopted six dimensions identified from previous studies (performance, financial, safety, social, psychological, and time/opportunity) but developed thirteen risk attributes specifically associated with a car purchase. Stone and Mason (1995) and Stone and Gronhaug (1993) used three items each to measure the six dimensions of risk (social, time, financial, physical, performance, psychological) related to buying a personal computer. Laroche et al. (2004) adopted the scales from Stone and Gronhaug (1993), but one item of “Social Risk” was excluded in their study. The next section presents further discussions of each risk dimension.

Physical Risk

“Physical Risk” was the least related dimension of perceived risk regarding grocery shopping along with “Social Risk” (Brooker, 1984). However, Roehl and Fesenmaier (1992) found that “Physical Risk” regarding a general vacation and a specific vacation was the strongest dimension of risk perception in international vacations along with “Equipment Risk.” They defined “Physical Risk” as “the possibility that the trip to a particular destination will result in physical danger, injury, or sickness” (p. 18). Another study defined “Physical Risk” related to a group package tour as “the possibility that an individual’s health is likely to be exposed to risk, injury, and sickness because of conditions like law and order, weather, and hygiene problems found during the tour” (Tsaur, Tzeng, & Wang, 1997).

Health Risk

Richter (2003) reported that organizations associated with tourists’ health, such as the World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention

(CDC), were not successful in performing their original mission of reporting and preventing new or serious diseases. However, more and more of the world's populations are aware of the seriousness of health issues that they may face when they travel abroad. Severe Acute Respiratory Syndrome (SARS) devastated international travel in the Asia-Pacific region during the first half of 2003. West Nile Fever in New York and Mad Cow Disease in Europe also impacted travel flows significantly (Richter, 2003). "Health Risk" was found as the most concern for Saudis who both had and did not have experience of visiting Germany (Yavas, 1990).

Financial Risk

While price was not a major determinant of demand in many other service industries, it was a major demand factor in tourism (Schmoll, 1977). Among U.K. international travelers, both package and non-package tourists reported that value for vacation money was equally important to them (Hsieh et al., 1994). While package travelers agreed to pay more for extras and luxuries, inexpensive travel to a country was more important to non-package travelers; however, both groups showed consent to the statement that "money spent on travel is well spent" (Hsieh et al., 1994).

Social Risk

Reimer (1990) argued that the style of holiday may impress a traveler's peers. The style of holiday includes the number of places visited, the frequency of trips taken, the distance traveled, and the destination's exotic character. Toronto tour operators in Canada reported that peer pressure is a strong motivation for people to buy upscale adventure trips; traveling to sun destinations in the winter season can be a symbol of success (Reimer, 1990). The social risk was the only significant predictor of the intention to travel to Europe among

ten risk types in the analysis with a sample of U.S. residents; individuals who have a higher level of social risk were less likely to intend to visit Europe (Sonmez & Graefe, 1998a).

Contrary to findings on the significant role of “Social Risk” presented above, Roehl and Fesenmaier (1992) found that “Social Risk” has the lowest correlation with the other six types of risk, and therefore excluded social risk in their further analysis. They defined “Social Risk” as “the possibility that a trip to a particular destination will affect others’ opinion of me” (p. 18).

Time Risk

Roehl and Fesenmaier (1992) defined “Time Risk” as “the possibility that the trip to a particular destination will take too much time or be a waste of time” (p. 18). “Time Risk” related to services (hotel, fast food, hairdresser, and restaurant meal) was perceived to be more important than that of foods, convenience durables, and shopping goods (Mitchell & Greator, 1990).

Equipment Risk

Roehl and Fesenmaier (1992) defined “Equipment Risk” as “the possibility of mechanical, equipment or organizational problems while on vacation” (p. 18). Their study results showed that respondents rated equipment risk as the highest perceived risk factor among seven risk types in general vacations as well as in the most recently visited destination. Similar to the results of their study, a sample of British and Cypriot undergraduate students identified an equipment risk related statement as the most important among 42 risk statements in buying a package holiday to Corfu in Greece (Mitchell & Vassos, 1997). The statement is “your hotel may not be as nice as it appears in the brochure pictures” (p. 56).

Tsaur, Tzeng, and Wang provided a definition of equipment risk in their study of tourists' perceived risks during package tours by Taiwanese (Tsaur et al., 1997). The definition is "the dangers arising from the unavailability of equipment or its malfunctioning, such as insufficient telecommunication facilities, unsafe transportation, and break-down of vehicles" (p. 799).

Another example of equipment risk is summarized by the following CNN account: an Egyptian charter plane crashed into the Red Sea on January 3, 2004 (CNN, 2004b). The cause of the crash was entirely technical. This accident will cause people to avoid flights and traveling to the area of the accident.

Satisfaction Risk

Cheron and Ritchie (1982) added "Satisfaction Risk" as a new dimension of perceived risk based on their finding from exploratory interviews that individuals were "concerned with the ability of leisure activities to provide a sense of accomplishment and personal satisfaction" (p. 141). They examined the level of perceived risk associated with 20 different leisure activities but travel was not included. Roehl and Fesenmaier (1992) defined "Satisfaction Risk" as "the possibility that the trip to a particular destination will not provide personal satisfaction" (p. 18). Sonmez and Graefe (1998b) found that individuals who were more likely to avoid traveling to Africa perceived a higher level of "Satisfaction Risk."

Psychological Risk

Roehl and Fesenmaier (1992) defined "Psychological Risk" as "the possibility that the trip to a particular destination will not reflect an individual's personality or self-image" (p. 18). A study compared the risk perception between national and non-national consumers in the U.K. regarding purchasing four different types of products (foods, non-food convenience,

shopping goods, and services) (Mitchell & Grottel, 1990). Among four types of perceived risk, psychological loss was significantly more important for non-national consumers across all four product categories investigated.

Political Instability Risk

Hall and O'Sullivan (1996) defined "Political Instability" as "a situation in which conditions and mechanisms of governance and rule are challenged as to their political legitimacy by elements operating from outside of the normal operations of the political system" (p. 106). Political instability has a severe impact on international tourism; individuals who perceived a higher degree of "Political Instability Risk" in international travel were significantly more likely to avoid traveling to Asia and South America (Sonmez & Graefe, 1998b).

Terrorism Risk

Sonmez and Graefe (1998b) examined three vacation decisions involving terrorism risk: a lower level of perceived risk of terrorism is associated with the propensity for international tourism; individuals' perceived risk of terrorism increased their extent of information collection; and respondents' terrorism risk perception increased their concern for safety in the destination evaluation. They also found that individuals who perceived a higher level of "Terrorism Risk" were more likely to avoid traveling to the Middle East and Africa. Since the terrorists' attack on September 11, 2001 in the U.S., "Terrorism Risk" has become one significant dimension

Communication Risk

Although a few previous studies (Basala & Klenosky, 2001; Hsieh et al., 1994; Yavas, 1987) recognized that language is an influential factor in destination choices, language barrier has not been investigated as a dimension of travelers' perceived risk which may be due to the lack of cross-cultural studies within tourism research. The native language of the country visited was an important issue for non-package U.K. travelers in their international travel (Hsieh et al., 1994). Their responses were significantly higher than package travelers' responses regarding their agreement on the statement, "important that people speak my language." Basala and Klenosky (2001) examined language as a factor that influences tourists' choice of prospective destinations, because tourists' fluency, or lack of fluency, in the language at a destination can be a barrier in international travel. As they pointed out, the impact of language is one of the least studied factors in tourism research and also an important area that should be explored. In their study, it was clear that tourists tend to visit destinations where there is no language difference regardless of their psychographic characteristics (e.g. novelty-seekers, familiarity-seekers). Yavas (1987) suggested that putting signs in Arabic and recruiting Arabic-speaking personnel in Turkey would be helpful to show a concern for Saudi tourists. Based on these findings on language barrier in international travel, "Communication Risk" was proposed in this study as a dimension of risk perception in vacationing at international destinations.

Proposition 1: Individuals perceive salient dimensions of risk when contemplating international leisure travel.

Hypothesis 1: The salient dimensions of perceived risk in international leisure travel are Physical, Health, Time, Financial, Psychological, Social, Terrorism, Political Instability, Equipment, Satisfaction, and Communication.

Personal Factors

From the perspective of consumer behavior, personal factors refer to socio-demographic and psychological characteristics of the individuals: gender, age, education, motivations, values, personality, etc. (Beerli & Martin, 2004). Considering that language ability is obtained from education, this study includes language ability in personal factors. This section provides a review of previous studies on psychographics and language ability.

Psychographics

Psychographics have become an accepted and favored approach in hospitality and tourism research (Chandler & Costello, 2002). However, according to Plog (1994), who developed the dimension of “venturesomeness” as a way of measuring travelers’ psychographic characteristics, there are no standard psychographic categories or ways of defining people. Demby (1994), who claimed to be the first developer of the concept of psychographics, defined the term as “the use of psychological, sociological, and anthropological factors, such as benefits desired (from the behavior being studied), self-concept, and lifestyle (or serving style) to determine how the market is segmented by the propensity of groups within the market--and their reasons--to make a particular decision about a product, person, ideology, or otherwise hold an attitude or use a medium” (p. 26). Chandler

and Costello (2002) summarized that psychographics focus on personal values, lifestyle and activity level preferences, attitudes, interests, opinions, personality, and numerous other individual characteristics and traits. Schewe and Calantone (1977) suggested that psychographics provide an extensive understanding of consumers' way of living; this concept measures people's activities, interests, opinions, and basic characteristics such as life cycle stage, income, and education. They also stated that psychographics help to understand the psychological side of the buyer while demographics are merely descriptor variables. However, they also concluded that psychographics are more effective when coupled with demographic information. Many previous studies in hospitality and tourism research did not mention the term "psychographics" in their reports, although they used one of the constructs of psychographics. Sonmez (1994) and Yavas (1987) suggested the need to examine relationships between potential travelers' demographics, psychographic characteristics, and decisions involving risk.

The following section discusses further instruments developed to measure psychographics and related research: Plog's concept; tourist roles; Tourist Role Preference Questionnaire (TRPQ); International Tourist Role (ITR) scale; and novelty-seeking measures.

A. Psychocentric vs. Venturesomeness

One widely employed psychographic approach is Plog's concept, a study on personality type and choice of destinations. The original concept of Plog's personality type found non-flyers as psychocentrics and those who fly as allocentrics (Plog, 2002). The terms of these two types of flyers were changed to dependables and venturers respectively (Plog, 1995). Plog (1990) criticized Smith's study (1990), which reported no support for the concept

of psychographics by pointing out several mistakes: Smith used a 21-item measurement scale that he failed to provide in his report and the scale is not the original survey developed by Plog; four point scales (very important, somewhat important, not very important, not at all important) were used for respondents to score the 21 questions and they were condensed into three points to classify psychoconic, allocentric, and midcentric; Smith used a sample of long haul travelers or intenders who tend to be allocentric while Plog's concept was developed on a nationwide sample. Another study examined Plog's model using Fiske and Maddi's (1961) activation theory (Nickerson & Ellis, 1991).

Using a sample of domestic U.S. travelers, Madrigal (1995) compared the study of Plog (1990) on personality type and personal values scale regarding their predictability of independent versus group travel behavior. The personal values scale, List Of Values (LOV), demonstrated its utility as a better prediction tool in differentiating group travelers from independent travelers (Madrigal, 1995).

Chandler and Costello (2002) developed a profile of heritage destination visitors using Plog's lifestyle and activity level preferences. Visitors were categorized as active venturers, active centrics, active dependables, mellow venturers, mellow centrics, and mellow dependables. However, more than 83% of the respondents were categorized as either active or mellow centrics.

B. Tourist Roles by Cohen

Cohen (1972) proposed a typology of tourists based on the combinations of novelty and familiarity. The four tourist roles of his typology are: the organized mass tourist (least adventurous and likely to buy a package tour); the individual mass tourist (likely to buy a

package tour but wants some control over time and itinerary); the explorer (arranges his trip alone but needs comfortable accommodations and reliable transportation); and the drifter (ventures furthest away from the accustomed ways of life without itinerary or timetable). Extending Cohen's (1974) classification of tourist roles, Pearce (1982) developed 15 tourist-related roles (tourist, traveler, holidaymaker, jet-setter, businessman, migrant, conservationist, explorer, missionary, overseas student, anthropologist, hippie, international athlete, overseas journalist, and religious pilgrim). Snepenger (1987) attempted a segmentation of the Alaska vacation market using novelty-seeking roles based on Cohen's typology, and his study results showed that: (1) the organized mass tourists were mostly in their fifties and more than half of the travel parties were female; (2) the individual mass tourists were in their late 40s and early 50s and their travel parties had equal numbers of female and male; and (3) the explorers were in their late 30s and early 40s, and more males were in their travel parties. The fourth role of the drifters was not identified in his study due to the use of secondary data. Another study (Lepp & Gibson, 2003) found that organized mass tourists and independent mass tourists perceived a higher level of risk related to health than explorers and drifters; organized mass tourists were more concerned with risk related to terrorism and strange food than the other three roles.

C. Tourist Role Preference Questionnaire (TRPQ)

Yiannakis And Gibson (1992) developed an instrument consisting of 13 pairs of items which measures tourist roles. TRPQ revealed three bipolar dimensions: stimulation-tranquility (Y axis), strangeness-familiarity (X axis), and structure-independence (Z axis). Since this

scale asks respondents to describe their actual behaviors while on vacation regarding a variety of roles provided, TRPQ is more appropriate for investigating past travel experience.

D. International Tourist Role (ITR)

The ITR scale is a measurement instrument developed by Mo, Howard, and Havitz (1993) to identify Cohen's (1972) international tourist typology. They refined the 20-item questionnaire from the original 62-item pool. The ITR scale showed three dimensions: the destination-oriented dimension, which represents an individual's preferences for novelty and familiarity when choosing international destinations; the travel services dimension, which measures if an individual prefers to travel with or without institutionalized travel services in international travel; and the social contact dimension, which measures the individual's preferences regarding the extent and variety of social contacts with local people when traveling in a foreign country (Mo, Havitz, & Howard, 1994). These three dimensions appear to be similar to the dimensions identified in the TRPQ scale by Yiannakis and Gibson (1992).

Mo et al. (1994) stated that the ITR scale is appropriate for examining both experienced travelers and non-travelers since it measures tourists' preferences, not their behaviors. Basala and Klenosky (2001) also suggested that the TRPQ scale is useful when analyzing past experience, and they showed the ITR scale is suitable for examining either past behavior or future travel preferences and intentions. Using the ITR scale, they examined the differences among novelty seekers, average travelers, and familiarity seekers in terms of their preference for vacation types (accommodations, companions, and language). Their results showed that international hotel chains were preferred by familiarity seekers and average travelers but novelty seekers preferred locally owned facilities; all three groups of familiarity

seekers, average travelers, and novelty seekers showed the least preference for traveling alone; and regarding language, all three groups indicated that they were more likely to visit a destination where its native language is the same as theirs (in this case English). Jiang, Havitz, and O'Brien (2000) validated the ITR scale by rearranging the order of questions, changing the wording, and recoding eight items in reverse. Through the process of exploratory and confirmatory factor analysis, they revised the original 21-item scale into a 16-item scale.

E. Measurement Scale of Novelty Seeking in Tourism

Lee and Crompton (1992) developed a 21-item instrument that measures the construct of novelty in the context of tourism. They defined novelty as a multi-dimensional construct which consists of six overlapping dimensions: change from routine; escape; thrill; adventure; surprise; and boredom alleviation. In the process of pretest and main analysis, two dimensions, "escape" and "adventure," were discarded and the final version of the scale had four dimensions. Among these measures of psychographics listed above, the scale of novelty seeking was selected to be used in this study. The second hypothesis is stated below:

Hypothesis 2: The psychographic make-up of an individual is related to an individual's overall perceived risk in vacationing at international destinations.

Language Ability

Although Cohen and Cooper (1986) pointed out the importance of language in tourism, it has been one of the least studied subjects. Mathieson and Geoffrey (1982) announced that "language is an important factor in an analysis of social and cultural change and could be a

useful indicator of the social impact of international tourism” (p. 154). However, it is equally important to understand the impact of language on tourists’ behavior in international travel. Language barriers are undoubtedly a major issue in transcultural communication and it influences every aspect of travel decisions, not to mention destination choices (Cohen & Cooper, 1986).

A study investigating safety concerns of Japanese visitors to Guam revealed that there was a significantly strong and positive relationship between confidence in communication skills and perceived safety (Pinhey & Iverson, 1994). Yavas (1987) identified that Saudi high-risk perceivers preferred other Arab countries for international travel destinations because of common language, religion, and a sense of heritage. Scientific exchange visitors from the USA to China between 1985 and 1987 reported communication problems, which include “language and interpretation at the person-to-person level” and “lack of advance information to both visitor and host groups at the organizational level” (Wei, Crompton, & Reid, 1989). On the other hand, Tapachai and Waryszak (2000) conducted a study on a tourism destination’s beneficial image and found that one of the benefits of the United States’ image to Australians is “no language barrier.” Basala and Klenosky (2001) examined the impact of language on destination preferences. From the results of their conjoint analysis, the type of language spoken showed the greatest influence to individuals who are classified as Familiarity Seekers when traveling. To Familiarity Seekers, it was most important that the language of the destination should be the same as their native language. Thus, when there is a communication barrier, it elevates perceived risk; when perceived risk is high, it is very important to communicate with consumers (Basala & Klenosky, 2001). Based on the

discussion regarding the impact of language ability to risk perception, the third hypothesis is proposed and stated below:

Hypothesis 3: The ability to speak the native language of a destination influences an individual's overall perceived risk in vacationing at the destination.

Knowledge of Destination

While the construct of prior knowledge has been evaluated to have two dimensions of familiarity and expertise (Alba & Hutchinson, 1987), Cho (2001) proposed that the construct might be comprised of three dimensions: familiarity, expertise, and past experience; however, the result showed that familiarity and expertise are strongly correlated to each other. Therefore, Cho (2001) concluded that prior knowledge is a two-dimensional construct composed of familiarity/expertise and past experience. On the other hand, Gursoy (2001) conceptualized that previous visits influence familiarity, expertise, and involvement in information search behavior but only tested the relationships of familiarity and expertise to information search; the results showed that there is also a direct positive relationship between familiarity and expertise. Since his study did not test the construct of previous visits, this dissertation utilizes the concept of prior knowledge having two dimensions (familiarity/expertise and past experience) identified by Cho (2001). Both familiarity and past experience were identified to be negatively related to perceived risk (Cheron & Ritchie, 1982; Lepp & Gibson, 2003).

Familiarity/Expertise

Previous studies investigated the relationship between “familiarity” and travel decisions (Lepp & Gibson, 2003) or information search (Hales & Shams, 1990; Millman & Pizam, 1995). However, the conceptualization of “familiarity” has been made in several different ways. Srull (1983) described the concept as awareness or perception of the product/service and does not necessarily come from actual experience. Millman & Pizam (1983) used the number of times of previous visits as a measure of familiarity and found that familiarity with a destination had a positive impact on interest and likelihood of visiting. Baloglu (1995) developed a familiarity index having informational and experiential dimensions. Gursoy (2001) operationalized “familiarity” as a unidimensional concept influencing external information search and used multiple indicators to measure the construct. On the other hand, Cho (2001) found that “familiarity” and “expertise” were strongly correlated and combined the two constructs as one dimension of prior knowledge.

A study examined Gulf Arabs’ decisions of European holiday destinations and 80% of the respondents indicated the major reason for their choice was familiarity of destination (Hales & Shams, 1990). A study of leisure activities found that perceived risk has a strong inverse relationship to familiarity (Cheron & Ritchie, 1982). The more familiar with a leisure activity, the less risk individuals perceived with that activity. Based on this result and adopting the combined dimension of familiarity and expertise by Cho (2001), the fourth hypothesis was proposed as following:

Hypothesis 4: Familiarity/Expertise with a particular destination will be negatively correlated with an individual’s overall perceived risk in vacationing in that destination.

Past Experience

Past experience, often referred to as prior experience (Vogt & Andereck, 2003), is one of the factors influencing the decision-making process. Bettman and Park (1980) stated that “inexperienced consumers may spend more time evaluating levels of attributes as they try to develop criteria for choice than consumers with more knowledge and experience” (p. 234). While most previous research investigated the relationships of past experience to purchase decisions (Mazursky, 1989), destination image (Baloglu & McCleary, 1999; Millman & Pizam, 1995; Vogt & Andereck, 2003), and information search (M.-H. Cho, 2001), Sonmez and Graefe (1998a) found that personal experience with travel in general or a destination in particular can affect risk or safety perceptions by confirming or eliminating them; individuals’ risk perception levels decreased as their experience increased. Therefore, past travel experience to specific regions both increases the individuals’ intention to travel there again and also increases their willingness to explore other areas considered to be risky (Sonmez & Graefe, 1998b).

Moutinho (1987) also stated that the vacation site experience is inversely related to the level of perceived risk in purchasing a vacation. The most recent research revealed that the most experienced tourists perceived less risk related to health, terrorism, and strange food (Lepp & Gibson, 2003).

The fifth hypothesis follows below:

Hypothesis 5: Individuals’ experience of visiting an international destination influences their overall perceived risk in vacationing in that particular destination.

Travel Purchase Decisions

Jeng (2000) examined the hierarchical nature of the travel planning process and identified that travel planning is a multi-staged decision behavior. Tourists have to make a series of sub-decisions besides the travel destination before the actual trip departure. These decisions include the members of the travel group, the date and length of trip, the transportation mode, the route, the budget, the destinations, and the activities (Fesenmaier & Jeng, 2000; Moutinho, 1987).

However, most travel decision studies to date have focused on destination choices, such as where to travel, and investigating factors related to destination choice (Ankomah, Crompton, & Baker, 1996; Crouch & Louviere, 2000; Dellaert, Ettema, & Lindh, 1998; Lindh, 1998; Shin, 1998; Um & Crompton, 1990; Woodside & Lysonski, 1989; Woodside & Sherrell, 1977). The most common approach is that consumers take a limited number of travel destinations into consideration during their travel planning process (Woodside & Sherrell, 1977). This destination set model is based on the concept of evoked set (Howard, 1963). Woodside and Lysonski (1989) developed a general model of traveler leisure destination awareness and choice (see figure 4). They described that “destination awareness includes four categories: consideration set, inert set, unavailable and aware set, and inept set” (p. 8). Um & Crompton (1990) conducted a longitudinal study to identify potential travelers’ awareness sets, evoked sets, and the role of attitude in destination choice processes of individuals’ pleasure travel. They derived three dimensions of attitude: need satisfaction, a set of motivations for travel such as novelty, challenge, relaxation, learning, and curiosity; social agreement, potential tourists’ inclinations to act in accordance with their social groups’ opinions; and an

ability to travel, an individual's propensity to travel to a place in terms of such variables as money, time, skill, and health (see figure 5).

Other factors influencing travel decisions investigated by a number of researchers are push and pull motivational effects (Cha, McCleary, & Uysal, 1995; Klenosky, 2002; G. Lee, O'Leary, Lee, & Morrison, 2002; Yuan & McDonald, 1990). Klenosky (2002) summarized that push factors are related to the needs and wants of the traveler, such as the desire for escape, rest and relaxation, and social interaction; pull factors are associated with the features and attributes of the destination itself, such as beaches, sunshine, and cheap airfares. Based on five push factors and seven pull factors, it was found that individuals seem to travel for similar reasons (novelty) but their choices of particular destinations result from different reasons (Yuan & McDonald, 1990). Cha et al. (1995) employed push motivation factors only and clustered Japanese overseas travelers into three distinct groups: sports seekers, novelty seekers, and family/relaxation seekers. Among the seven motivational pull factors for German pleasure travelers to the U.S., Canada, and Asia, "environment and safety" was identified as one factor measured by three indicators: "high standards of hygiene and cleanliness," "personal safety even when traveling alone," and "environmental quality of air, water, and soil" (G. Lee et al., 2002). Their study results supported that motivational factors were significant determinants in destination choice.

Also, many studies found that the traditional decision making process involves decision rules that combine information on choice alternatives in order to find the best alternative (Ankomah et al., 1996; Crompton, 1992; Crompton & Ankomah, 1993; van Raaij & Crotts, 1994).

Figure 4: General Model of Traveler Leisure Destination Awareness and Choice (Woodside & Lysonski, 1989)

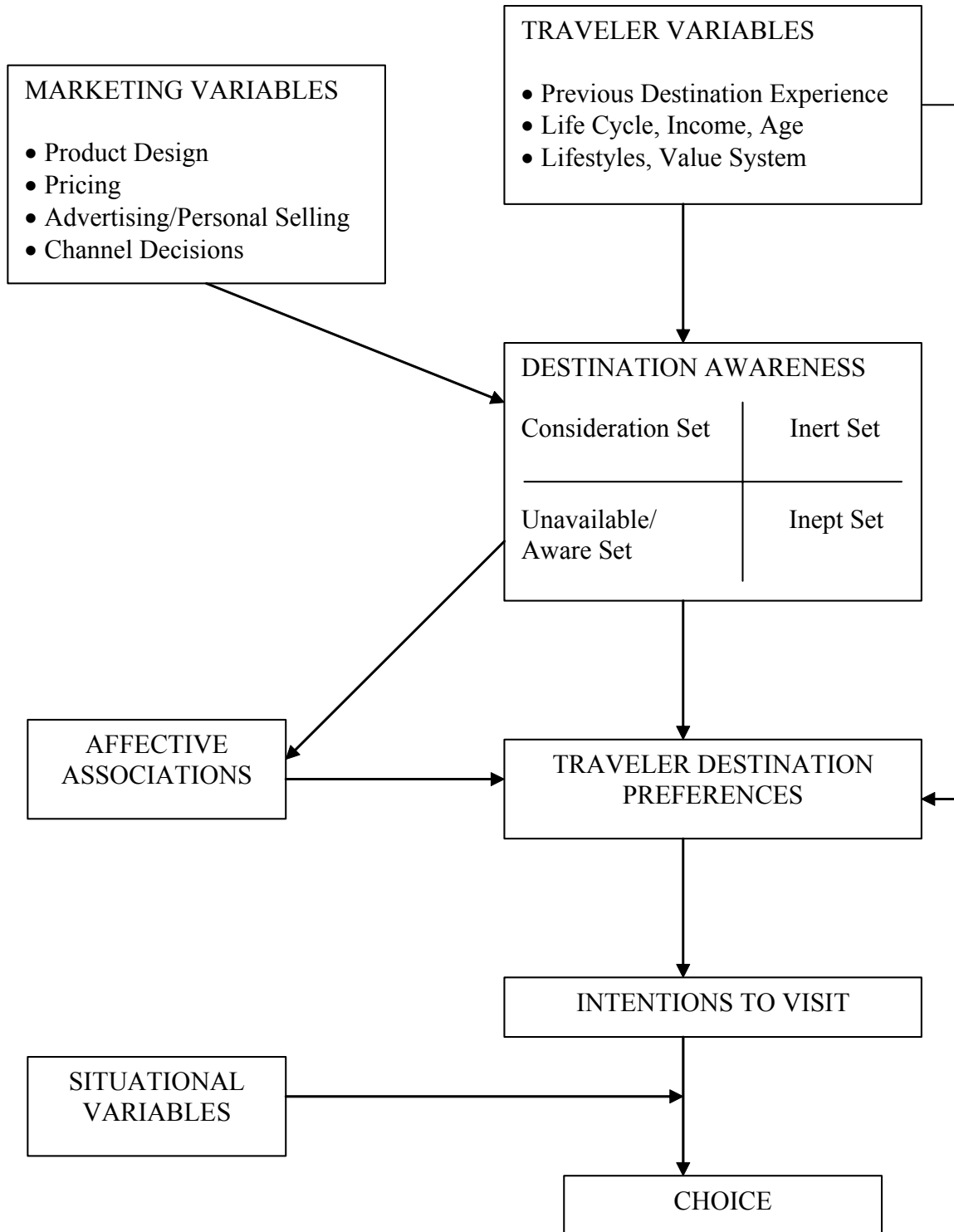
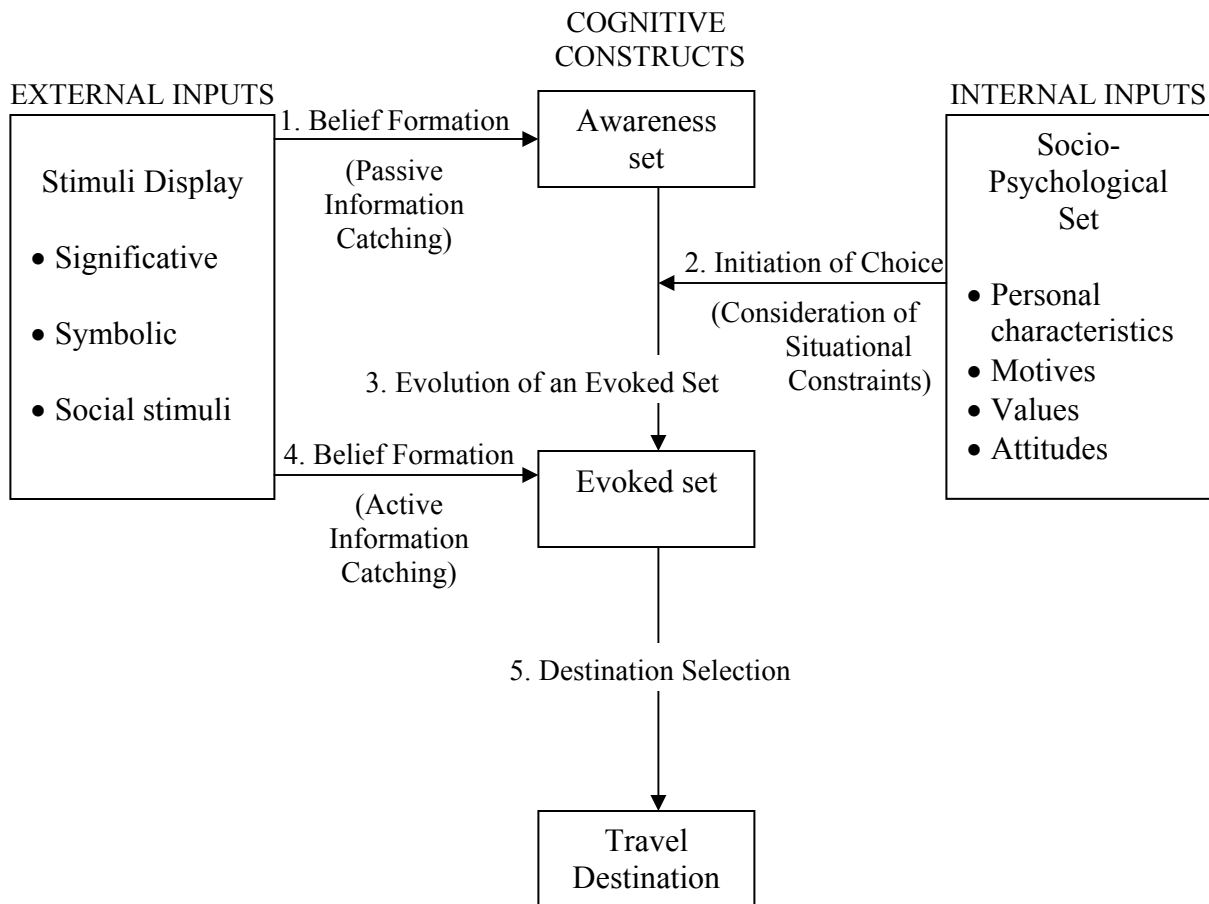


Figure 5: A Model of the Pleasure Travel Destination Choice Process
 (Um & Crompton, 1990)



Crompton and Ankomah (1993) developed an inventory of propositions focusing on the early consideration set, the late consideration set, and the final choice decision process; many other sets have been proposed by other researchers. Ankomah et al. (1996) investigated the relationship between cognitive distance to vacation destinations and individuals' destination choice sets. Cognitive distance is "a mental representation of actual distance molded by an individual's social, cultural, and general life experiences" (Ankomah et al., 1996, p. 140). Contrary to other studies on choice sets, Lindh (1998) found that Swedish households do not make strategic plans for their discretionary trips; instead, they consider only one destination for only one type of trip without having any alternative destinations. When there is no alternative destination considered, three major decision stages – whether or not to travel, destination, and how to travel--are not processed in sequence; they are often decided individually. These results imply that individuals may be influenced by different factors such as perceived risk, past experience, and personal characteristics in each stage of the decision process in travel purchase.

Travel purchase decision making is unique since there is no tangible return on a large investment planned over a long time (Moutinho, 1987). Mathieson and Wall (1982) presented four features of travel purchase decisions: the tourist product is an experience rather than a good and provides no tangible return; expenditure is substantial; travel purchase is carefully planned before purchase; and consumers visit the destination (the site of production), unlike other tangible products brought to the buyer. Intangibility is the major characteristic of tourism products that creates the difference in the decision process between purchasing tangible products and purchasing travel (Hudson & Gilbert, 2000).

Schmoll (1977, p. 66) provided the first model that pays attention to constraints, assessment of risks, and their impact on the decision making process. He described the travel decision process extensively by suggesting a model consisting of four fields: travel stimuli, external variables, personal and social determinants of travel behavior, and characteristics and features of service destination. This model illustrated every possible factor associated with the travel decision process, but it is difficult to quantify the relevant variables and test their interrelationships.

Although the terrorist attacks on September 11, 2001 devastated the travel market and caused almost ten million lost jobs and bankruptcy of some airlines, Plog's research found that travel by Americans did not decrease in 2001 after 9-11 (Plog, 2004, p. 232). However, travelers chose to drive instead of flying and went to closer destinations. There was a similar observation among U.K. travelers during the Gulf War. While U.K. air travel to almost all international destinations dropped significantly, sea travel increased from the U.K. to France in the first quarter of 1991 (Coshall, 2003). It seems that travelers change the mode of travel instead of canceling their trip when there are constraints (Plog, 2004).

Regarding the relationship between perceived risk and travel decisions, Yavas (1987) presented three major reasons that "risk perception may be the primary force behind foreign travel decision making": (1) the fundamental difference of intangibility between services and goods causes the inability to infer expected benefits from a trip, which may result in anxiety; (2) vacationing at international destinations is a high involvement situation; and making decisions regarding international vacations is important to individuals; and (3) perceived risk influences individuals' decisions greatly when adopting something new. Another study found that the presence of risk has the potential to change the nature of travel decisions (Sonmez &

Graefe, 1998a). Figure 6 illustrates a vacation tourist model (Moutinho, 2000). This model consists of a flowchart of three parts: (1) pre-decision and decision process; (2) post-purchase evaluation; and (3) future decision making. Only the first part of the original model related to this study is presented in Figure 6. This model describes that “Perceived Risk” influences vacation decisions.

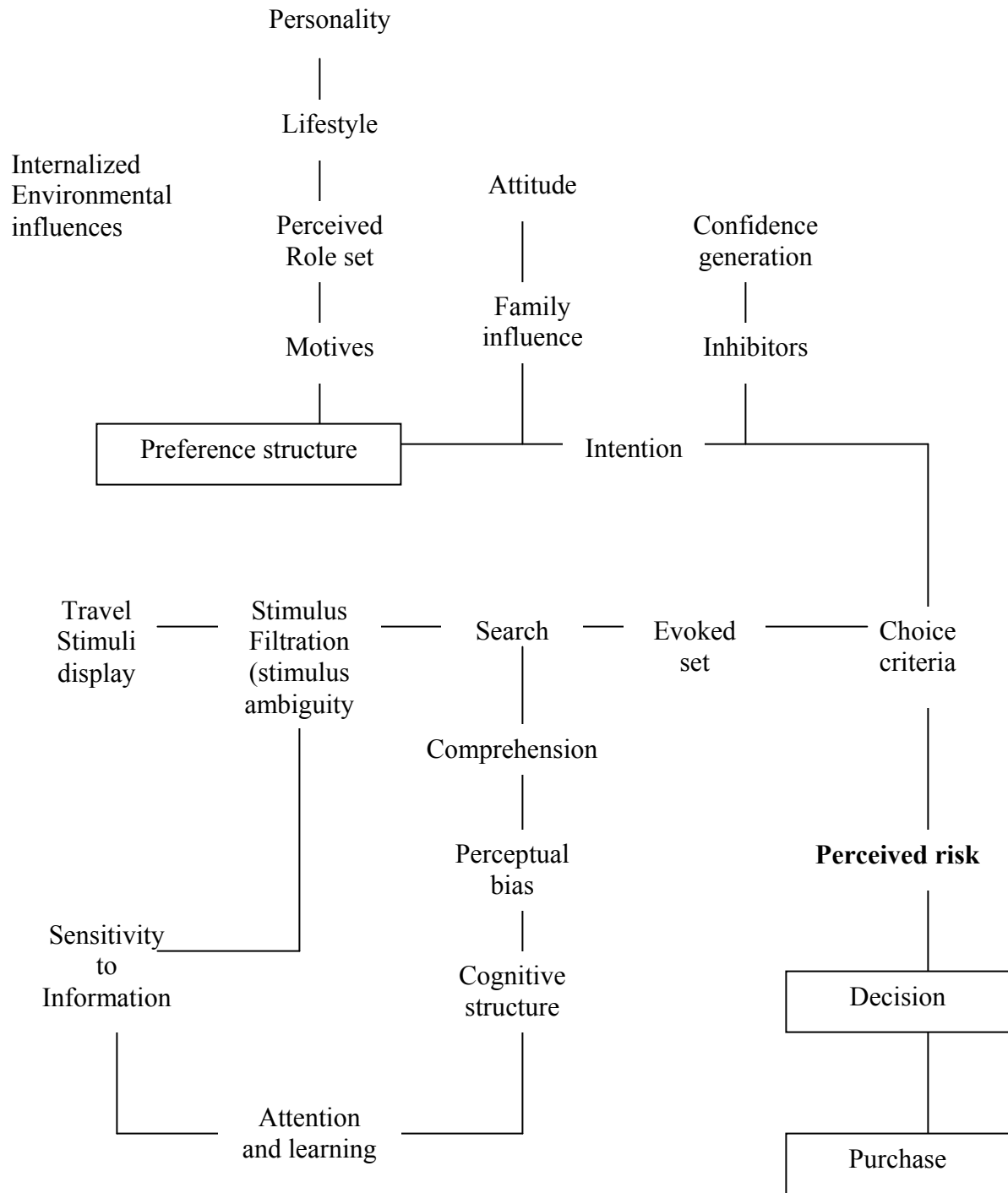
The two stages of travel decisions that are investigated in this study, travel likelihood and travel style, are discussed further in the following section.

Travel Likelihood

Norman (1995) investigated the relationship between perceived constraints and the basic generic decision of whether or not to travel. This generic decision model is based on the assumption that individuals decide whether or not to take a trip first, and then select a destination before they finally decide to go the destination. A study by Zimmer, Brayley, and Searle (1995) examined demographic factors influencing travel decisions of seniors in Canada. They found that age is the best predictor of distinguishing travelers from non-travelers. Two other variables that showed high correlation with the ability to travel were education and the number of mobility problems. Other variables included in the study were self-assessed health status, income level, ability to handle money, number of chronic health conditions, and interest in spending money on recreation.

Sonmez and Graefe (1998a) found that individuals were more likely to avoid traveling to certain regions when they perceived a higher level of risk. They examined both likelihood of visiting and likelihood of avoiding ten particular regions.

Figure 6: A Vacation Tourist Behavior Model – Part I: Pre-decision and Decision Processes (Moutinho, 2000)



However, these two questions can be combined as one item of likelihood of traveling to a destination and can be measured on a scale of not likely to very likely.

The sixth hypothesis follows:

Hypothesis 6: Overall perceived risk toward a particular international destination negatively influences the likelihood of vacationing at the destination.

Travel Style

Literature on travel style provides different categories of classification; there seems to be no consent on travel style established yet. Taylor (1998) identified three travel philosophy segments from data collected from respondents of thirteen different countries between 1986 and 1990. He identified three travel styles and labeled them as follows: planned travel (package travel), 37.5%; independent travel (travelers making their own travel arrangements), 33.5%; and reluctant travel (individuals who don't like traveling), 29%. The proportions represent the average for respondents of all thirteen countries. Even though there are differences in proportions across countries, the three travel philosophy segments were identified in all of the countries. Taylor (1998) also suggested that travel style information contributes to a better understanding of international tourism since a growth or a decline in either independent or planned travel requires different marketing strategies. However, it is essential to know the factors that influence travelers to select the travel style. Plog (2004) classified four types of travel style: (1) independent travel: travelers arrange air tickets, hotels, rail, and other extras separately themselves; (2) escorted tour: travel arrangement includes guides, tour buses, accommodations, meals and entertainment; (3) inclusive package: includes

everything in the price, such as air, hotel, many meals, and entertainment; and (4) partial package: fewer items are included.

Madrigal (1995) examined personality type and personal values to predict travel type, group or independent travel, with a sample of U.S. domestic travelers. The results derived from the discriminant analysis showed that personal values significantly discriminated group travelers from independent travelers. Group travelers tended to value being well-respected and having warm relationships with others, while independent travelers were inclined to value self-fulfillment and accomplishment. A study of mainland American visitors to Hawaii revealed that “visitor parties who are elderly, intend to visit several destinations, contain few people in the party, intend to make short visits, and are on their first trip to Hawaii are more likely to purchase package tours than to travel independently” (Sheldon & Mak, 1987). Unlike other studies which suggested that “Novelty Seekers” prefer traveling alone and are least likely to buy an organized group tour, Basala and Klenosky (2001) found that Novelty Seekers preferred traveling with friends the most and traveling alone the least. They felt the results were based in part on the travel scenario they used in the study which described the destination as “having a history of instability and terrorist activity” (Basala & Klenosky, 2001).

Quiroga (1990) found that personal safety was the most important reason to participate in package tours for travelers over 65, while it was the least important for respondents under 26 years of age in a sample of Latin American tourists on a guided tour of Europe. Detailed advantages of organized tours given by travelers in the order of importance were the comprehensive way of traveling, personal safety, lack of worry, economic reasons, and to make friends (Quiroga, 1990). Safety is not only an important factor to seniors, but also to

travelers of all age groups. Moreover, safety appears to be relatively more important in selecting travel style than motivation. Money and Crotts (2003) suggested that medium uncertainty avoidance consumers will purchase fewer prepackaged trips, will stay longer at the destination, and will visit more destinations compared with high uncertainty avoidance consumers. They found that high-risk aversion individuals were more likely to be traveling in larger groups of people and visiting fewer destinations with shorter average lengths of stay. On the other hand, independent travelers are willing to take risks in selecting vacation elements when levels of risk are perceived to be low or irrelevant (Hyde & Lawson, 2003).

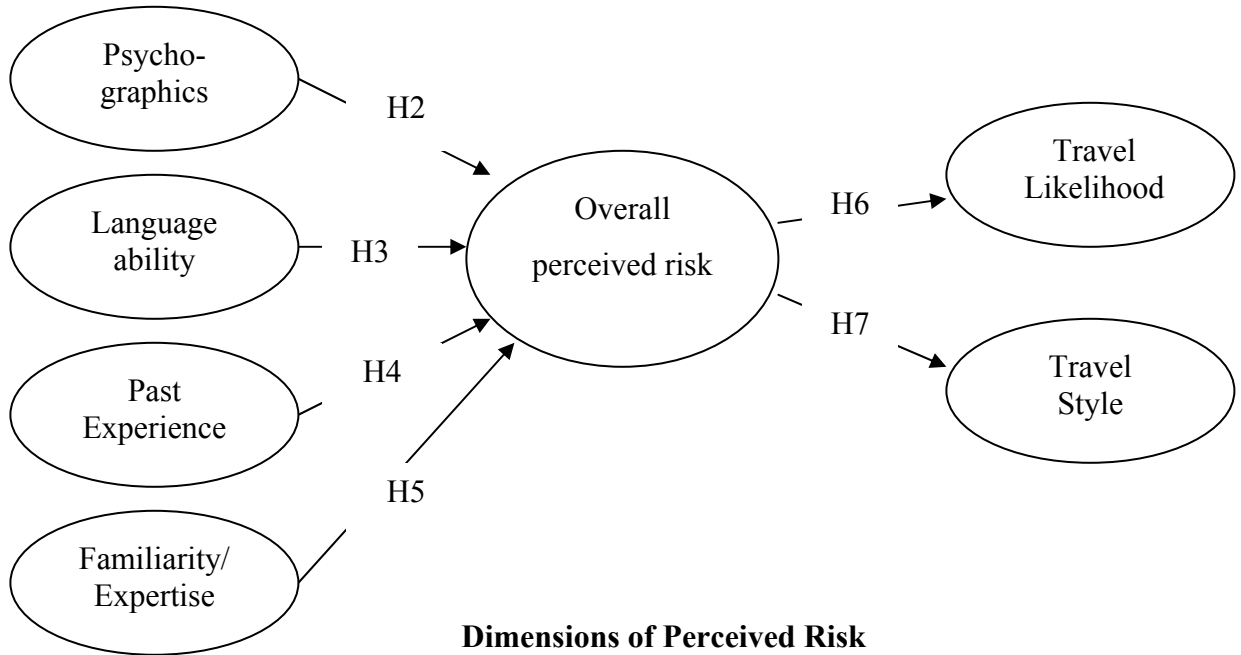
The seventh hypothesis follows:

Hypothesis 7: Individuals' overall perceived risk towards vacationing at international destinations influences their choice of travel style.

Summary

This chapter presented a literature review that builds the theoretical framework for constructs in this study. Figure 7 exhibits the proposition and hypotheses developed for the current study. One proposition and one hypothesis examined the underlying dimensions of perceived risk in international leisure travel. Two hypotheses explored the relationships between personal factors and overall perceived risk. The influence of destination knowledge on overall perceived risk was investigated by testing two hypotheses. Lastly, two hypotheses tested the impact of overall perceived risk on travel purchase decisions in international leisure travel.

Figure 7: A Proposition and Hypotheses in The Model



Dimensions of Perceived Risk

- | | |
|-------------------------|-------------|
| P1 & H1 | |
| - Equipment | |
| - Financial | |
| - Satisfaction | - Physical |
| - Psychological | - Social |
| - Time | - Terrorism |
| - Political instability | - Health |
| - <i>Communication</i> | |

CHAPTER III

METHODOLOGY

Introduction

Chapter III discusses the methodology of this study. First, research questions, a proposition and research hypotheses proposed in Chapter I are presented. Then, the research design of this dissertation is described. The developmental process of measurement scales for perceived risk is depicted comprehensively in the scale purification section. Finally, the procedure of developing the survey is introduced. All phases of the research design, sampling frame, variables of interest, data collection, and statistical analyses are reviewed.

Research Questions, Proposition and Research Hypotheses

Through a comprehensive review of literature on perceived risk, personal factors, destination knowledge, and travel decisions, the current study proposed four research questions. One proposition and seven research hypotheses were developed to answer the research questions.

Research Question 1

What are the underlying dimensions of perceived risk in international leisure travel?

A review of literature on perceived risk identified ten underlying dimensions, and an eleventh perceived risk “Communication Risk” is proposed in this study. The ten dimensions identified in the literature are: Physical, Health, Time, Financial, Psychological, Social, Terrorism, Political Instability, Equipment, and Satisfaction.

Proposition 1: Individuals perceive salient dimensions of risk when contemplating international leisure travel.

Research Hypothesis 1: The salient dimensions of perceived risk in vacationing at international destinations are: “Physical Risk,” “Health Risk,” “Time Risk,” “Financial Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Political Instability Risk,” “Equipment Risk,” “Satisfaction Risk,” and “Communication Risk.”

Research Question 2

Do relationships exist between personal factors and perceived risk in international leisure travel?

Research Hypothesis 2: The psychographic make-up of an individual is related to an individual’s overall perceived risk of vacationing at international destinations.

Research Hypothesis 3: The ability to speak the native language of a destination influences an individual’s overall perceived risk in vacationing at the destination.

Research Question 3

Do relationships exist between knowledge of a destination and perceived risk in international leisure travel?

Research Hypothesis 4: Familiarity/Expertise with a particular destination will be negatively correlated with an individual's overall perceived risk in vacationing in that destination.

Research Hypothesis 5: Individuals' experience of visiting an international destination negatively influences their overall perceived risk in vacationing in that particular destination.

Research Question 4

Do relationships exist between perceived risk and travel purchase decisions in international leisure travel?

Research Hypothesis 6: Overall perceived risk toward a particular international destination negatively influences the likelihood of vacationing at the destination.

Research Hypothesis 7: Individuals' overall perceived risk toward vacationing at international destinations influences their choice of travel style.

Research Design

Due to the nature of “Perceived Risk” which is a markedly task specific phenomenon, Mitchell (1994) suggested providing a buying scenario in designing a methodology.

Following the suggestion and to investigate the existence of “Communication Risk” in international leisure travel, two scenario destinations were selected, Australia and Japan, as target destinations for respondents’ perceived risk while traveling to each country. Both countries are located similar distances from the U.S. but they have different native languages.

This study conducted scale purification in two phases: phase I validated items measuring eleven dimensions of perceived risk regarding vacationing in Australia/Japan, and phase II refined the instrument to obtain measurement scales related to perceived risk of vacationing at international destinations in general. The questionnaire of phase I included all items measuring the constructs in the proposed model and the phase II questionnaire only contained items measuring perceived risk regarding vacationing at international destinations in general. Exploratory Factor Analysis was used to refine items measuring risk perceptions in phase I and phase II.

In the final survey, perceived risk, language ability, psychographics, past experience, familiarity/expertise, and travel decisions were measured in the scenario of vacationing at Australia/Japan. The statistical techniques used for the final data analysis are discussed in a later section of this chapter.

Scale Purification – Phase I

Survey Instrument

The first phase of scale purification was designed as a self-administered questionnaire and consisted of five parts (See Appendix A). The first part of this phase was comprised of questions regarding the respondents' English language ability, familiarity/expertise with Australia, and past experience of vacationing in Australia. The second part consisted of questions regarding the respondents' Japanese language proficiency, familiarity/expertise with Japan, and past experience of vacationing in Japan. Respondents' risk perceptions of vacationing in both Australia and Japan were measured with thirty-four statements in the third part of the questionnaire. The fourth part included items on travel purchase decisions related to vacationing in Australia and Japan. Finally, demographic information was gathered in part five. While all items were evaluated for comprehension and clarity, the main purpose of phase I was to develop the risk perception items. The discussion on how items were selected to measure each construct of perceived risks can be found in the section "Scale – Perceived Risk."

Data Collection

The survey was distributed to a convenience sample of 249 undergraduate students in one large undergraduate class at Virginia Tech. Students who completed the questionnaire received extra credit. Because the target population for this study is native English speakers, 28 respondents who identified themselves as international students and whose native languages were not English were removed for a usable sample size of 221. Among the 221

respondents, three individuals did not fill out demographic information. However, factor analysis included these responses because: (1) this sample was collected for phase purposes only and demographic information was not necessary, and (2) this sample consisted of undergraduate students who have similar demographics. Half of the sample was male and most of the respondents were 22 years of age or younger (95%) while only 11 were 23 years of age or older (5%).

Scale – Perceived Risk

The scales employed in previous studies (Han & Weaver, 2003; Hsieh et al., 1994; Mitchell, Davies, Moutinho, & Vassos, 1999; Roehl, 1988; Sonmez, 1994; Stone & Gronhaug, 1993; Stone & Mason, 1995; Tsaor et al., 1997; Um & Crompton, 1992) were adopted for the initial version of the questionnaire for phase I. For a better understanding of the dimensions of perceived risk and to establish a stable measuring instrument, multiple measures for each dimension of perceived risk were identified and adopted from the literature. These scales were refined in the process of phase I in order to obtain a reliable instrument for measuring perceived risk of vacationing at international destinations. The researcher identified ten types of perceived risk from previous studies with varying numbers of perceived risk dimensions. Therefore, it was necessary to test the utility of the dimensions to determine if any of the dimensions overlapped with another dimension, or if any of the dimensions was not valid in international leisure travel. Measurement items were organized for each of the eleven dimensions, ten dimensions identified in the literature: “Physical Risk,” “Health Risk,” “Time Risk,” “Financial Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Political Instability Risk,” “Equipment Risk,” “Satisfaction Risk,” and one proposed dimension in this

study, “Communication Risk.” Respondents were asked to rate their level of agreement on a five-point Likert scale (1=very unlikely to 5=very likely) regarding eleven types of perceived risk of vacationing in Australia and vacationing in Japan. The scales selected from the literature were modified. Table 3.1 lists the eleven dimensions and related measuring items.

The measuring items for the dimension of “**Physical Risk**” are: (1) “It (vacationing in Australia and vacationing in Japan) will result in physical danger or injury” modified from “Possibility of physical danger, injury or sickness while on vacation” (Roehl, 1988); (2) “I may experience or witness violence,” modified from “You may experience or witness violence during your holiday” (Mitchell & Vassos, 1997); and (3) “It is absolutely safe for me” modified from “it is not absolutely safe for me to travel to _____” (Um & Crompton, 1992).

The scales for “**Health Risk**” are: (1) “I may become sick from food or water” modified from “You may become sick from food or water during your trip” (Mitchell et al., 1999); (2) “There is a possibility of contracting infectious diseases” modified from “Possibility of contracting infectious diseases” (Tsaour et al., 1997); and (3) “Potential health problems are a concern” modified from “Potential health problems are a concern if I go on a trip to _____” (Um & Crompton, 1992).

The items for “**Financial Risk**” are: (1) “It will not provide value for the money spent” modified from “Possibility that the vacation will not provide value for the money spent” (Roehl, 1988); (2) “It will be a bad way to spend my money” modified from “My purchasing a personal computer within the next twelve months for use at home would be a bad way to spend my money” (Stone & Mason, 1995); and (3) “I would rather spend money

on purchases at home,” modified from “Rather spend money on things beside travel” (Hsieh et al., 1994).

The scales for “**Social Risk**” are: (1) “It will negatively affect others’ opinion of me” modified from “Possibility that a vacation will affect others’ opinion of me” (Roehl, 1988); (2) “Friends and relatives will disapprove of my vacation” modified from “Friends/family/associates disapproving of vacation choices or activities” (Sonmez, 1994); and (3) “I want a vacation in this destination because that is where everyone goes” modified from “I want to travel to _____ because that is where everyone goes” (Um & Crompton, 1992).

The three measuring items for “**Time Risk**” are: (1) “Having a vacation here is too time-consuming,” (2) “It will be a waste of time,” and (3) “It will require too much planning time” modified from “Possibility that a vacation will take too much time or be a waste of time” (Roehl, 1988).

The scales for “**Equipment Risk**” are: (1) “It may result in mechanical or equipment problems” modified from “Possibility of mechanical, equipment or organizational problems while on vacation” (Roehl, 1988); (2) “I’ll experience inconvenience of telecommunication facilities” modified from “Convenience of the telecommunication facilities” (Tsaur et al., 1997); and (3) “My baggage may be misplaced or delayed (by the airline or hotel)” modified from “Baggage may be misplaced or delayed (by the airline, hotel, or shuttle service) during holiday” (Mitchell et al., 1999).

The two items for “**Satisfaction Risk**” are: (1) “It may be a disappointment considering everything that can go wrong during the vacation,” which was developed for this study; and (2) “It is likely to enhance my feeling of well-being” which was modified from “A trip to ___ is likely to enhance my feeling of well-being” (Um & Crompton, 1992).

The scales for “**Psychological Risk**” are: (1) “It will not reflect my personality” and (2) “It will not reflect my self-image” modified from “Possibility that a vacation will not reflect my personality or self-image” (Roehl, 1988); (3) “The thought of vacationing here will make me feel uncomfortable” modified from “The thought of purchasing a personal computer within the next twelve months for use at home makes me feel psychologically uncomfortable” (Stone & Mason, 1995); (4) “The thought of vacationing here will give me a feeling of unwanted anxiety” modified from “The thought of purchasing a personal computer within the next twelve months for use at home gives me a feeling of unwanted anxiety” (Stone & Mason, 1995); and (5) “The thought of vacationing here will cause me to experience unnecessary tension” modified from “The thought of purchasing a personal computer within the next twelve months for use at home causes me to experience unnecessary tension” (Stone & Mason, 1995).

The three items measuring “**Political Instability Risk**” are: (1) “This destination should be avoided by tourists because of its political instability” modified from “Politically unstable countries should be avoided by tourists” (Sonmez, 1994); (2) “I would not let political instability keep me from vacationing in this destination” modified from “I would not let political instability keep me from traveling to a particular region or country” (Sonmez, 1994); and (3) “I would like to vacation in this destination but negative news about this destination discourages me from it” modified from “I’d like to travel internationally but negative news about foreign countries discourages me from it” (Sonmez, 1994).

The scales for “**Terrorism Risk**” are: (1) “Travelers have a high probability of being targeted by terrorists” modified from “International travelers have a high probability of being targeted by terrorists” (Sonmez, 1994); (2) “I’ll not be intimidated by terrorism when

vacationing in this destination” modified from “I’m not intimidated by terrorism” (Sonmez, 1994); and (3) “Terrorism will not influence my vacation here” modified from “Terrorism has never influenced my decision to travel internationally” (Sonmez, 1994).

The three items related to “**Communication Risk**” are: (1) “It is important that people who I meet speak English during my vacation in this destination” modified from “It is important that the people I encounter on a vacation trip speak my language” (Yamamoto & Gill, 1999); (2) “I have concerns about having possible communication problems during my vacation here” and (3) “I will not have problems in communication with others whom I meet during my vacation here” modified from “Have concerns about possible communication problems” (Han & Weaver, 2003).

Exploratory factor analysis was used to develop an instrument measuring perceived risk and the results of the factor analysis are discussed in Chapter IV.

Table 3.1: Scales Measuring Perceived Risk Identified in the Literature

Dimensions	Literature & Items
Physical Risk	(Mitchell & Vassos, 1997; Roehl, 1988; Um & Crompton, 1992) 1. It will result in physical danger or injury. 2. I may experience or witness violence. 3. It is absolutely safe for me.
Health Risk	(Mitchell et al., 1999; Tsaur et al., 1997; Um & Crompton, 1992) 1. I may become sick from food or water. 2. There is a possibility of contracting infectious diseases. 3. Potential health problems are a concern.
Financial Risk	(Hsieh et al., 1994; Roehl, 1988; Stone & Mason, 1995) 1. It will not provide value for the money spent. 2. It will be a bad way to spend my money. 3. I would rather spend money on purchases at home.
Social Risk	(Roehl, 1988; Sonmez, 1994; Um & Crompton, 1992) 1. It will negatively affect others' opinion of me. 2. Friends and relatives will disapprove my vacation. 3. I want a vacation in this destination because that is where everyone goes.
Time Risk	(Roehl, 1988) 1. Having a vacation here is too time-consuming. 2. It will be a waste of time. 3. It will require too much planning time.
Equipment Risk	(Mitchell et al., 1999; Roehl, 1988; Tsaur et al., 1997) 1. It may result in mechanical or equipment problems. 2. I'll experience inconvenience of telecommunication facilities. 3. My baggage may be misplaced or delayed (by the airline or hotel).

<p>Satisfaction Risk</p>	<p>(Um & Crompton, 1992)</p> <ol style="list-style-type: none"> 1. It may be a disappointment considering everything that can go wrong during the vacation. 2. It is likely to enhance my feeling of well-being.
<p>Psychological Risk</p>	<p>(Roehl, 1988; Stone & Mason, 1995)</p> <ol style="list-style-type: none"> 1. It will not reflect my personality. 2. It will not reflect my self-image. 3. The thought of vacationing here will give me a feeling of unwanted anxiety. 4. The thought of vacationing here will make me feel comfortable. 5. The thought of vacationing here will cause me to experience unnecessary tension.
<p>Political Instability Risk</p>	<p>(Sonmez, 1994)</p> <ol style="list-style-type: none"> 1. This destination should be avoided by tourists because of its political instability. 2. I would not let political instability keep me from vacationing in this destination. 3. I would like to vacation in this destination but negative news about this destination discourages me from it.
<p>Terrorism Risk</p>	<p>(Sonmez, 1994)</p> <ol style="list-style-type: none"> 1. Travelers have a high probability of being targeted by terrorists. 2. I'll not be intimidated by terrorism when vacationing in this destination. 3. Terrorism will not influence my vacation in here.
<p>Communication Risk</p>	<p>(Han & Weaver, 2003; Yamamoto & Gill, 1999)</p> <ol style="list-style-type: none"> 1. It is important that people who I meet speak English during my vacation in this destination. 2. I have concerns about having possible communication problems during my vacation here. 3. I will not have problems in communication with others whom I meet during my vacation here.

Scale – Language Ability

The questions used for measuring language ability were developed for this study. The questions were included in phase I to investigate their content validity and not analyzed in the data analysis of phase I. The first question asked the individuals' native language and was used to screen only native English speakers. Another question measured an individual's ability to communicate in Japanese. Additionally, questions were posed to determine a respondent's interest in learning foreign languages. These questions are listed below:

1. What is your native language? 1) English 2) Other

2. If your native language is not English, what is your level of English proficiency?
 - 1) Neither understand nor speak 2) Understand a little but cannot speak
 - 3) Understand and speak a little 4) Understand and speak

3. I'm interested in learning a foreign language.

Strongly disagree					Strongly agree
1	2	3	4	5	

4. How would you rate your fluency in Japanese?
 - 1) Neither understand nor speak 2) Understand a little but cannot speak
 - 3) Understand and speak a little 4) Understand and speak

Scale – Familiarity/Expertise

The measurement scales on familiarity and expertise by Cho (2001) were adopted for this study. Cho (2001) found that familiarity and expertise are overlapping concepts. The wording of the questions was modified for this study. Two more questions were developed for this study (question 2 & 3 below). The reliability of these four items was tested and discussed in Chapter IV, Results – Phase I. The questions are listed below and were rated on a five-point Likert scale (1=not at all to 5=extremely).

Familiarity/Expertise

1. How familiar are you with Australia (Japan) as a vacation destination?
2. How interested have you been in Australia (Japan) as a vacation destination?
3. How much do you know about Australia (Japan) as a vacation destination?
4. How would you rate your knowledge about vacation travel in Australia (Japan) relative to the rest of the U.S. population?

Scale Purification – Phase II

Survey Method

Phase II tested the scales on perceived risk established in phase I to obtain a general instrument which can measure perceived risk in international travel. The results from phase I can be found in Chapter IV, Results. Phase II contained seven dimensions with 23 items measuring perceived risk that were developed from phase I. The wording from phase I was modified, and the directions were slightly altered (See Appendix B). The second phase utilized two methods to collect data. The 23-item questionnaire was posted online using the resource of Virginia Tech, www.survey.vt.edu. The URL of the questionnaire was sent to students enrolled in one online class and one traditional class by the instructors via email. No extra credit incentive was offered for responding to the online survey. Self-administered questionnaires were also distributed to two undergraduate classes at Virginia Tech. The researcher visited one class to collect the data. The students filled out the one-page questionnaire at the beginning of class and no extra credit was given in this class. The other in-class survey was executed by the instructor of the class and students were given extra credit for completing the questionnaire.

Table 3.2 lists the dimensions and related measuring items identified in phase I and the five added items for phase II. A total of 23 items was prepared to represent seven dimensions of perceived risk in vacationing at international destinations. The results of phase I are presented in Chapter IV. However, the next section provides a short discussion of the results of phase I to aid in developing the questionnaire for phase II.

Table 3.2

Phase II Scales of Perceived Risk in Vacationing at International destinations

Dimensions	Literature & Items
Value Risk	<ol style="list-style-type: none"> 1. It will be a bad way to spend my money. 2. I would rather spend money on purchases at home. 3. It will be a waste of time.
Health Risk	<ol style="list-style-type: none"> 1. I may become sick from food or water. 2. There is a possibility of contracting infectious diseases. 3. Potential health problems are a concern.
Psychological Risk	<ol style="list-style-type: none"> 1. Having vacations at international destinations will not reflect my personality or self-image 2. When I think about this vacation purchase, I feel tension (added). 3. The thought of purchasing this vacation makes me feel uncomfortable (added). 4. The thought of purchasing this vacation fills me with anxiety (added). 5. I worry about purchasing this vacation (added).
Social Risk	<ol style="list-style-type: none"> 1. It will negatively affect others' opinion of me. 2. Friends and relatives will disapprove of my vacation. 3. I would be concerned what people, whose opinion was of value to me, would think of me, if they considered this vacation a bad choice (added).
Communication Risk	<ol style="list-style-type: none"> 1. It is important that people who I meet speak English during my vacation in this destination. 2. I have concerns about having possible communication problems during my vacation here. 3. I will not have problems in communication with others whom I meet during my vacation here.
Equipment Risk	<ol style="list-style-type: none"> 1. It may result in mechanical or equipment problems. 2. Telecommunication systems (phone, fax, etc.) will be inconvenient to use. 3. My baggage may be misplaced or delayed (by the airline or hotel).
Terrorism Risk	<ol style="list-style-type: none"> 1. I would not let political instability keep me from vacationing in this destination. 2. I'll be intimidated by terrorism when vacationing in this destination. 3. Terrorism will influence my decision to vacation here.

Survey Instrument

From the results of phase I (See Results – Phase I in Chapter IV for complete presentation), seven dimensions with 19 items were obtained. The dimensions are: “Value Risk,” “Health Risk,” “Equipment Risk,” “Terrorism Risk,” “Communication Risk,” “Social Risk,” and “Psychological Risk.” The first five dimensions had three items each and the last two dimensions only retained two items each. After careful examination of the dimensions and items, the researcher decided to add items to two of the dimensions to establish a more reliable instrument. One item was added to “Social Risk”: “I would be concerned what people, whose opinion was of value to me, would think of me, if they considered this vacation a bad choice.” This item was adopted from Dholakia (2001). Four items were added to “Psychological Risk”: “When I think about this vacation purchase, I feel tension;” “The thought of purchasing this vacation makes me feel uncomfortable;” “The thought of purchasing this vacation fills me with anxiety;” and “I worry about purchasing this vacation.” The first three items were originally included in phase I but failed to appear in the last factor analysis. However, the researcher decided to re-introduce them in phase II. The last item among these four added items was adopted from Dholakia (2001). On the other hand, two items belonging to “Psychological Risk” as a result of phase I were combined to make one item. The two items were originally identified as one item in the literature but were tested as two items in phase I to see if they implied different meanings. However, they seemed to represent a single issue and were united again as one item for phase II. The responses from phase II survey were analyzed using exploratory factor analysis to develop a measurement scale of perceived risk in vacationing at international destinations for the final survey. The phase II results are presented in Chapter IV, Results.

Final Survey

Data Collection

A self-administered mail survey was utilized to collect data because a mail questionnaire can reach a geographically dispersed sample simultaneously at a relatively low cost (Zikmund, 2000).

The survey of this study was organized to measure each construct of the proposed model. Items used 5-point Likert type scales, except for questions representing past experience and travel purchase decisions that require respondents to select a specific answer from multiple choice options. Demographic information was found on the last part of the questionnaire. Following the general rule that the length of a mail questionnaire should not exceed six pages (Bean & Roszkowski, 1995), the questionnaire was arranged in four pages: 17" x 11" paper was single folded to make four pages of 8 ½ " x 11".

A cover letter included the name and address of the respondent and was signed individually to show the effort of personalization (See Appendix C). A self addressed, business reply envelope was enclosed in the questionnaire package to provide convenience for respondents to return the completed questionnaire.

Population

The population of this study includes travelers and non-travelers from residents of the state of Virginia in the U.S.A.

Sampling Frame

Residents of Virginia who are 18 years of age or older were the sampling frame for this study. The number of respondents from each county and city was determined by a

stratified sampling method (Appendix D). A random sample was used to select the assigned number of respondents from each county and city of Virginia. A mailing list was obtained from ReferenceUSA database (www.referenceusa.com), which provides residential information collected from telephone directories and is available at large public libraries. Each listing appears in the database exactly as it appears in the phone book and unlisted phone numbers are not included.

Sample Size

To perform factor analysis, one of the statistical techniques that was used in this study, the sample size should have a ten-to-one ratio of observations to variables and should be 100 or larger (Hair, Anderson, Tatham, & Black, 1998). Because there were three items each for seven types of perceived risk, the optimal sample size to analyze these variables was between 250 and 300. Therefore, targeting a sample size of 300 was considered appropriate for this study.

Previous studies on perceived risk reported a response rate between 48% and 64% (Roehl & Fesenmaier, 1992; Sonmez & Graefe, 1998b). However, one study used personal contacts to obtain its sample (Roehl & Fesenmaier, 1992). Sonmez and Graefe (1998b) obtained their mailing list from a broker. Mail surveys tend to produce the lowest response rates; 30% are common for the general population but rates can be as low as 10%, depending on questionnaire content and design (S. L. J. Smith, 1995). A recent survey of Virginia residents attained a 24% response rate (Gursoy, 2001). The present study targeted a sample size of 300 assuming a 15% conservative response rate, so 2,000 questionnaires were mailed.

Questionnaire Design

The questionnaire was organized in six parts (See Appendix C): (1) An individual's native language, familiarity/expertise with Australia as a vacation destination, and past experience of visiting Australia; (2) An individual's Japanese proficiency, familiarity/expertise with Japan as a vacation destination, and past experience of visiting Japan; (3) Items regarding novelty seeking; (4) An individual's risk perception of vacationing in Australia and Japan; (5) An individual's travel purchase decisions regarding vacationing in Australia and Japan; and (6) Demographic information.

The scales on each construct were designed to measure respondents' attitudes toward suggested destinations: Australia and Japan. The final survey contained some questions which were not included in phase I and phase II except for the scales of "language ability." Among the four items for "language ability" included in phase I, one item was omitted and the other three items were used in the final survey. These items are discussed in the following section.

Measurement Scale – Personal Factors

a. Psychographics: The measurement scale of Novelty Seeking developed by Lee and Crompton (1992) was adopted. This scale was only included in the final survey because it was not necessary to validate the items in phase I and phase II. The wording of the questions was slightly modified for the final survey. The original 21 items of the instrument and the dimensions identified in the previous work are listed in Table 3.3. The dimension of "Thrill" has seven items; "Change from routine" has eight items; and two dimensions, "Boredom alleviation" and "Surprise" have three items each.

Table 3.3

Four Dimensions and Items Measuring Novelty Seeking by Lee and Crompton (1992)

Dimensions	Items
Thrill	<p>I sometimes like to do things on vacation that are a little frightening.</p> <p>I enjoy doing “daring” activities while on vacation.</p> <p>Sometimes it is fun to be a little scared on vacation.</p> <p>I enjoy experiencing a sense of danger on a vacation trip.</p> <p>I would like to be on a raft in the middle of a wild river at the time of the spring flood waters.</p> <p>I enjoy activities that offer thrills.</p> <p>I seek adventure on my vacation.</p>
Change from Routine	<p>I like to find myself at destinations where I can explore new things.</p> <p>I want to experience new and different things on my vacation.</p> <p>I want to experience customs and cultures different from those in my own environment on vacation.</p> <p>I enjoy the change of environment which allows me to experience something new on vacation.</p> <p>My ideal vacation involves looking at things I have not seen before.</p> <p>I want there to be a sense of discovery involved as part of my vacation.</p> <p>I like to travel to adventurous places.</p> <p>I feel powerful urge to explore the unknown on vacation.</p>
Boredom Alleviation	<p>I want to travel to relieve boredom.</p> <p>I have to go on vacation from time to time to avoid getting into a rut.</p> <p>I like to travel because the same routine work bores me.</p>
Surprise	<p>I don’t like to plan a vacation trip in detail because it takes away some of the unexpectedness.</p> <p>I like vacations that are unpredictable.</p> <p>I would like to take off on a trip with no preplanned routes in my mind.</p>

Measurement Scale – Knowledge of a Destination

a. Past Experience: Information on individuals' traveling experience to each destination (Australia and Japan) was collected utilizing questions adopted from Cho (2001) and Money and Crotts (2003). The questions were slightly modified for this study. Four questions were asked for each country:

1. Have you ever visited Australia (Japan)? Yes No
2. If yes, how many times have you visited Australia (Japan)? Time(s)
3. If yes, how did you travel on your last trip to Australia (Japan)?
 - 1) Alone 2) With Friends 3) With family 4) With a partner
4. If yes, how did you arrange your last trip to Australia (Japan)?
 - 1) All-inclusive package tour
 - 2) Only flight and hotel included package
 - 3) All arranged by myself

b. Familiarity/Expertise: The measurement scales on familiarity and expertise were tested in Phase I for its reliability. Two items were adopted from Cho (2001) and two items were developed for this study. The reliability of these items was confirmed in Phase I and all four items were used for the final survey. The questions are listed below and were rated on a five-point Likert scale (1=not at all to 5=extremely).

Familiarity/Expertise

1. How familiar are you with Australia (Japan) as a vacation destination?
2. How interested have you been in Australia (Japan) as a vacation destination?
3. How much do you know about Australia (Japan) as a vacation destination?
4. How would you rate your knowledge about vacation travel in Australia (Japan) relative to the rest of the U.S. population?

Measurement Scale – Language Ability

Among four questions developed for this study, one question that asks individuals' level of English proficiency was considered to be irrelevant and omitted in the final survey. All three questions were confirmed to have face validity in phase I. Individuals who indicated that their native language is not English were excluded from the usable sample for data analysis.

1. What is your native language? 1) English 2) Other
2. I'm interested in learning a foreign language.
(Five-point Likert scale: strongly disagree to strongly agree)
3. How would you rate your fluency in Japanese?
 - 1) Neither understand nor speak 2) Understand a little but cannot speak
 - 3) Understand and speak a little 4) Understand and speak

Measurement Scale – Travel Purchase Decisions

a. Travel Likelihood: A single question is used to measure travel likelihood and it was rated on a five-point Likert scale (1=not at all to 5=very likely). This question is generally used when measuring individuals' propensity to travel in tourism research.

How likely will you vacation in Australia (Japan) in the next three years?

b. Travel Style: This question is adopted from a previous study (McCleary, Weaver, & Hsu, 2004). Three different types of travel style are presented for respondents to select their choices: a fully packaged tour; a partially packaged tour with transport and accommodation only; and non-packaged/independent travel. Although "I would never go" was added to determine respondents' interests in vacationing in Australia and vacationing in Japan, this category was not included in the data analysis because it is not a type of travel style.

Which of the following will be your choice of vacation in Australia (Japan)?

1. a fully packaged tour
2. a partially packaged tour with transport and accommodation only
3. non-packaged/independent travel
4. I would never go

Table 3.4

Demographic Information Questions

Questions	Answer Categories
1. Year of Birth	(19)
2. Gender (Please circle one)	Female () Male ()
3. Marital Status (Please circle one)	Never Married Married Divorced Widowed Separated Living with a partner
4. Number of Children Living in the household	()
5. Ages of children living in the household	, , , , ,
6. What was your approximate annual household income before taxes in 2003?	Less than \$40,000 \$40,000 ~ \$59,999 \$60,000 ~ \$79,999 \$80,000 ~ \$99,999 \$100,000 ~ \$119,999 \$120,000 ~ \$139,999 \$140,000 ~ \$159,999 \$160,000 ~ \$179,999 \$180,000 and more
7. What is the highest education level you have attained?	Less than high school degree High school degree Some college 2 year or vocational degree Bachelor's degree Graduate degree
8. How frequently do you read (e.g., magazines, travel sections in newspapers, books, internet) about travel?	Not at all Only when planning my trip Several times a year Several time a month Several times a week
9. Hoe likely will you travel to a foreign destination for leisure in the next three years?	(Not at all) (Don't know) (Very likely) 1 2 3 4 5

Demographic Information

In addition to the scales discussed above, the last part of the questionnaire included demographic information: age, gender, marital status, number of children living in the household, ages of children living in the household, annual household income, and education. Also, two questions were included for additional information. The list of items is described in Table 3.4.

Statistical Analysis

Several statistical methods were conducted for the data analysis. The SPSS statistical package was used to analyze the data. First, descriptive statistics were generated to evaluate the distribution of variables. Then, a series of appropriate tests were performed to examine necessary assumptions before applying main statistical techniques: Exploratory Factor Analysis, Correlations, Independent Sample t-test, and Paired Sample t-test. In the following discussion, a list of the statistics that were used is overviewed, then the specific statistics employed to address each hypothesis are identified.

Exploratory Factor analysis

According to Hair et al. (1998), “Factor analysis is a generic name given to a class of multivariate statistical methods whose primary purpose is to define the underlying structure in a data matrix” (p. 90). Factor analysis determines linear combinations of variables that aid in investigating their interrelationships; this is a statistical method to discover the basic structure of a domain and to add substantive interpretations to the underlying dimensions (Zikmund, 2000, p. 544).

This study utilized VARIMAX rotation to extract factors. The objective of rotation methods is to simplify the rows and columns of the factor matrix – simplifying the rows maximizes a variable’s loading on a single factor and simplifying the columns reduces the number of “high” loadings – to facilitate interpretation (Hair et al., 1998). One of the rotation methods, VARIMAX, gives a clearer separation of the factors. In general, Kaiser’s experiment indicates that the factor pattern obtained by VARIMAX rotation tends to be more invariant than that obtained by the QUARTIMAX method when different subsets of variables are analyzed. The VARIMAX method has proved very successful as an analytic approach to obtaining an orthogonal rotation of factors.

This dissertation utilized factor analysis for two purposes: 1) to determine scale items for the final survey; and 2) to discover the dimensions of perceived risk in international leisure travel.

Correlations

Simple correlation analysis is the most popular technique to investigate the relationship of one variable to another (Zikmund, 2000). Pearson's correlation coefficient, a measure of linear association (SPSS, 2002), ranges from +1.0 indicating a perfect positive relationship to -1.0 implying a perfect negative relationship. The larger the correlation coefficient, the stronger the relationship between the two variables. Based on principles that statistical significances vary in terms of sample sizes, this study considers a correlation of $\pm .15$ or larger to be significant with a sample size between 250 and 300 (Nunnally, 1975).

Independent Samples t-test

The Independent-Sample t-test procedure compares means for two groups (SPSS, 2002). This statistical method can test two means with homogeneous and heterogeneous variances. Generally, Levene's test of homogeneity of variance is used to test the assumption of equal variances.

Paired Sample t-test

The Paired-Sample t-test procedure compares the means of two variables for a single group (SPSS, 2002). It computes the differences between values of the two variables for each case and tests the hypothesis that the average difference is not 0.

Multiple Discriminant Analysis

Multiple Discriminant Analysis (MDA) is an appropriate statistical technique when the dependent variable is categorical (nominal or nonmetric) and the independent variables are metric. MDA can handle the dependent variable that contains more than two groups. When there are two groups in the dependent variable, the technique is referred to as two-group discriminant analysis. When three or more classifications are involved, it is referred to as multiple discriminant analysis (Hair et al., 1998). MDA is "applicable to any research question with the objective of understanding group membership whether the group can be evaluated on a series of independent variables" (Hair et al., 1998).

Hypotheses Testing

To test the seven proposed research hypotheses with the two data sets regarding vacationing in Australia and vacationing in Japan, two different research sub-hypotheses were developed for each research hypothesis. A total of fourteen research sub-hypotheses were tested using appropriate statistical methods. The detailed discussions of the sub-hypotheses are presented in Chapter IV, Results. The statistical techniques utilized to test each research sub-hypothesis are listed in this section.

Research Question 1

What are the underlying dimensions of perceived risk in international leisure travel?

Proposition 1: Individuals perceive salient dimensions of risk when contemplating international leisure travel.

Research Hypothesis 1: The salient dimensions of perceived risk in vacationing at international destinations are: “Physical Risk,” “Health Risk,” “Time Risk,” “Financial Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Political Instability Risk,” “Equipment Risk,” “Satisfaction Risk,” and “Communication Risk.”

To find the underlying dimensions of perceived risk in vacationing in Australia and vacationing in Japan, two separate exploratory factor analyses were used (Hypotheses 1a and 1b).

Research Question 2

Do relationships exist between personal factors and perceived risk in international leisure travel?

Research Hypothesis 2: The psychographic make-up of an individual is related to an individual's overall perceived risk of vacationing at international destinations.

Research Hypothesis 3: The ability to speak the native language of a destination influences an individual's overall perceived risk in vacationing at the destination.

For testing the relationship of the psychographic make-up of an individual and an individual's overall perceived risk of vacationing at international destinations, correlations were employed (Hypotheses 2a and 2b). A paired sample t-test was used to investigate the difference of native English speakers' overall perceived risk between vacationing in Australia and vacationing in Japan (Hypothesis 3a). The difference in risk perception of vacationing in Japan between individuals who have some level of Japanese proficiency and those who have no Japanese proficiency was tested using an independent sample t-test (Hypothesis 3b).

Research Question 3

Do relationships exist between knowledge of a destination and perceived risk in international leisure travel?

Research Hypothesis 4: Familiarity/Expertise with a particular destination will be negatively correlated with an individual's overall perceived risk in vacationing in that destination.

Research Hypothesis 5: Individuals' experience of visiting an international destination negatively influences their overall perceived risk in vacationing in that particular destination.

Two simple correlations analyses tested the relationship between familiarity/expertise and risk perception of vacationing in Australia and vacationing in Japan (Hypotheses 4a and 4b). Two independent sample t-tests were used to explore the relationships between past experience visiting particular destinations (Australia and Japan) and overall risk perception towards those destinations (Hypotheses 5a and 5b).

Research Question 4

Do relationships exist between perceived risk and travel purchase decisions in international leisure travel?

Research Hypothesis 6: Overall perceived risk toward a particular international destination negatively influences the likelihood of vacationing at the destination.

Research Hypothesis 7: Individuals' overall perceived risk toward vacationing at international destinations influences their choice of travel style.

The relationships of overall risk perception towards particular destinations (Australia and Japan) to the likelihood of vacationing in those destinations were identified using simple

correlations (Hypotheses 6a and 6b). Finally, two separate Multiple Discriminant Analysis (MDA) investigated the relationships between individuals' overall perceived risk toward vacationing at international destinations (Australia and Japan) and their choice of travel style (Hypotheses 7a and 7b). The results of hypotheses testing using statistical techniques described above are discussed in Chapter IV.

Summary

This chapter provided the methodology of this study. To investigate the relationships of the constructs in the model of this study, one proposition and seven hypotheses were proposed in association with the four research questions presented in Chapter I.

The research design, including sampling frame, sample selection, data collection, and the development of the final survey, was discussed and appropriate statistical analyses were presented. The administration of this study was conducted in three phases: phase I and phase II of scale purification, and the final survey. A total of three separate data sets were collected. Phase I validated items measuring perceived risk of vacationing in two different international destinations: Australia and Japan. Phase II developed a general instrument regarding perceived risk in vacationing at international destinations. The final survey examined the underlying dimensions of perceived risk in vacationing in Australia and vacationing in Japan.

The discussions of survey results, data analysis, and hypotheses testing are presented in Chapter IV.

CHAPTER IV

RESULTS

Introduction

This chapter provides the process and the results of the data analysis. This study conducted scale purification in two phases to validate the underlying dimensions of perceived risk and to obtain a reliable instrument for the final survey. Phase I validated measuring items collected from previous studies and items developed for this dissertation. Phase II refined the instrument tested in phase I to obtain measurement scales which can be applied in a general international leisure travel environment. A factor analysis and Cronbach's alpha test for internal consistency were performed with two separate convenience samples of undergraduate students at Virginia Tech. Because Exploratory Factor Analysis (EFA) was applied to identify the underlying dimensions of perceived risk in vacationing at international destinations, numerous iterations of factor solutions were performed to find the best final solutions in each phase of scale purification.

The final survey was distributed to a sample of Virginia residents in the U.S. Descriptive statistics were used to summarize the data. The statistical analyses performed to test the hypotheses were discussed.

Phase I

Survey Method

A self-administered questionnaire consisting of five parts (See Appendix A) was distributed to a convenience sample of 249 undergraduate students in one large undergraduate class at Virginia Tech. Extra credit was given to students who completed the survey in the class. To obtain the targeted sample of native English speakers, 28 responses by international students whose native language is not English were removed for the data analysis and the final usable sample size was 221. This phase I was comprised of questions regarding five constructs examined in this study: (1) the respondents' English and Japanese language ability; (2) familiarity/expertise with Australia and Japan; (3) past experience of vacationing in Australia and Japan; (4) respondents' risk perceptions of vacationing in both Australia and Japan; and (5) travel purchase decisions related to vacationing in Australia and Japan. Demographic information was gathered in the survey but is not included in the data analysis because phase I was conducted only for factor analytic purposes. Therefore, the following discussion centers on the factor analysis results of the perceived risk questions.

Factor Analysis of Items Measuring Perceived Risk

The final sample size of 221 for phase I satisfied the minimum requirement of the sample size for principal component analysis with 34 variables; at least five times as many observations as variables are recommended (Hair et al., 1998). To find the underlying dimensions of perceived risk, an Exploratory Factor Analysis (EFA) with a principal component method was employed. To determine the number of dimensions and scale items

for each dimension, a series of EFAs were performed. In each EFA, the Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) and the Bartlett test of sphericity were examined to determine the appropriateness of factor analysis. Factor loadings were examined to identify the appropriateness of items under each derived factor. Additionally, the reliability of the items measuring each factor was assessed for the final factor solution. As explained in Chapter III, one purpose of this study was to explore the utility of “Communication Risk;” therefore, the same questions were asked under the scenario of vacationing in Australia and again under the scenario of vacationing in Japan. According to Hair et al. (1998), “whenever differing groups are expected in the sample, separate factor analyses should be performed” (p. 100). Thus, separate factor analyses were run for the perceived risk scale items relating to Australia and Japan. The discussion on factor analyses of perceived risk regarding traveling to Australia is presented first; then follows the factor analyses of perceived risk in traveling to Japan.

Factor Analysis Results – Australia

Exploratory Factor Analysis was run on all 34 variables measuring risk perceptions of vacationing in Australia (See Table 4.1 for the list of items). Several assumptions had to be examined, although conceptual assumptions are more critical than statistical assumptions (Hair et al., 1998). Visual inspection revealed that the data matrix of risk perceptions towards Australia had a number of correlations greater than .30, which justifies the application of factor analysis (Hair et al., 1998).

Table 4.1: List of Items Measuring Perceived Risk in Vacationing in Australia/Japan

Dimensions	Items
Physical Risk	1. It will result in physical danger or injury. 2. I may experience or witness violence. 3. It is absolutely safe for me.
Health Risk	4. I may become sick from food or water. 5. There is a possibility of contracting infectious diseases. 6. Potential health problems are a concern.
Financial Risk	7. It will not provide value for the money spent. 8. It will be a bad way to spend my money. 9. I would rather spend money on purchases at home.
Social Risk	10. It will negatively affect others' opinion of me. 11. Friends and relatives will disapprove my vacation in Australia (Japan). 12. I want a vacation in Australia (Japan) because that is where everyone goes.
Time Risk	13. It is too time consuming. 14. It will be a waste of time. 15. It will require too much planning time.
Equipment Risk	16. It may result in mechanical or equipment problems. 17. I'll experience inconvenience of telecommunication facilities. 18. My baggage may be misplaced or delayed (by the airline or hotel).
Satisfaction Risk	19. It may be a disappointment considering everything that can go wrong during the vacation. 20. It is likely to enhance my feeling of well-being.
Psychological Risk	21. It will not reflect my personality. 22. It will not reflect my self-image. 23. The thought of vacationing in Australia (Japan) will give me a feeling of unwanted anxiety. 24. The thought of vacationing in Australia (Japan) will make me feel comfortable. 25. The thought of vacationing in Australia (Japan) will cause me to experience unnecessary tension.
Political Instability Risk	26. Australia avoided by tourists because of its political instability. 27. I would not let political instability keep me from vacationing in Australia. 28. I would like to vacation in Australia (Japan) but negative news about Australia discourages me from it.
Terrorism Risk	29. Travelers in Australia (Japan) have a high probability of being targeted by terrorists. 30. I'll not be intimidated by terrorism when vacationing in Australia (Japan). 31. Terrorism will not influence my vacation in Australia (Japan).
Communication Risk	32. It is important that people who I meet while vacationing in Australia (Japan) speak English. 33. I have concerns about having possible communication problems when vacationing in Australia (Japan). 34. I will not have problems in communication with others whom I meet during my vacation in Australia (Japan).

One statistical measure for the presence of correlations among the variables is the Bartlett test of sphericity; this statistical test provides the statistical probability that the correlation matrix has significant correlations among at least some of the variables. Throughout the series of attempted factor solutions, no solution showed insignificant correlations among variables. The Measure of Sampling Adequacy (MSA) quantifies the degree of intercorrelations among the variables and the appropriateness of factor analysis. The MSA value of .80 or above is interpreted as meritorious and .70 or above is considered as middling (Hair et al., 1998). This MSA index is evaluated for each factor solution in the following section along with the factor solution process. When deciding the number of factors, it is necessary to look at several additional trial solutions after the initial solution has been derived (Hair et al., 1998). Among many trials, a selection of seven factor solutions is presented in the next section.

Principal component analysis with an orthogonal rotation (VARIMAX) produced the first run with ten factors by using the default eigenvalues of 1 as a cutoff. According to Hair et al. (1998), factors having eigenvalues greater than 1 are considered significant and most reliable when the number of variables is between 20 and 50 (Hair et al., 1998). The ten-factor solution explained 61.94% of the variance which is considered satisfactory in social sciences (Hair et al., 1998). According to Zikmund (2000), “this explanation of variance is equivalent to the R^2 in multiple regression” (p. 546). The MSA was .806 and is interpreted as meritorious and satisfied the underlying structure assumption. However, one variable failed to correlate with any factor significantly: “It may be a disappointment considering everything that can go wrong during the vacation.” Before deleting this variable, another factor run was attempted to see if this variable could load on any factor.

A nine-factor solution was assigned along with VARIMAX rotation for the second run instead of using eigenvalues as a cutoff. While the MSA remained the same .806 as in the previous ten-factor solution, the variance explained by this nine-factor solution dropped to 58.88%, which is still considered satisfactory in the social sciences (Hair et al., 1998). The result of a nine-factor solution revealed that five variables did not load above .40 on any factor. Hair et al. (1998) suggested that a factor loading of .40 and above is required for a .05 significance level (obtaining a power level of 80%) in a sample of 200 (p. 111). These variables with factor loadings below .40 are candidates for deletion: “It may be a disappointment considering everything that can go wrong during the vacation”; “Travelers have a high probability of being targeted by terrorists”; “The thought of vacationing in Australia causes me to experience unnecessary tension”; “It will not provide value for the money spent”; “I would like to vacation in Australia but negative news about Australia discourages me.” Therefore, these five variables were eliminated and the next run of factor analysis continued.

After removing the above five variables, nine factors still surfaced from VARIMAX rotation using eigenvalues greater than 1 as a cutoff for the third run. Although the overall MSA slipped to .778, the percentage of explained variance increased to 62.78%. The examination of the nine-factor structure required removal of five variables because their factor loadings were lower than .50. From this iteration, the researcher decided to follow the guideline of criteria relating more to practical significance in examining factor loadings; the loadings $\pm .50$ or greater are considered practically significant with a sample size of 100 or larger, whereas statistical significance of factor loadings differ based on sample sizes (Hair et al., 1998). The five variables eliminated were: “Vacationing in Australia is absolutely safe for

me”; “Vacationing in Australia may result in mechanical or equipment problems”; “Australia should be avoided by tourists because of its political instability”; “The thought of vacationing in Australia gives me a feeling of unwanted anxiety”; “I have concerns about having possible communication problems during my vacation in Australia.” Twenty-four variables remained to continue another run of factor analysis.

In run four, eight factors were obtained from the 24 remaining variables using eigenvalues of 1 as a cutoff and VARIMAX rotation. In this round, the MSA index dropped to .732 which was still in the range of middling (Hair et al., 1998), but the variance explained by eight factors increased to 63.64%. One more variable which revealed insignificant loading was excluded to proceed to another factor analysis: “It will require too much planning time.”

Because four factors had only two variables each in the previous eight-factor solution, a seven-factor solution was assigned for run five with 23 variables along with VARIMAX rotation. The results showed that: 1) three factors remained with two variables; and 2) two variables loaded on two factors. The objective of examining trial factor solutions is to minimize the number of significant loadings on each row of the factor matrix (Hair et al., 1998, p. 113). Therefore, these two variables loaded on two factors were removed: “My baggage may be misplaced or delayed (by the airline or hotel)”, and “Telecommunication systems (phone, fax, etc) will be inconvenient to use.”

After perusing several solutions with a varying number of factors, a seven-factor solution was selected in the final run to determine the appropriate items for a general perceived risk scale. Table 4.2 describes the extraction of the final seven-factor solution.

Table 4.2

Phase I – Extraction Results of Seven Factors of Perceived Risk Regarding Vacationing in Australia. (n=221)

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	4.225	20.117	20.117
2	2.013	9.587	29.704
3	1.922	9.155	38.859
4	1.579	7.519	46.378
5	1.302	6.201	52.579
6	1.242	5.913	58.492
7	1.101	5.243	63.735

Table 4.3

Phase I – VARIMAX Rotated Component Factor Matrix for Perceived Risk Regarding Vacationing in Australia (n=221)

Variables	VARIMAX rotated loadings		
	Factor1 (Health)	Factor2 (Value)	Factor3 (Social)
Potential health problems are a concern	.778		
There is a possibility of contracting infectious diseases	.770		
I may experience or witness violence	.708		
I may become sick from eating food or drinking water	.694		
It will result in physical danger or injury	.692		
I would rather spend money on purchases at home		.731	
It will be a bad way to spend my money		.690	
Having a vacation here is too time-consuming		.688	
It will be a waste of time		.614	
It will negatively affect others' opinion of me			.822
Friends and relatives will disapprove of my vacation			.799

VARIMAX rotated loadings			
Variables	Factor 4 (Terrorism)	Factor 5 (Psychological)	Factor 6 (Undefined)
Terrorism will not influence my decision to vacation here	.867		
I'll not be intimidated by terrorism when vacationing in this destination	.724		
I would not let political instability keep me from vacationing in this destination	.668		
It will not reflect my personality		.900	
It will not reflect my self-image		.867	
The thought of vacationing here makes me feel uncomfortable			.814
It is likely to enhance my feeling of well-being			.706

	VARIMAX rotated loadings
Variables	Factor 7 (Communication)
It is important that people I meet speak English during my vacation in this destination	.675
I want a vacation in this destination because everyone goes there	.605
I will not have problems in communication with people I meet during my vacation here	.566

This seven-factor solution produced the overall MSA of .700 which was slightly lower than the previous seven-factor solution with 23 variables. But this final factor solution's ability to explain the total variance increased to 63.74% from the previous solution's 60.16%. Table 4.2 displays the cumulative percent of variance for the seven-factor solution. Table 4.3 shows the seven dimensions and associated variables with each dimension of the final factor solution along with factor loadings. One dimension had five items, one dimension had four items, two dimensions had three items, and three dimensions had two items. After evaluating the items, the seven factors were titled in the descending order of total variance explained: "Health Risk," "Value Risk," "Social Risk," "Terrorism Risk," "Psychological Risk," "Undefined," and "Communication Risk." Among seven dimensions, it was not possible to define one dimension with two items: "The thought of vacationing here (Australia) makes me feel uncomfortable" and "It (vacationing in Australia) is likely to enhance my feeling of well-being." The researcher decided to stop the factor analysis at this point and wait to compare the result of the current factor analysis to the result of the factor analysis of Japan as the destination.

Factor Analysis Results – Japan

A similar process was again employed on the same 34 items (See Table 4.1) measuring perceived risk in traveling to Japan. A series of factor analyses employed principal component analysis and orthogonal rotation (VARIMAX). One of the assumptions, the Bartlett test of sphericity, confirmed the presence of correlations among the variables at the .0001 level; the assumption requirement was satisfied that the correlation matrix had significant correlations among variables (Hair et al., 1998, p. 99). Another measure of

intercorrelations among variables, the Measure of Sampling Adequacy (MSA), is presented for each factor solution.

In the first factor analysis run with a default eigenvalue of 1, 34 variables measuring perceived risk in traveling to Japan generated ten factors. The MSA index was .829, which is interpreted as meritorious and 64.58% of the total variance was explained by this initial ten-factor solution. The examination of the factor matrix detected that four variables loaded on two factors, when factor loadings of .40 or above were reviewed.

A second run establishing a nine-factor solution with the original 34 variables was performed. The MSA remained the same, .829 as in the first run, but this nine-factor solution explained 61.43% of the total variance which was smaller than 64.58% of the first ten-factor solution. Two items loaded on two factors: “The thought of vacationing in this destination (Japan) causes me to experience unnecessary tension” and “I may experience or witness violence.” Three items had factor loadings below .40: “It (vacationing in Japan) may be a disappointment considering everything that can go wrong during the vacation;” “The thought of vacationing here makes me feel uncomfortable;” and “It (vacationing in Japan) is likely to enhance my feeling of well-being.” These five variables were removed from further analyses.

After removing five items, 29 variables produced a nine-factor solution based on eigenvalues greater than 1 using VARIMAX rotation in run three. While the MSA slightly dropped to .804, the percentage of variance explained increased to 65.11% in this iteration. However, it was not possible to obtain meaningful dimensions from this factor solution, so further analysis continued. Since four variables still loaded on two factors, a factor solution was attempted with fewer factors.

In run four, an eight-factor solution was analyzed utilizing the 29 variables. This iteration produced a smaller percentage of variance explained (61.51%) but the overall MSA was maintained at .804. After reviewing the factor loadings, two items were eliminated from further analyses because one item loaded on two factors: “It (vacationing in Japan) will result in physical danger or injury” and “Vacationing in Japan is absolutely safe for me.”

In run five, an eight-factor solution was performed on the 27 remaining variables after deletion of the above two items. In this eight-factor solution with 27 variables, the total variance explained improved to 63.55%, but the MSA index slightly slipped to .794, which is still close to the range of meritorious. The result of this solution showed that two factors had only two items each and one factor had just one variable. The researcher decided to keep the two-item factors but to exclude the one-item factor from further analysis. This one-variable factor, “I want a vacation in Japan because everyone goes there”, was removed.

In run six, the final run, a seven-factor solution explained 61.36% of the variance which is considered satisfactory in social sciences (Hair et al., 1998), and had the overall MSA value increased slightly to .799 from .794 of the previous eight-factor solution (Refer to Table 4.4 for a summary of the cumulative percent of variance for this final solution). One factor had seven items, one factor had five items, one factor had four items, two factors had three items each, and two factors had two items. The final seven factors were labeled: “Value Risk,” “Health Risk,” “Terrorism Risk,” “Equipment Risk,” “Communication Risk,” “Social Risk,” and “Psychological Risk.” Table 4.5 provides the items in each factor.

Table 4.4

Phase I – Extraction Results of Seven Factors of Perceived Risk in Vacationing in Japan (n=221)

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	5.920	22.769	22.769
2	2.583	9.936	32.705
3	2.097	8.064	40.769
4	1.726	6.640	47.409
5	1.304	5.015	52.423
6	1.214	4.670	57.094
7	1.108	4.263	61.356

Table 4.5

Phase I – VARIMAX Rotated Component Factor Matrix for Perceived Risk in Vacationing in Japan (n=221)

Variables	VARIMAX rotated loadings	
	Factor1 (Value)	Factor2 (Health)
It will be bad way to spend my money	.732	
I would rather spend money on purchases at home	.712	
It will be a waste of time	.703	
Having a vacation here is too time-consuming	.629	
It will not provide value for the money spent	.624	
The thought of vacationing here gives me a feeling of anxiety	.557	
It will require too much planning time	.455	
Potential health problems are a concern		.847
There is a possibility of contracting infectious diseases		.822
I may become sick from eating food or drinking water		.713
I would like to vacation in this destination but negative news about his destination discourages me		.488
Travelers have a high probability of being targeted by terrorists		.481

Variables	VARIMAX rotated loadings		
	Factor3 (Terrorism)	Factor 4 (Equipment)	Factor 5 (Communication)
Terrorism will influence my decision to vacation in Japan	.860		
I'll be intimidated by terrorism when vacationing in Japan	.749		
I would not let political instability keep me from vacation in Japan	.682		
Telecommunication systems (phone, fax, etc.) will be inconvenient to use		.782	
My baggage may be misplaced or delayed (by the airline or hotel)		.534	
It may result in mechanical or equipment problems		.497	
Japan should be avoided by tourist because of its Political instability		.453	
It is important that people who I meet speak English during my vacation in Japan			.774
I have concerns about having possible communication problems during my vacation in Japan			.759
I will have problems in communication with others whom I meet during my vacation in Japan			-.555

Variables	VARIMAX rotated loadings	
	Factor 6 (Social)	Factor 7 (Psychological)
Friends and relatives will disapprove of my vacation in Japan	.757	
Having a vacation in Japan will negatively affect others' opinion of me	.726	
It will not reflect my self-image		.872
It will not reflect my personality		.852

This final seven-factor solution was selected for a review of establishing an instrument measuring general perceived risk in international leisure travel. The dimensions and items of this final seven-factor solution were examined and compared with the seven-factor solution of perceived risk in vacationing in Australia. The discussion of this review process is presented in the next section.

Results – Perceived Risk in Phase I

While separate factor analyses for travelers' perceived risk toward vacationing in Australia and Japan produced two separate solutions, both factor solutions contain six risk factors that are the same. The six common dimensions are: "Value Risk," "Health Risk," "Terrorism Risk," "Social Risk," "Psychological Risk," and "Communication Risk." One of the dimensions, representing risk perceptions of vacationing in Australia, had two items: "The thought of vacationing here (Australia) makes me feel uncomfortable" and "It (vacationing in Australia) is likely to enhance my feeling of well-being." This dimension was not able to be titled and this less meaningful two-item dimension was disregarded for interpretation (Hair et al., 1998, p. 114). One risk dimension, "Equipment Risk," appeared as a perceived risk dimension only when vacationing in Japan. The six common dimensions and one additional dimension, "Equipment Risk," a total of seven factors were included in the next phase (phase II) of the study. Each of the five dimensions contained three items selected from the final factor solutions of perceived risk of vacationing in Australia and Japan. However, two dimensions, "Social Risk" and "Psychological Risk", had only two items in the final factor solutions (See Table 4.6).

Table 4.6

Seven Dimensions Representing Perceived Risk in International Leisure Travel and Measurement Items Derived in Phase I

Dimensions	Measurement Items
Value Risk	It will be bad way to spend my money
	I would rather spend money on purchases at home
	It will be a waste of time
Health Risk	I may become sick from eating food or drinking water
	There is a possibility of contracting infectious diseases
	Potential health problems are a concern
Terrorism Risk	I would not let political instability keep me from vacationing in this destination
	I'll not be intimidated by terrorism when vacationing in this destination
	Terrorism will not influence my decision to vacation here
Equipment Risk	It may result in mechanical or equipment problems
	Telecommunication systems (phone, fax, etc.) will be inconvenient to use
	My baggage may be misplaced or delayed (by airline or hotel)

Dimensions	Measurement Items
Communication Risk	<p data-bbox="818 396 1300 499">It is important that people who I meet speak English during my vacation in this destination</p> <p data-bbox="818 541 1273 611">I want a vacation in this destination because everyone goes there</p> <p data-bbox="818 653 1273 758">I will not have problems in communication with others whom I meet during my vacation here</p>
Social Risk	<p data-bbox="818 848 1208 917">It will negatively affect others' opinion of me</p> <p data-bbox="818 959 1289 1024">Friends and relatives will disapprove of my vacation</p>
Psychological Risk	<p data-bbox="818 1115 1230 1142">It will not reflect my personality</p> <p data-bbox="818 1184 1224 1213">It will not reflect my self-image</p>

In order to create a stable instrument, one more item was added for the “Social Risk” dimension: “I would be concerned what people, whose opinion was of value to me, would think of me, if they considered this vacation a bad choice” (Dholakia, 2001). The two items belonging to “Psychological Risk” were combined for one item: “Vacationing at international destinations will not reflect my personality or self-image.” Four additional items (Dholakia, 2001) to measure “Psychological Risk” were added to the instrument for phase II: “When I think about vacation purchases at international destinations, I feel tension”; “The thought of purchasing vacations at international destinations makes me feel uncomfortable”; “The thought of purchasing vacations at international destinations fills me with anxiety”; and “I worry about purchasing vacations at international destinations.” The first three added items were adopted from the study by Stone and Mason (1995) and the last item was developed by the researcher.

Reliability Test Results – Familiarity/Expertise

The reliability of four items measuring familiarity/expertise was tested using Cronbach’s alpha. The two reliability coefficients were obtained from the reliability analyses with two data sets: vacationing in Australia and vacationing in Japan. Both coefficient values were .83, which is higher than the lower limit of .70 (Hair et al., 1998). All four items verified their appropriateness to be included in the final survey.

Phase II

In the previous section, the first phase of scale purification was described. This part explains the process and the results of the second phase. A measurement scale on perceived risk in international leisure travel developed in the first phase (See Table 4.7 for the list of the items) was validated with another data set and the final version of an instrument is presented in Phase II.

Survey Method

A self-administered questionnaire containing only items measuring perceived risk was composed for phase II (See Appendix B for the phase II questionnaire). From an online distribution to two classes of undergraduate students and a data collection in two traditional classes, 23 and 104 responses were gathered respectively.

The sample size of 127 satisfied the recommended minimum guideline of a five-to-one ratio between observations and variables and exceeded the minimum required sample size of 100 to perform factor analysis.

Table 4.7: Phase II – Items Measuring Perceived Risk in International Leisure Travel

Dimensions	Items
Value Risk	<ol style="list-style-type: none"> 1. It will be a bad way to spend my money. 2. I would rather spend money on purchases at home. 3. It will be a waste of time
Health Risk	<ol style="list-style-type: none"> 4. I may become sick from eating food or drinking water. 5. There is a possibility of contracting infectious diseases. 6. Potential health problems are a concern.
Terrorism Risk	<ol style="list-style-type: none"> 7. I would not let political instability keep me from vacationing at international destinations. 8. I will be intimidated by terrorism when vacationing at international destinations. 9. Terrorism will influence my decision to vacation at international destinations.
Equipment Risk	<ol style="list-style-type: none"> 10. It may result in mechanical or equipment problems. 11. Telecommunication systems (phone, fax, etc.) will be inconvenient to use. 12. My baggage may be misplaced or delayed (by airline or hotel).
Communication Risk	<ol style="list-style-type: none"> 13. It is important that people who I meet speak English during my vacations at international destinations. 14. I have concerns about having possible communication problems during my vacations at international destinations 15. I will have problems in communication with others whom I meet during my vacations at international destinations.
Social Risk	<ol style="list-style-type: none"> 16. Having vacations at international destinations will negatively affect others' opinion of me. 17. Friends and relatives will disapprove of my vacations at international destinations. 18. I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing at international destinations a bad choice.
Psychological Risk	<ol style="list-style-type: none"> 19. Having vacations at international destinations will not reflect my personality or self-image. 20. When I think about vacation purchases at international destinations, I feel tension. 21. The thought of purchasing vacations at international destinations makes me feel uncomfortable. 22. The thought of purchasing vacations at international destinations fills me with anxiety. 23. I worry about purchasing vacations at international destinations.

Factor Analysis Results – Phase II

Several assumption tests were performed before running factor analyses with the 127 sample size of phase II. The correlation matrix revealed “a substantial number of correlations greater than .30” among variables (Hair et al., 1998, p. 99). Some degree of multicollinearity is needed to identify interrelated sets of variables, which is the objective of factor analysis. Another measure to inspect the entire correlation matrix is the Bartlett test of sphericity, which “provides the statistical probability that the correlation matrix has significant correlations among at least some variables” (Hair et al., 1998, p. 99). All factor analyses’ results of phase II revealed that the correlations are significant at the .0001 level. Another test that quantifies the degree of intercorrelations among the variables is the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA), which produces specific index ranges from 0 to 1. The index values for each factor analysis of phase II are reported in this section.

Principal component analysis was conducted with 23 variables along with VARIMAX rotation. Using eigenvalues of 1 as a cutoff, a seven-factor solution was produced. The MSA scored .726, which is middling according to Hair et al. (1998). This initial seven-factor solution explained 69.63% of the total variance, which was above the satisfactory level of 60% (Hair et al., 1998). But this solution did not best represent the data and it was necessary to continue further trial solutions. One variable loaded on two factors with small factor loadings and was deleted: “It will not reflect my personal or self-image.”

In the next run with 22 variables, six factors having eigenvalues greater than 1 were extracted. The MSA index increased to .731 in this solution while the percentage of the total variance explained slightly slipped to 67.25%. Because this six-factor solution did not

produce clear dimensions and the measurement items for phase II were composed in seven dimensions, a seven-factor trial solution was attempted.

Instead of using eigenvalues as a cutoff, seven factors were assigned to run another factor analysis with VARIMAX rotation. The MSA value remained the same .731, but the total variance explained increased to 71.70%. Nevertheless, three items related to the “Equipment Risk” dimension identified in phase I loaded on three separate factors with relatively small loadings. These three items were excluded for further analysis:

“Telecommunication systems (phone, fax, etc.) will be inconvenient to use”; “It may result in mechanical or equipment problems”; and “My baggage may be misplaced or delayed (by airline or hotel).” Another factor analysis was performed with the remaining 19 variables.

The final factor analysis produced a six-factor solution with eigenvalues greater than 1 as a cutoff. In this run, the MSA score still remained the same .731, but the percentage of the variance explained increased to 72.44%. Before determining this six-factor solution as the final factor solution for phase II, another seven-factor solution was attempted. According to Hair et al. (1998), using eigenvalues as a cutoff tends to produce a conservative number of factors when variables are less than 20. However, the seven-factor solution explained 71.70% of the total variance and the factor structure was not as representative as the previous six-factor solution. Therefore, the researcher determined the six-factor solution with 19 variables as the final best solution for phase II (See Table 4.8).

The final factor solution was carefully examined for each factor and associated items based on their conceptual contribution before it was labeled. The first dimension had four items and was labeled “Psychological Risk.” The second dimension had four items but the last item was not conceptually related and had a loading (-.412) much smaller than the other three

items (See Table 4.9). This item, “I would not let political instability keep me from vacationing at international destinations”, also loaded on the last factor with items regarding “Terrorism Risk.” Considering the conceptual relation of this item to the last factor, the researcher determined to place this item in the last factor titled “Terrorism Risk.” The third dimension had three items and was named “Value Risk.” The fourth dimension also contained three items and was labeled “Communication Risk.” The fifth dimension, consisting of three items, was titled “Social Risk.” As mentioned above, the sixth dimension named “Terrorism Risk” consisted of two items with high loadings (.866 and .852) and one item with a small loading (-.323). Except for the one item with a small loading, all other 18 items had loadings higher than .55 (See Table 4.9).

Table 4.8

Phase II – Extraction Results of Six Factors of Perceived Risk in Vacationing at International Destinations. (n=127)

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	5.233	27.542	27.542
2	2.725	14.344	41.886
3	1.605	8.447	50.333
4	1.547	8.143	58.475
5	1.335	7.029	65.504
6	1.319	6.940	72.444

Table 4.9

Phase II – VARIMAX Rotated Component Factor Matrix for Perceived Risk of Vacationing at International Destinations (n=127)

Variables	VARIMAX rotated loadings		
	Factor1 (Psychological)	Factor2 (Health)	Factor3 (Value)
The thought of purchasing vacations at international destinations makes me feel uncomfortable	.914		
I worry about purchasing vacation at international destinations	.853		
The thought of purchasing vacations at international destinations fills me with anxiety	.815		
When I think about vacation purchases of international destinations, I feel tension	.773		
There is a possibility of contracting infectious diseases		.869	
Potential health problems are a concern		.823	
I may become sick from eating food or drinking water		.805	
I would not let political instability keep me from vacationing at international destinations		-.412	
It will be bad way to spend my money			.873
I would rather spend money on purchases at home			.765
It will be a waste of time			.760

Variables	VARIMAX rotated loadings		
	Factor 4 (Communication)	Factor 5 (Social)	Factor 6 (Terrorism)
I have concerns about having possible communication problems during my vacations at international destinations	.880		
I will have problems in communication with others whom I meet during my vacation at international destinations	.847		
It is important that people whom I meet speak English during my vacations at international destinations	.561		
Friends and relatives will disapprove of my vacations at international destinations		.828	
It will negatively affect others' opinion of me		.731	
I would be concerned what people, whose opinion was of value to me, would think of me, if they considered this vacation a bad choice		.699	
Terrorism will influence my decision to vacation at international destinations			.866
I'll be intimidated by terrorism when vacationing at international destinations			.852
I would not let political instability keep me from vacationing at international destination			-.323

Internal Consistency Assessment – Phase II

Internal consistency is a commonly used measure of reliability (Hair et al., 1998). To assess internal consistency for the measurement items of perceived risk validated in phase II, Cronbach's alpha was used. Cronbach's alpha, which is the most widely used measure, produces values ranging from 0 to 1.0; the lower limit for acceptable reliability is .70, but it may decrease to .60 to be accepted as a moderate rating (Robinson, Shaver, & Wrightsman, 1991, p. 13).

Table 4.10 lists the reliability values for the six dimensions of perceived risk in international. Four factors had scores above .70 and two factors are in the range of .66 to .59: "Psychological Risk" has the highest score of .91; "Health Risk" and "Value Risk" range between .86 and .81; "Social Risk" is .66; and "Terrorism Risk" scores .5954 (almost .60).

Final Survey

Survey Method

The final questionnaire was distributed to 2000 individuals via the U.S. Postal Service. A personalized cover letter individually addressed and signed was included in the survey package with a four-page questionnaire and a self-addressed business reply envelope. In this final survey, no follow-up was necessary because responses exceeded the target sample of 300 after two weeks from the mailing.

Table 4.10

Cronbach Alpha Scores for Each of the Seven Dimensions Identified in Phase II – Perceived Risk in Vacationing at International Destinations

Dimensions	Items	Cronbach's alphas
Psychological	<p>The thought of purchasing vacations at international destinations makes me feel uncomfortable</p> <p>I worry about purchasing vacation at international destinations</p> <p>The thought of purchasing vacations at international destinations fills me with anxiety</p> <p>When I think about vacation purchases of international destinations, I feel tension</p>	.9054
Health	<p>There is a possibility of contracting infectious diseases</p> <p>Potential health problems are a concern</p> <p>I may become sick from eating food or drinking water</p>	.8579
Value	<p>It will be bad way to spend my money</p> <p>I would rather spend money on purchases at home</p> <p>It will be a waste of time</p>	.8053

Dimensions	Items	Cronbach's alphas
Communi- cation	<p>I have concerns about having possible communication problems during my vacations at international destinations</p> <p>I will have problems in communication with others whom I meet during my vacation at international destinations</p> <p>It is important that people whom I meet speak English during my vacations at international destinations</p>	.7633
Social	<p>Friends and relatives will disapprove of my vacations at international destinations</p> <p>It will negatively affect others' opinion of me</p> <p>I would be concerned what people, whose opinion was of value to me, would think of me, if they considered this vacation a bad choice</p>	.6634
Terrorism	<p>Terrorism will influence my decision to vacation at international destinations</p> <p>I'll be intimidated by terrorism when vacationing at international destinations</p> <p>I would not let political instability keep me from vacationing at international destination</p>	.5954

Sample

A total of 337 responses were returned for a response rate of 16.90% (See Table 4.11). In the process of coding, six responses from non-native English speakers were removed and an additional 46 incomplete responses were eliminated. One of the reasons for this relatively large number of incomplete responses was due to the design of the questionnaire. The questions of perceived risk were placed in the middle and respondents were asked to circle their level of agreement to the statements on the left side of the questionnaire regarding Australia and on the right side of the questionnaire regarding Japan; more than half of the incomplete responses were blank on the left side of the questionnaire which was allocated for answering questions regarding Australia (See Appendix C for the final survey questionnaire). Therefore, 285 surveys were used in the final data analysis, for a usable response rate of 14.29%.

	Number	Percent (%)
Total target population	2000	100.00%
Undeliverable	6	.3%
Total survey population	1994	99.7%
Total survey population	1994	100.00%
Total responses	337	16.90%
Non-native English speakers	6	
Incomplete surveys	46	
Total usable responses	285	14.29%

Non-Response Bias

According to Ferber (1948-1949), a comparison of the distribution of early and late respondents' responses on survey items can test the presence of bias. This method is based on the assumption that "any difference on a certain issue between mail respondents and non-respondents would be reflected in the replies of the early respondents as compared with those of the later ones" (Ferber, 1948-1949, p. 671). Late respondents are "almost non-respondents and most similar to those who did not reply" (Ferber, 1948-1949, p. 671).

The examination of non-response bias was performed in this study using a comparison of early and late respondents. The responses of early 90% (n=303) and late 10% (n=34) were compared. The independent sample t-test revealed no statistically significant differences at the .01 level between early and late respondents regarding their age, novelty seeking characteristics, familiarity/expertise with Australia/Japan, and risk perception towards vacationing in Australia/Japan. Then chi-square tests of independence showed that the two groups of early and late respondents did not differ in their visiting experience of Australia/Japan and their other demographic characteristics: gender, marital status, household annual income, and education. Based on these statistical tests results, the two groups were combined for further analysis.

Profile of the Respondents

Information of respondents' demographic characteristics such as age, income, marital status, gender, and number of children was gathered to understand the descriptive profile of respondents (See Table 4.12). Each characteristic of the respondents is discussed in the following section.

Gender

Respondents were asked to indicate if they were female or male. All individuals responded to this question; 115 or 40.4% were female and 170 or 59.6% were male.

Age

Respondents were asked to provide the year of their birth to obtain accurate age information. Most of the respondents (49.1%) are between 35 and 54 and 35.8% are 55 years of age or older. Respondents' ages are normally distributed from 18 to 84 and the mean age for the respondents is 49.74.

Marital Status

Six response options were provided for respondents to indicate their marital status. None of the respondents was in the category of "Separated." The vast majority of 224 respondents (78.6%) specified that they were married, while 27 (9.5%) were never married. Among the rest of the respondents, those who were divorced or widowed were 12 (4.2%) each, and 7 (2.5%) were living with a partner.

Number of Children Presently Living in the Household

Among 122 individuals who responded that they were presently living with their children, 18.9% were living with two children, 12.6% reported that they were living with one child, and there were 9.8% who had three children living with them. There were also 7% of the respondents who were living with four children and 7% who were living with five children in their household.

Table 4.12: Profile of the Respondents

		Frequency	Percent
Gender (n=285)	Female	115	40.4 %
	Male	170	59.6 %
Age (n=285) Mean age: 49.74	24 years or younger	6	2.1 %
	25-34	337	13.0 %
	35-44	57	20.0 %
	45-54	83	29.1 %
	55-64	59	20.7 %
	65-74	29	10.2 %
	75 years or older	14	4.9 %
Marital Status (n=282)	Never married	27	9.5 %
	Now married	224	78.6 %
	Divorced	12	4.2 %
	Widowed	12	4.2 %
	Living with a partner	7	2.5 %
Number of Children Living in the Household (n=122)	1	36	12.6 %
	2	54	18.9 %
	3	28	9.8 %
	4	2	.7 %
	5	2	.7 %
Education (n=284)	Less than high school degree	6	2.1 %
	High school degree	35	12.3 %
	Some college	40	14.0 %
	2 year or vocational degree	20	7.0 %
	Bachelor's degree	92	32.3 %
	Graduate degree	91	31.9 %
Income (n=272)	Less than \$40,000	38	13.3 %
	\$40,000-\$59,999	51	17.9 %
	\$60,000-\$79,999	37	13.0 %
	\$80,000-\$99,999	41	14.4 %
	\$100,000-\$119,999	32	11.2 %
	\$120,000-\$139,999	20	7.0 %
	\$140,000-\$159,999	15	5.3 %
	\$160,000 or more	38	13.3 %

Education

For the highest education attained, six categories were supplied as answer options for respondents to select. The majority (64.2%) of the respondents had Bachelor's degrees or Graduate degrees. A total of 60 respondents indicated that they attended some college or had 2-year or vocational degrees (21.0%). Only six individuals had less than high school degrees (2.1%) and 35 respondents graduated from high school (12.3%).

Income

Respondents were asked to indicate their annual household income before taxes in 2003. Aside from 13 respondents who did not complete this question, 38 individuals (13.3%) reported that they had less than \$40,000 household income; 38 respondents (13.3%) had more than \$160,000 annual income in 2003; 88 individuals (30.9%) earned between \$40,000 and \$79,999; 73 respondents (25.6%) indicated that their household income was between \$80,000 and \$119,999; and 35 individuals (12.3%) had household income between \$120,000 and \$159,000.

Data Analysis

The results of the hypotheses tests are discussed in this section of the chapter. First, the descriptive information of variables used in data analysis is presented: two data sets for risk perception of vacationing in Australia and vacationing in Japan; novelty seeking; language ability; familiarity/expertise; past experience; and travel decisions. Secondly, factor analyses conducted for perceived risk in vacationing in Australia and Japan are discussed.

Descriptive Information of Variables

Perceived Risk

Respondents were asked to indicate their level of agreement to 21 statements regarding perceived risk in vacationing in Australia and vacationing in Japan on a five-point Likert scale (1=Strongly Disagree to 5=Strongly Agree). Table 4.13 depicts the means and standard deviations of items measuring individuals' perceived risk in vacationing in Australia. Among 21 items, the highest mean is 3.50 for: "It is important that people who I meet speak English during my vacation in Australia," and the three items measuring "Social Risk" have the lowest means of 1.30 to 1.33. While eight items have means higher than the average mean of 2.16, the means of the other 13 items are lower than the average. Table 4.14 provides the descriptive information of respondents' perceived risk in vacationing in Japan. The three items measuring "Communication Risk" show the highest means of 3.53 to 3.59. The three items of "Social Risk" in vacationing in Japan have the lowest means of 1.32 to 1.36. The average risk perception of vacationing in Japan is 2.44, which is higher than that of vacationing in Australia. Nine items out of 21 have means higher than the average and the other 12 items are lower than the average.

Through a simple visual inspection of the two descriptive tables (Table 4.13 and Table 4.14), all items regarding perceived risk in vacationing in Japan show higher means than those of perceived risk in vacationing in Australia. The item that scored the highest mean among risk perception regarding vacationing in Australia also has the highest mean of 3.59 for vacationing in Japan: "It is important that people who I meet speak English during my vacation in Australia/Japan." All three items measuring "Communication Risk" reveal the highest means in risk perception of vacationing in Japan. However, only one item of

“Communication Risk” in vacationing in Australia shows the highest mean and the other two items have means even lower than the average mean of 2.16. On the other hand, the means of three items measuring “Social Risk” are the lowest in risk perception of vacationing in both Australia and Japan.

The discussion of the data analysis testing the differences of the two data sets is presented in a later section of this chapter. The next section describes the data of novelty seeking.

Table 4.13

Descriptive Information Regarding Perceived Risk of Vacationing in Australia (1 = Strongly Disagree to 5 = Strongly Agree)

Items	Means	Standard Deviations
It will be bad way to spend my money	2.19	1.211
I would rather spend money on purchases at home	2.99	1.323
It will be a waste of time	1.85	1.083
I may become sick from eating food or drinking water	2.08	1.126
There is a possibility of contracting infectious diseases	2.19	1.147
Potential health problems are a concern	2.15	1.153
I would not let political instability keep me from vacationing in Australia (reversed)	2.75	1.468
I'll be intimidated by terrorism when vacationing in Australia	2.69	1.327
Terrorism will influence my decision to vacation in Australia	2.69	1.510
It may result in mechanical or equipment problems	2.14	1.086
Telecommunication systems (phone, fax, etc.) will be inconvenient to use	2.15	1.137
My baggage may be misplaced or delayed (by the airline or hotel)	2.42	1.122

Items	Means	Standard Deviations
It is important that people who I meet speak English during my vacation in Australia	3.50	1.331
I have concerns about having possible communication problems during my vacation in Australia	2.10	1.297
I will have problems in communication with others whom I meet during my vacation in Australia	2.07	1.251
Having a vacation in Australia will negatively affect others' opinion of me	1.30	.731
Friends and relatives will disapprove of my vacation in Australia	1.33	.803
I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing in Australia a bad choice	1.31	.785
The thought of purchasing a vacation in Australia fills me with anxiety	1.85	1.127
The thought of purchasing a vacation in Australia makes me feel uncomfortable	1.80	1.121
I worry about purchasing a vacation in Australia	1.72	1.051

Table 4.14

Descriptive Information Regarding Perceived Risk of Vacationing in Japan (1 = Strongly Disagree to 5 = Strongly Agree)

Items	Means	Standard Deviations
It will be bad way to spend my money	2.68	1.374
I would rather spend money on purchases at home	3.27	1.370
It will be a waste of time	2.19	1.265
I may become sick from eating food or drinking water	2.33	1.237
There is a possibility of contracting infectious diseases	2.38	1.246
Potential health problems are a concern	2.33	1.282
I would not let political instability keep me from vacationing in Japan (reversed)	2.69	1.423
I'll be intimidated by terrorism when vacationing in Japan	2.55	1.367
Terrorism will influence my decision to vacation in Japan	2.87	1.512
It may result in mechanical or equipment problems	2.23	1.123
Telecommunication systems (phone, fax, etc.) will be inconvenient to use	2.28	1.212
My baggage may be misplaced or delayed (by the airline or hotel)	2.45	1.120

Items	Means	Standard Deviations
It is important that people who I meet speak English during my vacation in Japan	3.59	1.255
I have concerns about having possible communication problems during my vacation in Japan	3.58	1.281
I will have problems in communication with others whom I meet during my vacation in Japan	3.53	1.252
Having a vacation in Japan will negatively affect others' opinion of me	1.32	.736
Friends and relatives will disapprove of my vacation in Japan	1.36	.817
I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing in Japan a bad choice	1.33	.780
The thought of purchasing a vacation in Japan fills me with anxiety	2.27	1.289
The thought of purchasing a vacation in Japan makes me feel uncomfortable	2.07	1.208
I worry about purchasing a vacation in Japan	2.02	1.197

Novelty Seeking

The 21-item instrument developed by Lee and Crompton (1992) was adopted to measure individuals' attitudes toward novelty seeking. The instrument consisted of four dimensions identified in the previous study: "Thrill," "Change from Routine," "Boredom Alleviation," and "Surprise." Respondents were asked to indicate their level of agreement to each statement on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Table 4.15 describes the means and standard deviations of individuals' responses regarding novelty seeking. All eight items of "Thrill" show the highest means, which range from 3.31 to 4.29. Those eight highest means are higher than the average mean of 3.13 and the other 13 items are lower than the average in their means. The item with the highest mean of 4.29 is: "My ideal vacation involves looking at things I have not seen before," while the item with the lowest mean of 1.88 is: "I would like to be on a raft in the middle of a wild river at the time of the spring flood waters."

The 21 items of novelty seeking were analyzed using factor analysis to see if the four dimensions identified in the previous study would show the same dimensions when applied to a different data set of this study. The result of factor analysis and related hypotheses testing is presented in a later section of this chapter.

Table 4.15

Descriptive Information Regarding Novelty Seeking (1 = Strongly Disagree to 5 = Strongly Agree)

Items	Means	Standard Deviations
I sometimes like to do things on vacation that are a little frightening.	2.54	1.306
I enjoy doing “daring” activities while on vacation.	2.59	1.299
Sometimes it is fun to be a little scared on vacation.	2.34	1.261
I enjoy experiencing a sense of danger on a vacation trip.	2.03	1.150
I would like to be on a raft in the middle of a wild river at the time of the spring flood waters.	1.88	1.197
I enjoy activities that offer thrills.	2.63	1.346
I seek adventure on my vacation.	3.18	1.244
I like to find myself at destinations where I can explore new things.	3.99	1.144
On my vacation, I want to experience new and different things.	4.09	1.097
On vacation I want to experience customs and cultures different from those in my own environment.	3.97	1.059
I enjoy the change of environment which allows me to experience something new on vacation.	4.18	.930

Items	Means	Standard Deviations
My ideal vacation involves looking at things I have not seen before.	4.29	.857
I want there to be a sense of discovery involved as part of my vacation.	4.05	1.020
I like to travel to adventurous places.	3.74	1.080
I feel powerful urge to explore the unknown on vacation.	3.31	1.188
I want to travel to relieve boredom.	2.80	1.251
I have to go on vacation from time to time to avoid getting into a rut.	3.02	1.313
I like to travel because the same routine work bores me.	2.79	1.280
I don't like to plan a vacation trip in detail because it takes away some of the unexpectedness.	2.91	1.226
I like vacations that are unpredictable.	2.71	1.146
I would like to take off on a trip with no preplanned routes in my mind.	2.70	1.356

Language Ability

This study aims to understand risk perceptions of individuals whose native language is English under the two scenarios of vacationing in Australia and vacationing in Japan. To obtain a sample of native English speakers, a screening question was included on the first page of the questionnaire. A total of six respondents who indicated that their native language is not English were excluded in the process of data coding.

To investigate the difference between individuals who do not have Japanese proficiency and those who understand some Japanese regarding their perceived risk in vacationing in Japan, respondents were asked the following question: “How would you rate your fluency in Japanese?” on a scale of five categories: “neither understand nor speak,” “understand a little but cannot speak,” “understand and speak a little,” “understand and speak,” and “very fluent.” Among 284 individuals who reported their level of Japanese proficiency, except one respondent who failed to answer this question, the vast majority of 266 respondents indicated that they neither understand nor speak Japanese (See Table 4.16). The other 18 individuals had some level of Japanese proficiency but no individual was fluent in Japanese.

Table 4.16: Language Ability – Japanese Proficiency

Japanese Proficiency Categories	Frequency	Percentage
neither understand nor speak	266	93.3%
understand a little but cannot speak	9	3.2%
understand and speak a little	6	2.1%
understand and speak	3	1.1%
very fluent	0	0%

Familiarity/Expertise

Familiarity/Expertise with Australia and Japan as vacation destinations were measured using four items each. The four scales are: “How familiar are you with Australia /Japan as a vacation destination”; “How interested are you in Australia/Japan as a vacation destination”; “How much do you know about Australia/Japan as a vacation destination”; and “How knowledgeable are you about vacation travel in Australia (Japan) relative to the rest of the U.S. population.” Respondents were asked to indicate their level of familiarity/expertise with each destination on a five-point Likert scale (1=Not at all to 5=Extremely). Table 4.17 provides the descriptive information of items measuring respondents’ familiarity/expertise with Australia and Japan as vacation destinations. The means of items regarding familiarity/expertise with Australia range from 2.33 to 3.08 and those with Japan range from 1.80 to 2.13. All four items of familiarity/expertise with Australia show higher means than those of Japan.

For data analysis, the two average scores of four measuring items each were computed to create new variables: familiarity/expertise with Australia as a vacation destination; and familiarity/expertise with Japan as a vacation destination. Cronbach’s alpha assessed the consistency of four items for each construct; the reliability scores are .8530 for familiarity/expertise with Australia and .8784 for familiarity/expertise with Japan.

Table 4.17

Descriptive Information Regarding Familiarity/Expertise with Australia and Japan as Vacation Destinations

Items	Means	Standard Deviations
<u>Familiarity/Expertise with Australia</u>		
How familiar are you with Australia as a vacation destination	2.43	1.154
How interested are you in Australia as a vacation destination	3.08	1.348
How much do you know about Australia as a vacation destination	2.40	1.054
How knowledgeable are you about vacation travel in Australia relative to the rest of the U.S. population	2.33	1.209
Cronbach's alpha	.8530	
<u>Familiarity/Expertise with Japan</u>		
How familiar are you with Japan as a vacation destination	1.82	1.048
How interested are you in Japan as a vacation destination	2.13	1.217
How much do you know about Japan as a vacation destination	1.80	1.035
How knowledgeable are you about vacation travel in Japan relative to the rest of the U.S. population	1.87	1.149
Cronbach's alpha	.8784	

Past Experience

Respondents were simply asked to choose one of the alternatives, yes or no, to indicate whether they had visited Australia or Japan. This single measure was used as a variable representing the construct of “Past Experience.” Among the total of 285 responses, 23 individuals (8.1%) reported that they had visited Australia before and the other 262 respondents (91.9%) had not visited Australia. Forty-one individuals (14.4%) had visited Japan while the majority of 244 (85.6%) had never visited Japan.

Among 23 individuals who visited Australia, five responded that they purchased full package tours, three had partial package tours, and 13 individuals traveled independently (See Table 4.18). For those who visited Japan, five individuals indicated that they traveled with full package tours, seven with partial package tours, and 20 traveled independently. Individuals were asked about their travel style regarding their last trip to either destination.

Table 4.18: Past Experience of Visiting Australia and Japan

N=285	Travel Style	Visited		Not Visited	
		Frequency	Percentage	Frequency	Percentage
Australia		23	8.1%	262	91.9%
	Full package	5			
	Partial package	3			
	Independent	13			
	Other	2			
Japan		41	14.4%	244	85.6%
	Full package	5			
	Partial package	7			
	Independent	20			
	Other	9			

Travel Likelihood

The likelihood of vacationing in Australia and vacationing in Japan was tested on a five-point Likert scale (1=not at all to 5=very likely). Among the total of 285 individuals, 127 (44.6%) responded that they were not likely to vacation in Australia in the next three years at all, while eight respondents (2.8%) indicated that they were very likely to vacation in Australia in the next three years. On the other hand, more than half of the respondents (180 or 63.2%) indicated that they were not likely to vacation in Japan in the next three years at all, and only five individuals (1.8%) responded that they were very likely to vacation in Japan in the next three years (See Table 4.19).

Table 4.19: Travel Likelihood

	Australia		Japan	
	Frequency	Percentage	Frequency	Percentage
1=Not at all	127	44.6%	180	63.2%
2	55	19.3%	39	13.7%
3	74	26.0%	51	17.9%
4	21	7.4%	10	3.5%
5=Very likely	8	2.8%	5	1.8%
Total	285	100.0%	285	100.0%

Travel Style

Respondents were asked to indicate their choice of travel style if they were to vacation in Australia and if they were to vacation in Japan. Three response categories were provided: “a fully packaged tour,” “a partially packaged tour with transport and accommodation only,” and “non-packaged/independent travel.” Although the last category of “I would never go” was included as a response option, it was excluded in the data analysis because it is not a type of travel style. While 85 individuals (29.8%) responded that they would select full package tours if they vacationed in Australia, 116 respondents (40.7%) indicated their choice of full package tours in vacationing in Japan (See Table 4.20). There were 71 individuals (24.9%) who would travel independently to Australia and only 38 (13.3%) to Japan.

Table 4.20: Travel Style Choice

N=285	Australia		Japan	
	Frequency	Percentage	Frequency	Percentage
Full Package	85	29.8%	116	40.7%
Partial Package	98	34.4%	62	21.8%
Independent Travel	71	24.9%	38	13.3%
I would never go	25	8.8%	61	21.4%
Missing value	6	2.1%	8	2.8%

Factor Analysis Results – Perceived Risk

This section presents the results of factor analyses that were performed to explore underlying dimensions of perceived risk in vacationing in Australia and vacationing in Japan. The process of selecting final solutions for each data set is discussed in detail. The factor analyses regarding risk perception of vacationing in Australia is presented first and then follows the factor analyses of risk perception of vacationing in Japan.

Australia

A total of 285 samples exceeded the acceptable sample size requirement of having a ten-to-one ratio between observation and variables. Several assumption tests were employed to see if the data was appropriate for factor analysis. First, a visual inspection of the correlations of the data matrix detected a substantial number of correlations greater than .30 among variables. Another measure to test the presence of correlations among variables is the Bartlett test of sphericity. If the result of this statistical test is significant, the data has significant correlations among at least some variables. This test revealed statistical significance of correlations among variables measuring perceived risk in vacationing in Australia. The Measure of Sampling Adequacy (MSA) is reported in each discussion of selected factor solutions presented in the next section.

By applying principal component analysis with VARIMAX rotation, 21 items measuring English native speakers' perceived risk regarding vacationing in Australia were factor analyzed. The initial factor solution was derived using eigenvalues of 1 as a cutoff and produced a six-factor solution. The MSA scored .867, which is in the meritorious range, and 71.10% of the total variance were explained by this six-factor solution. The examination of

the component matrix found that the factor structure was not the best representation of the data and several variables loaded on two factors. Another run of factor analysis continued.

Instead of using eigenvalues as a cutoff, seven factors were assigned to be generated using 21 variables. When VARIMAX rotation was applied, a seven-factor solution produced some improvement in the factor structure. While the MSA remained the same at .867, the percentage of the variance explained increased to 75.75%. After a careful review of the factor structure and factor loadings, one item was deleted because it loaded on a factor that had items conceptually unrelated. Further analyses proceeded.

After the deletion of one item, “I would not let political instability keep me from vacationing in Australia,” another factor analysis with VARIMAX rotation was executed. In this run, 20 variables generated a five-factor solution with eigenvalues greater than 1. Although the MSA still remained the same at .867, the total variance explained dropped to 68.73%. It was necessary to attempt trial solutions with more and fewer number of factors.

Finally, after several different numbers of trial factor solutions, a seven-factor solution was selected for the final factor solution of perceived risk in vacationing in Australia. This final seven-factor solution explained the largest percent, 78.33%, of the total variance among other solutions generated in the process of factor analyses and the MSA value remained .867 (See Table 4.21). Among seven factors, four factors had items with factor loadings higher than .810, one factor had items with factor loadings larger than .750, and two factors had items with factor loadings higher than .690 (See Table 4.22).

Table 4.21

Final Survey – Extraction Results of Seven Factors of Perceived Risk of Vacationing in Australia. (n=285)

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	7.604	38.022	38.022
2	1.894	9.470	47.493
3	1.830	9.150	56.642
4	1.244	6.218	62.860
5	1.175	5.873	68.734
6	.987	4.933	73.666
7	.933	4.664	78.330

All six dimensions had three items each except one dimension with two items. The seven dimensions identified to represent individuals' perceived risk in vacationing in Australia were labeled in descending order of variance explained: "Psychological Risk," "Health Risk," "Social Risk," "Equipment Risk," "Value Risk," "Communication Risk," and "Terrorism Risk" (See Table 4.22).

The reliabilities of each dimension were tested using Cronbach's alpha. All dimensions scored Cronbach's alpha greater than .70: two dimensions had scores larger than .90; two dimensions were between .83 and .86; and three dimensions scored between .72 and .80 (See Table 4.23).

Table 4.22

Final Survey – VARIMAX Rotated Component Factor Matrix for Perceived Risk in Vacationing in Australia (n=285)

Variables	VARIMAX rotated loadings		
	Factor1 (Psychological)	Factor2 (Health)	Factor3 (Social)
The thought of purchasing a vacation in Australia fills me with anxiety	.863		
I worry about purchasing a vacation in Australia	.846		
The thought of purchasing a vacation in Australia makes me feel uncomfortable	.832		
Potential health problems are a concern		.855	
There is a possibility of contracting infectious diseases		.824	
I may become sick from eating food or drinking water		.823	
Having a vacation in Australia will negatively affect others' opinion of me			.862
Friends and relatives will disapprove of my vacation in Australia			.854
I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing in Australia a bad choice			.823

Variables	VARIMAX rotated loadings		
	Factor 4 (Equipment)	Factor 5 (Value)	Factor 6 (Communication)
Telecommunication systems (phone, fax, etc.) will be inconvenient to use	.809		
It may result in mechanical or equipment problems	.777		
My baggage may be misplaced or delayed (by the airline or hotel)	.690		
It will be bad way to spend my money		.796	
I would rather spend money on purchases at home		.765	
It will be a waste of time		.751	
I will have problems in communication with others whom I meet during my vacation in Australia			.719
It is important that people who I meet speak English during my vacation in Australia			.706
I have concerns about having possible communication problems during my vacation in Australia			.699

Variables	VARIMAX rotated loadings
	Factor 7 (Terrorism)
Terrorism will influence my decision to vacation in Australia	.823
I'll be intimidated by terrorism when vacationing in Australia	.812

Table 4.23

Cronbach Alpha Scores for Each of the Seven Dimensions Identified in the Final Survey – Perceived Risk in Vacationing in Australia

Dimensions	Items	Cronbach's alphas
Psychological	<p>The thought of purchasing a vacation in Australia fills me with anxiety</p> <p>I worry about purchasing a vacation in Australia</p> <p>The thought of purchasing a vacation in Australia makes me feel uncomfortable</p>	.9396
Health	<p>Potential health problems are a concern</p> <p>There is a possibility of contracting infectious diseases</p> <p>I may become sick from eating food or drinking water</p>	.9001
Social	<p>Having a vacation in Australia will negatively affect others' opinion of me</p> <p>Friends and relatives will disapprove of my vacation in Australia</p> <p>I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacation in Australia a bad choice</p>	.8502

Dimensions	Items	Cronbach's alphas
Equipment	<p>Telecommunication systems (phone, fax, etc.) will be inconvenient to use</p> <p>It may result in mechanical or equipment problems</p> <p>My baggage may be misplaced or delayed (by the airline or hotel)</p>	.8364
Value	<p>It will be bad way to spend my money</p> <p>I would rather spend money on purchases at home</p> <p>It will be a waste of time</p>	.7632
Communi- cation	<p>I will have problems in communication with others whom I meet during my vacation in Australia</p> <p>It is important that people whom I meet speak English during my vacation in Australia</p> <p>I have concerns about having possible communication problems during my vacation in Australia</p>	.7231
Terrorism	<p>Terrorism will influence my decision to vacation in Australia</p> <p>I'll be intimidated by terrorism when vacationing in Australia</p>	.7963

Japan

The same process of assumption tests performed for the data regarding perceived risk in vacationing in Australia was completed for the data regarding perceived risk in vacationing in Japan. The examination of the correlation matrix and the Bartlett test of sphericity supported the appropriateness to conduct factor analysis with the data.

Items measuring perceived risk in vacationing in Japan were factor analyzed. When principal component analysis and VARIMAX rotation was applied to 21 variables, the initial seven-factor solution was generated using eigenvalues of 1 as a cutoff. The MSA scored .859, which is in the meritorious range, and 71.66% of the total variance were explained by the initial six-factor solution. A review of the factor structure was not satisfactory because several items loaded on two factors and had relatively small loadings. Further analyses were attempted to examine other trial solutions.

Instead of using eigenvalues as a cutoff, a seven-factor solution was assigned to be produced with VARIMAX rotation. In this iteration, the MSA value remained the same at .859 as in the first solution, but the percent of the variance explained increased to 76.21%. Although the factor structure showed some improvement, one item loaded on two factors with small loadings. This item was also removed from the final factor solution for perceived risk in vacationing in Australia: "I would not let political instability keep me from vacationing in Japan."

After deleting the item mentioned above, another factor analysis was performed. With 20 variables, a five-factor solution having eigenvalues greater than 1 was generated. In this run, the MSA score slightly increased to .860, but the total variance explained dropped to

69.70%. More trial runs of factor analyses with different numbers of factor solutions were attempted to obtain the best representative factor solution for the data.

Several different numbers of factor solutions were examined and a seven-factor solution was selected as the final factor solution. This seven-factor solution had an MSA score of .860 and explained 79.24% of the total variance (See Table 4.24). The seven dimensions representing perceived risk in vacationing in Japan were named as listed: “Health Risk,” “Psychological Risk,” “Social Risk,” “Communication Risk,” “Value Risk,” “Equipment Risk,” and “Terrorism Risk” (See Table 4.25).

To test the reliability of each dimension, Cronbach’s alphas were calculated. All dimensions had alpha values higher than the lower limit of .70: two dimensions had larger than .91 values; three dimensions had values between .84 and .85; and two dimensions had Cronbach’s alphas between .78 and .80 (See Table 4.26).

Finally, summated scales of risk perception of vacationing in Australia and vacationing in Japan were created for further analyses. The average scores of two sets of 20 items were calculated to obtain two scales representing overall perceived risk regarding vacationing in Australia and vacationing in Japan. Additionally, seven summated scales for the seven dimensions of perceived risk of vacationing in Australia and Japan were created. Consequently, each dimension is represented by a single variable generated from computing the average scores of items belonging to each dimension. According to Hair et al. (1998), there are two specific benefits of using summated scales: (1) it reduces measurement error by using multiple variables, and (2) it represents the multiple aspects of a concept in a single measure (p. 116-117).

Table 4.24

Final Survey – Extraction Results of Seven Factors of Perceived Risk in Vacationing in Japan (n=285)

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	7.059	35.297	35.297
2	2.096	10.481	45.778
3	2.007	10.033	55.811
4	1.602	8.011	63.822
5	1.175	5.875	69.697
6	1.963	4.813	74.510
7	.945	4.726	79.235

Table 4.25

Final Survey – VARIMAX Rotated Component Factor Matrix for Perceived Risk in Vacationing in Japan (n=285)

Variables	VARIMAX rotated loadings		
	Factor1 (Health)	Factor2 (Psychological)	Factor3 (Social)
Potential health problems are a concern	.868		
There is a possibility of contracting infectious diseases	.864		
I may become sick from eating food or drinking water	.829		
The thought of purchasing a vacation in Japan fills me with anxiety		.844	
I worry about purchasing a vacation in Japan		.823	
The thought of purchasing a vacation in Japan makes me feel uncomfortable		.786	
Friends and relatives will disapprove of my vacation in Japan			.853
Having a vacation in Japan will negatively affect others' opinion of me			.850
I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing in Japan a bad choice			.836

Variables	VARIMAX rotated loadings		
	Factor 4 (Communication)	Factor 5 (Value)	Factor 6 (Equipment)
I have concerns about having possible communication problems during my vacation in Japan	.861		
I will have problems in communication with others whom I meet during my vacation in Japan	.847		
It is important that people who I meet speak English during my vacation in Japan	.773		
It will be bad way to spend my money		.862	
It will be a waste of time		.803	
I would rather spend money on purchases at home		.730	
Telecommunication systems (phone, fax, etc.) will be inconvenient to use			.822
It may result in mechanical or equipment problems			.772
My baggage may be misplaced or delayed (by the airline or hotel)			.709

Variables	VARIMAX rotated loadings
	Factor 7 (Terrorism)
Terrorism will influence my decision to vacation in Japan	.849
I'll be intimidated by terrorism when vacationing in Japan	.839

Table 4.26

Cronbach Alpha Scores for Each of the Seven Dimensions Identified in the Final Survey – Perceived Risk in Vacationing in Japan

Dimensions	Items	Cronbach's alphas
Health	<p>Potential health problems are a concern</p> <p>There is a possibility of contracting infectious diseases</p> <p>I may become sick from eating food or drinking water</p>	.9099
Psychological	<p>The thought of purchasing a vacation in Japan fills me with anxiety</p> <p>I worry about purchasing a vacation in Japan</p> <p>The thought of purchasing a vacation in Japan makes me feel uncomfortable</p>	.9138
Social	<p>Friends and relatives will disapprove of my vacation in Japan</p> <p>Having a vacation in Australia will negatively affect others' opinion of me</p> <p>I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacation in Japan a bad choice</p>	.8456

Dimensions	Items	Cronbach's alphas
Communi- cation	<p>I have concerns about having possible communication problems during my vacation in Japan</p> <p>I will have problems in communication with others whom I meet during my vacation in Japan</p> <p>It is important that people whom I meet speak English during my vacation in Japan</p>	.8360
Value	<p>It will be bad way to spend my money</p> <p>It will be a waste of time</p> <p>I would rather spend money on purchases at home</p>	.7814
Equipment	<p>Telecommunication systems (phone, fax, etc.) will be inconvenient to use</p> <p>It may result in mechanical or equipment problems</p> <p>My baggage may be misplaced or delayed (by the airline or hotel)</p>	.8303
Terrorism	<p>Terrorism will influence my decision to vacation in Japan</p> <p>I'll be intimidated by terrorism when vacationing in Japan</p>	.7933

Testing of Hypothesis 1

Hypothesis 1: The salient dimensions of perceived risk in vacationing at international destinations are: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Equipment Risk,” and “Communication Risk.”

As discussed in Chapter III, individuals’ perceived risks in vacationing at international destinations were measured in the scenarios of vacationing at two particular destinations: Australia and Japan. To identify underlying dimensions of perceived risk regarding vacationing in Australia and vacationing in Japan, two sub-hypotheses test Hypothesis 1. The two sub-hypotheses are:

Hypothesis 1a: There are seven underlying dimensions of perceived risk in vacationing in Australia.

Hypothesis 1b: There are seven underlying dimensions of perceived risk in vacationing in Japan.

Although ten dimensions of risk perception were identified from previous studies and one additional dimension was proposed for this study, only seven dimensions were found in the process of scale purification. Therefore, Hypothesis 1 was modified to propose that perceived risk in vacationing at international destinations has seven underlying dimensions. The factor analytic results to test these hypotheses are presented in an earlier section. Factor analyses produced two separate seven-factor solutions for perceived risk in vacationing in

Australia and vacationing in Japan. Although the order of total variance explained of the dimensions differed, the seven dimensions and measuring items of each dimension in two solutions were consistent. The seven dimensions are: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Equipment Risk,” and “Communication Risk” (See Table 4.22 for the seven dimensions of perceived risk in vacationing in Australia and Table 4.25 for the seven dimensions of perceived risk in vacationing in Japan). The research hypotheses 1a and 1b were supported.

The next section discusses the data analysis regarding the construct of “Novelty Seeking.” First, the descriptive information of the data is presented. Second, the result of factor analysis provides the dimensions of novelty seeking identified in the final survey data analysis. Finally, the test of hypothesis 2 is discussed.

Factor Analysis Results – Novelty Seeking

The individuals’ attitudes toward novelty seeking were analyzed using factor analysis. Several assumption tests supported the appropriateness of conducting factor analysis with the data of novelty seeking. There were a substantial number of correlations among variables identified from visual inspection. The entire correlation matrix was examined using the Bartlett test of sphericity, which tests the presence of correlations among variables with a statistical probability; the test found that there were significant correlations among variables.

In this factor analysis, a priori criterion, a four-factor solution found in the study by Lee and Crompton (1992), was applied to extract factors. Principal component analysis with VARIMAX rotation produced the assigned four-factor solution. The MSA scored .906, which

is higher than the meritorious range of .80 and 74.51% of the total variance was explained by this four-factor solution (See Table 4.27). The four dimensions and associated items were consistent with the previous study by Lee and Crompton (1992). Table 4.28 describes items that compose the four dimensions of individuals' novelty seeking characteristics along with the factor loadings. The four dimensions were named after the titles labeled in the previous study. The first dimension, "Thrill," had eight items with factor loadings ranged between .90 and .64; the second dimension, "Change from Routine," contained seven items that scored between .88 and .61; the third dimension, "Boredom Alleviation," consisted of three items with factor loadings between .89 and .87; the fourth dimension, "Surprise," comprised three items that had factor loadings in the range of .82 and .80 (See Table 4.28).

The reliability of items in each of the four dimensions was tested using Cronbach's alpha values. The first and second dimensions had coefficients of .93 and .94 respectively; the third dimension had a coefficient of .87 and the last dimension's alpha value was .81 (See Table 4.29). These alpha values, higher than the lower limit for Cronbach's alpha of .70, confirmed the internal consistency of the scale regarding novelty seeking. Finally, a summated scale for overall novelty seeking was created by computing the average score of all 21 items. This single variable representing overall novelty seeking is used in the testing of Hypotheses 2a and 2b in the next section.

Table 4.27

Final Survey – Extraction Results of Four Factors of Novelty Seeking

Factors	Eigenvalues	% of variance	Cumulative % of variance
1	8.833	42.060	42.060
2	3.039	14.471	56.531
3	2.311	11.003	67.534
4	1.465	6.977	74.511

Table 4.28
 Final Survey – VARIMAX Rotated Component Factor Matrix for Novelty Seeking

Variables	VARIMAX rotated loadings	
	Factor 1 (Thrill)	Factor 2 (Change from Routine)
On vacation, I enjoy the change of environment which allows me to experience something new.	.892	
I want there to be a sense of discovery involved as part of my vacation.	.844	
On vacation, I want to experience customs and cultures different from those in my own environment.	.842	
I want to experience new and different things on my vacation.	.792	
I like to find myself at destinations where I can explore new things.	.786	
My ideal vacation involves looking at things I have not seen before.	.758	
I like to travel to adventurous places.	.715	
I feel a powerful urge to explore the unknown on vacation.	.642	
I enjoy doing “daring” activities while on vacation.		.874
I enjoy experiencing a sense of danger on a vacation trip.		.865
I enjoy activities that offer thrills.		.855
Sometimes it is fun to be a little scared on vacation.		.840
I sometimes like to do things on vacation that are a little frightening.		.837
I would like to be on a raft in the middle of a wild river at the time of the spring flood waters.		.779
I seek adventure on my vacation.		.607

Variables	VARIMAX rotated loadings	
	Factor 3 (Boredom Alleviation)	Factor 4 (Surprise)
I have to go on vacation from time to time to avoid getting into a rut.	.891	
I like to travel because the same routine work bores me.	.890	
I want to travel to relieve boredom.	.871	
I don't like to plan a vacation trip in detail because it takes away some of the unexpectedness.		.824
I like vacations that are unpredictable.		.799
I would like to take off on a trip with no preplanned routes in my mind.		.799

Table 4.29
Cronbach Alpha Scores for Four Dimensions of Novelty Seeking

Dimensions	Items	Cronbach's alphas
Thrill	<p>On vacation, I enjoy the change of environment which allows me to experience something new.</p> <p>I want there to be a sense of discovery involved as part of my vacation.</p> <p>On vacation, I want to experience customs and cultures different from those in my own environment.</p> <p>I want to experience new and different things on my vacation.</p> <p>I like to find myself at destinations where I can explore new things.</p> <p>My ideal vacation involves looking at things I have not seen before.</p> <p>I like to travel to adventurous places.</p> <p>I feel a powerful urge to explore the unknown on vacation.</p>	.9304
Boredom Alleviation	<p>I have to go on vacation from time to time to avoid getting into a rut.</p> <p>I like to travel because the same routine work bores me.</p> <p>I want to travel to relieve boredom.</p>	.8703

Dimensions	Items	Cronbach's alphas
Change form Routine	<p>I enjoy doing “daring” activities while on vacation.</p> <p>I enjoy experiencing a sense of danger on a vacation trip.</p> <p>I enjoy activities that offer thrills.</p> <p>Sometimes it is fun to be a little scared on vacation.</p> <p>I sometimes like to do things on vacation that are a little frightening.</p> <p>I would like to be on a raft in the middle of a wild river at the time of the spring flood waters.</p> <p>I seek adventure on my vacation.</p>	.9384
Surprise	<p>I don't like to plan a vacation trip in detail because it takes away some of the unexpectedness.</p> <p>I like vacations that are unpredictable.</p> <p>I would like to take off on a trip with no preplanned routes in my mind.</p>	.8117

Testing of Hypothesis 2

Hypothesis 2: The psychographic make-up of an individual is related to an individual's overall perceived risk of vacationing at international destinations.

Individuals' characteristics of novelty seeking were used to represent the construct of "Psychographic Make-up," and a single variable of overall novelty seeking was created for hypotheses testing. To investigate the relationships of novelty seeking to overall perceived risk of vacationing in Australia and vacationing in Japan, two sub-hypotheses were proposed. The two sub-hypotheses are:

Hypothesis 2a: Individuals who have a higher level of novelty seeking will perceive less risk in vacationing in Australia.

Hypothesis 2b: Individuals who have a higher level of novelty seeking will perceive less risk in vacationing in Japan.

Simple correlation analysis, the most popular technique that indicates the relationship of one variable to another (Zikmund, 2000), was used to test the hypotheses. Both hypotheses were supported. The correlation coefficient identifying the relationship between novelty seeking and overall perceived risk of vacationing in Australia is negative and significant ($r = -.241, p < .01$). There is also a negative correlation ($r = -.161$) between novelty seeking and overall perceived risk regarding vacationing in Japan, which is significant at .01 level. Those who have stronger attitudes in novelty seeking perceive less risk in vacationing at international destinations.

Table 4.30

Pearson Correlations for Novelty Seeking and Overall Perceived Risks in Vacationing in Australia and Japan

	Overall Perceived Risk in Vacationing in Australia	Overall Perceived Risk in Vacationing in Japan
Novelty Seeking	-.241*	-.161*
Note. * Correlation is significant at the .01 level		

Although it was not hypothesized, the difference between the degrees of correlations is observed; the relationship of novelty seeking with overall perceived risk in vacationing in Australia is stronger than the relationship between novelty seeking and overall perceived risk in vacationing in Japan (See Table 4.30).

Testing of Hypothesis 3

Hypothesis 3: The ability to speak the native language of a destination influences an individual's overall perceived risk in vacationing at the destination.

To test Hypothesis 3, two different statistical techniques were employed and corresponding two sub-hypotheses were proposed. Hypothesis 3a was tested using paired samples t-test, and independent samples t-test was performed for testing Hypothesis 3b.

Hypothesis 3a: There is a difference between native English speakers' overall perceived risk regarding vacationing in Australia and vacationing in Japan ($H_0: \mu_1 - \mu_2 = 0$, $H_1: \mu_1 - \mu_2 \neq 0$).

The result of paired samples t-test showed that overall perceived risk regarding vacationing in Japan had a higher mean than overall perceived risk in vacationing in Australia at .001 significance level ($t = -19.517$). The null hypothesis that there is no difference in native English speakers' risk perceptions toward vacationing in Australia and vacationing in Japan was rejected and the research hypothesis was supported. Native English speakers perceived more risk about vacationing in Japan.

Table 4.31

Paired Samples T-Test Result for Hypothesis 3a (n=285)

Overall Perceived Risk in Vacationing in Australia	Overall Perceived Risk in Vacationing in Australia	t-value	Sig.
2.1088	2.5953	-19.517	.001

Hypothesis 3b: There is a difference in overall perceived risk in vacationing in Japan between individuals who have some level of Japanese proficiency and those who have no Japanese proficiency ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

Independent samples t-test was conducted to investigate the difference between two groups of individuals who have some level of Japanese proficiency and those who have no Japanese proficiency in terms of their overall risk perception of vacationing in Japan. The Levene's test for equality of variance assumed that variances of both groups are equal, and a statistically significant difference was found between the two groups ($t = 3.028$, $p < .01$). Hypothesis 3b was supported. Individuals who have no Japanese proficiency indicated a higher degree of overall perceived risk toward vacationing in Japan than individuals who have some level of Japanese proficiency.

Table 4.32

Independent Samples T-Test Result for Hypothesis 3b

	No Japanese Proficiency	Some Japanese Proficiency	t-value	Sig.
Overall Perceived Risk in Vacationing in Japan	2.6316 (n=266)	2.1083 (n=18)	3.028	.01

Testing of Hypothesis 4

Hypothesis 4: Familiarity/Expertise with a particular destination will be negatively correlated with an individual's overall perceived risk in vacationing in that destination.

Individuals' familiarity/expertise with Australia as a vacation destination was measured with four items and the items were combined as a single variable for a better representation of the construct. Likewise, another single variable of familiarity/expertise with Japan as a vacation destination was created. To analyze the two separate data sets regarding vacationing in Australia and vacationing in Japan, two sub-hypotheses were proposed. The two sub-hypotheses are:

Hypothesis 4a: Individuals' familiarity/expertise with Australia as a vacation destination will be negatively correlated with individuals' overall perceived risk in vacationing in Australia ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

Hypothesis 4b: Individuals' familiarity/expertise with Japan as a vacation destination will be negatively correlated with individuals' overall perceived risk in vacationing in Japan ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

The result of simple correlation analysis supported both Hypothesis 4a and 4b. There is a negative correlation ($r = -.391$) between individuals' familiarity/expertise with Australia as a vacation destination and overall perceived risk regarding vacationing in Australia, which is significant at .01 level. The correlation coefficient ($r = -.427$), between individuals'

familiarity/expertise with Japan and overall risk perception with regards to vacationing in Japan is statistically significant at .01 level. The more individuals are familiar with a vacation destination, the less they perceive any risk in vacationing at the destination.

Table 4.33

Pearson Correlations for Familiarity/Expertise and Overall Perceived Risks in Vacationing in Australia and Japan

	Overall Perceived Risk in Vacationing in Australia	Overall Perceived Risk in Vacationing in Japan
Familiarity/Expertise with Australia	-.391*	
Familiarity/Expertise with Japan		-.427*
Note. * Correlation is significant at the .01 level		

Testing of Hypothesis 5

Hypothesis 5: Individuals' experience of visiting an international destination negatively influences their overall perceived risk in vacationing in that particular destination.

To test the relationships between visiting experiences and overall risk perception of vacationing at two different destinations, two sub-hypotheses were postulated. Two separate

independent samples t-tests were employed for the testing of the hypotheses. The two hypotheses are presented with the discussion of hypotheses testing.

Hypothesis 5a: There is a difference between individuals who have and those who have not visited Australia regarding their overall risk perception of vacationing in Australia ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

Equal variance was not assumed for both groups of individuals who have visited Australia ($n = 23$) and who have not visited Australia ($n = 262$). The independent samples t-tests for two groups with heterogeneous variances (Howell, 2001, p. 342) revealed that there is a statistically significant difference between a group of individuals who have visited Australia and those who have not in terms of their overall perceived risk in vacationing in Australia ($t = -5.061$, $p < .01$). This result supported Hypothesis 5a.

Table 4.34

Independent Samples T-Test Result for Hypothesis 5a

	Visited Australia (n=23)	Not Visited Australia (n=262)	t-value	Sig.
Overall Perceived Risk in Vacationing in Australia	1.6043	2.1531	-3.726	.001

Hypothesis 5b: There is a difference between individuals who have visited Japan and those who have not visited Japan regarding their overall risk perception of vacationing in Japan ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

Levene's test for equality of variance assumed equal variance for both groups: individuals who have visited Japan ($n = 41$) and those who have not ($n = 244$). These two groups showed a significant difference regarding vacationing in Japan ($t = -3.916$, $p < .01$); the group with visiting experience had a lower mean of risk perception. Hypothesis 5b was supported. Individuals who have visited an international destination perceived less risk in vacationing in that destination.

Table 4.35

Independent Samples T-Test Result for Hypothesis 5b

	Visited Japan (n=41)	Not Visited Japan (n=244)	t-value	Sig.
Overall Perceived Risk in Vacationing in Japan	2.1976	2.6621	-3.916	.001

Testing of Hypothesis 6

Hypothesis 6: Overall perceived risk toward a particular international destination will be negatively correlated to the likelihood of vacationing at the destination
($H_0: \rho = 0$, $H_1: \rho \neq 0$).

Individuals were asked to indicate the likelihood of vacationing in Australia and vacationing in Japan in the next three years on a five-point Likert scale (1=not at all to 5=Very likely). Two sub-hypotheses were proposed to test the relationships of individuals' overall risk perception of vacationing in Australia and vacationing in Japan to the likelihood of vacationing in Australia/Japan. Simple correlations were employed to test Hypotheses 6a and 6b.

Hypothesis 6a: Individuals' overall risk perception of vacationing in Australia will be negatively related to the likelihood of vacationing in Australia in the next three years ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

Hypothesis 6b: Individuals' overall risk perception of vacationing in Japan will be negatively related to the likelihood of vacationing in Japan in the next three years ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

The results of simple correlations supported Hypotheses 6a and 6b. There is a statistically significant negative relationship ($r = -.368$) between individuals' likelihood of vacationing in Australia and their overall perceived risk of vacationing in Australia. The

correlation coefficient is significant at the .001 level (See Table 4.36). The relationship between individuals' likelihood of vacationing in Japan and their overall risk perception regarding vacationing in Japan is also statistically significant at the .001 level ($r = -.398$). Individuals who perceived more risk in vacationing in Australia/Japan were less likely to vacation in Australia/Japan in the next three years.

Table 4.36

Pearson Correlations for Overall Perceived Risks (Vacationing in Australia/Japan) and Travel Likelihood

	Overall Perceived Risk in Vacationing in Australia	Overall Perceived Risk in Vacationing in Japan
Travel Likelihood Australia	-.368*	
Travel Likelihood Japan		-.398*
Note. * Correlation is significant at the .001 level		

Testing of Hypothesis 7

Hypothesis 7: Individuals' perceived risk toward vacationing at international destinations influences their choice of travel style.

Two sub-hypotheses were proposed to investigate the relationships of individuals' risk perception of vacationing in Australia and vacationing in Japan to their choice of travel style. Multiple Discriminant Analysis (MDA) tested Hypotheses 7a and 7b. To apply a multivariate technique of MDA, the summated scales created for the seven dimensions identified in the final survey were used as the independent variables. The travel style of three categories, "full package," "partial package," and "independent travel," was used as the dependent variable. Two separate MDA analyses tested the predictive ability of individuals' risk perception of vacationing in Australia/Japan regarding their choice of travel style.

Hypothesis 7a: Individuals' risk perception of vacationing in Australia will influence their choice of travel style.

Hypothesis 7b: Individuals' risk perception of vacationing in Japan will influence their choice of travel style.

The sample was divided into two subsamples: the analysis sample to develop the discriminant function and the holdout sample for validation purposes. Therefore, two subsamples of risk perception of vacationing in Australia and another two subsamples of risk perception of vacationing in Japan were used to perform two separate MDA. Benchmarking

the example of Hair et al. (1998), a 60-40 split between the analysis sample and the holdout sample was applied, and a proportionately stratified sampling procedure was employed due to the group sizes (See Table 4.37). Each of the four subsamples satisfied the minimum requirement of the sample size that the smallest group size must exceed the number of independent variables (Hair et al., 1998). The smallest group size is fifteen, the group of independent travel choice in the holdout sample for risk perception of vacationing in Japan. There are seven independent variables included in each MDA analysis.

Table 4.37

Sample Sizes of Analysis Sample and Holdout Sample

Travel Style	Total Sample (100%)		Analysis Sample (60%)		Holdout Sample (40%)	
	Frequency	%	Frequency	%	Frequency	%
Australia						
Total	254	100%	152	100%	102	100%
Full Package	85	33%	51	33%	34	33%
Partial Package	98	39%	59	39%	39	39%
Independent	71	28%	42	28%	29	28%
Japan						
Total	216	100%	130	100%	86	100%
Full Package	116	33%	70	33%	46	33%
Partial Package	62	39%	37	39%	25	39%
Independent	38	28%	23	28%	15	28%

The main assumption to apply MDA is the equality of the variance/covariance matrices. Box's M test provides the test statistic at the .01 significance level. The Box's M test results for overall risk perception regarding vacationing in Australia was significant at the .01 level and the Box's M test results for overall risk perception regarding vacationing in Japan was not significant at the .01 level. However, the sensitivity of Box's M test allows for

performing MDA when the result is significant (Hair et al., 1998, p. 297). Therefore, testing Hypotheses 7a and 7b continued using MDA.

Table 4.38

Univariate Tests of Equality of Group Means

	Australia			Japan		
	Wilks' Lambda	F	Sig.	Wilks' Lambda	F	Sig.
Value Risk	.999	.099	.906	.937	4.259	.016
Health Risk	.963	2.839	.062	.876	8.994	.000
Terrorism Risk	.911	7.287	.001	.873	9.222	.000
Equipment Risk	.976	1.837	.163	.976	1.573	.212
Communication Risk	.923	6.195	.003	.901	6.942	.001
Social Risk	.982	1.388	.253	.991	.605	.547
Psychological Risk	.979	1.571	.211	.887	8.107	.016

Table 4.38 presents the results of univariate tests of equality of three group means (full package/partial package/independent) regarding risk perception of vacationing in Australia and vacationing in Japan. On a univariate basis, two variables of risk perception of vacationing in Australia show the overall significant differences between the group means, and four variables of risk perception of vacationing in Japan revealed group differences. For the choice of travel style in vacationing in Australia, two independent variables of “Terrorism Risk” and “Communication Risk” displayed significant differences at the .01 level. In terms of travel style choice in vacationing in Japan, “Health Risk,” “Terrorism Risk,” and “Communication Risk” revealed significant differences at the .01 level; “Value Risk” and “Psychological Risk” were significant at the .05 level.

While the results of univariate tests provide the overall significant differences of each independent variable between groups, Wilks' lambda for the discriminant analysis reveals the significance of a function (a variate of the independent variables) in discriminating between the groups. When there are three groups in the dependent variable, two functions (number of groups – 1) are extracted.

Table 4.39

MDA Multivariate Results for Hypothesis 7a and 7b – Wilk's Lambda

Function	Vacationing in Australia			Vacationing in Japan		
	Wilks' Lambda	Chi-square	Sig. (df)	Wilks' Lambda	Chi-square	Sig. (df)
1	.832	26.940	.020 (14)	.652	52.965	.000
2	.952	7.138	.308 (6)	.965	4.370	.627

Table 4.39 displays the significance of two functions to discriminate between travel style groups in vacationing in Australia and vacationing in Japan. Only the first function in each analysis is significant: the travel style within Australia at the .05 significance level and the travel style within Japan at the .01 significance level. When the final Wilks' lambda (.832) in the analysis of vacationing in Australia is compared with the Wilks' lambda (.911) for the best result from a single variable of "Terrorism Risk," the lower value of lambda suggests that using the discriminant function contributed to the improvement. The same improvement is found in the final Wilks' lambda (.652) (vacationing in Japan) from the best Wilks' lambda

(.873) from a single variable of “Terrorism Risk.” Consequently, the significant first functions proved their ability to discriminate between the groups.

Table 4.40

MDA Multivariate Results for Hypothesis 7a and 7b – Eigenvalues

Function	Vacationing in Australia			Vacationing in Japan		
	Eigenvalue	% of Variance	Canonical Correlation	Eigenvalue	% of Variance	Canonical Correlation
1	.145	74.4	.356	.480	93.0	.569
2	.050	25.6	.218	.036	7.0	.186

Table 4.40 shows the overall impact of the discriminant functions. Because only the first functions are statistically significant, the second functions are excluded from interpretation. The first function in the analysis of vacationing in Australia accounts for 74.4% of the variance explained by the two functions, and 93.0% of the variance was explained by the first function in the analysis of vacationing in Japan. Regarding the total variation in the dependent variables, the first function in the analysis of vacationing in Australia accounts for 12.7% ($.356^2$) of the total variance in the travel style choice in vacationing in Australia; the first function in the analysis of vacationing in Japan accounts for 32.4% ($.569^2$) of the total variance in the travel style choice in vacationing in Japan.

Table 4.41 depicts the structure matrix of discriminant loadings. Only function 1 is discussed. In the analysis of travel style choice when vacationing in Australia, “Terrorism Risk,” “Communication Risk,” and “Health Risk” are the three strongest variables that

contributed to the first functions. In the analysis of travel style choice when vacationing in Japan, three variables of “Terrorism Risk,” “Health Risk,” and “Psychological Risk” are the strongest among the seven independent variables.

Table 4.41

MDA Multivariate Results for Hypothesis 7a and 7b – Structure Matrix

Independent Variables	Vacationing in Australia		Vacationing in Japan	
	Function 1	Function 2	Function 1	Function 2
Value Risk	.039	.148	.332	.630
Health Risk	.512*	.000	.543	.019
Terrorism Risk	.746	.582	.549	-.101
Equipment Risk	.384	.253	.185	.481
Communication Risk	.728	-.354	.457	.510
Social Risk	.208	.496	.141	-.016
Psychological Risk	.380	-.044	.515	.072

*Bold face items have a structure loadings of at least .500.

To determine the predictive accuracy level of the discriminant functions in each analysis of vacationing in Australia and vacationing in Japan, the classification matrices were examined and the measure of classification accuracy, Press’s Q, was calculated.

Table 4.42

MDA Results for Hypothesis 7a – Classification Results: Vacationing in Australia

Three group travel choice - Australia			Predicted Group Membership			Total
			Full package	Partial package	Independent	
Analysis Sample (60%)	Count	Full package	25	15	11	51
		Partial package	16	33	10	59
		Independent	10	17	15	42
	%	Full package	49.0	29.4	21.6	100.0
		Partial package	27.1	55.9	16.9	100.0
		Independent	23.8	40.5	35.7	100.0
48% of original grouped cases correctly classified. Press's Q analysis sample: 14.77						
Holdout Sample (40%)	Count	Full package	19	8	7	34
		Partial package	9	15	15	39
		Independent	6	7	16	29
	%	Full package	55.9	23.5	20.6	100.0
		Partial package	23.1	38.5	38.5	100.0
		Independent	20.7	24.1	55.2	100.0
49% of original grouped cases correctly classified. Press's Q holdout sample: 11.29						

First, the classification matrix for the analysis of Australia was reviewed. Table 4.42 shows that the hit ratio for the analysis sample is 48%, and 49% for the holdout sample. To determine the predictive accuracy level of the discriminant function, Press's Q is calculated for both analysis and holdout samples. Press's Q tests "the statistical significance that the classification accuracy is better than chance" (Hair et al., 1998, p. 305). The calculated value for the analysis sample is 14.77 and the value for the holdout sample is 11.29; both values are larger than 6.63, the critical value at a .01 significance level. Therefore, the discriminant analysis for Hypothesis 7a predicted the group membership better than chance and Hypothesis 7a was supported.

Table 4.43

MDA Results for Hypothesis 7b – Classification Results: Vacationing in Japan

Three group travel choice - Japan			Predicted Group Membership			Total
			Full package	Partial package	Independent	
Analysis Sample (60%)	Count	Full package	50	11	9	70
		Partial package	8	19	10	37
		Independent	6	9	8	23
	%	Full package	71.4	15.7	12.9	100.0
		Partial package	21.6	51.4	27.0	100.0
		Independent	26.1	39.1	34.8	100.0
59.2% of original grouped cases correctly classified. Press's Q analysis sample: 39.23						
Holdout Sample of (40%)	Count	Full package	25	10	11	46
		Partial package	4	13	8	25
		Independent	4	3	8	15
	%	Full package	54.3	21.7	23.9	100.0
		Partial package	16.0	52.0	32.0	100.0
		Independent	26.7	20.0	53.3	100.0
53.5% of original grouped cases correctly classified. Press's Q holdout sample: 15.72						

Finally, the classification results of travel style choice when vacationing in Japan was reviewed. Table 4.43 displays that 59.2% of the analysis sample were correctly classified and 53.5% of the holdout sample were predicted correctly. The same procedure of calculating Press's Q, the measure of classification accuracy, produced the value of 39.23 for the analysis sample and 15.72 for the holdout sample. Those values are also larger than the critical value of 6.63 and indicate that the predictive ability of the discriminant analysis is significant at the .01 level. Hypothesis 7b was supported. Seven variables of perceived risk dimensions made statistically significant predictions of travel choice style when the variables were employed as a single variate of risk perception.

Additionally, the means for the three-group travel style were compared as shown in Table 4.44 below. The choice of a full packaged tour revealed the highest mean of risk perception of vacationing at both destinations: Australia and Japan. Those who selected a full packaged tour in vacationing in Japan scored a slightly higher mean of perceived risk in vacationing in Japan.

Table 4.44

Means of Three Groups of Travel Style Choice

Travel Style	Australia	Japan
Full Package	2.22	2.46
Partial Package	1.84	1.99
Independent	1.99	1.82

Summary

Chapter IV discussed the data analysis of phase I, phase II, and the final survey. Phase I identified six common dimensions of perceived risk regarding vacationing in Australia and vacationing in Japan, and one independent dimension of perceived risk in vacationing in Japan. Phase II was designed to obtain a general instrument measuring perceived risk in international leisure travel and found six dimensions using one data set. The final survey was conducted under the scenarios of vacationing in two specific international destinations: Australia and Japan. Seven common dimensions were identified in two data sets.

The proposed construct of “Communication Risk” in this study was included in the dimensions identified for every stage of the data analysis: phase I, phase II, and the final survey. The existence of the construct as a dimension of perceived risk in vacationing at international destinations was confirmed.

Two new sub-hypotheses were proposed for each of all seven hypotheses. The six sets of the sub-hypotheses, except for Hypothesis 3, tested the relationships of the proposed model with two data sets: perceived risk of vacationing in Australia and vacationing in Japan. Hypothesis 3 had two sub-hypotheses utilizing two statistical methods. All hypotheses were supported. Hypothesis 1 originally postulated that there are eleven underlying dimensions of perceived risk in international leisure travel, but was modified after scale purification in which seven dimensions were found in risk perception regarding vacationing at the two destinations: Australia and Japan.

The next chapter presents the discussions of the findings of this dissertation, the limitations of this study, and recommendations for future studies.

CHAPTER V

DISCUSSION

Introduction

Chapter V provides the discussion of findings of the scale purification and final survey: dimensions of perceived risk identified in phase I and phase II of the scale purification; discussion of the sample and the final survey; hypotheses tests; and comparisons of the hypotheses test results of the two data sets and discussions related to previous studies. Also, implications and limitations of this study are presented, and recommendations for future studies and conclusions.

Discussion

This section overviews and discusses the findings of the scale purification, the final survey, and the hypotheses tests.

Scale Purification

In phase I of the scale purification, six common dimensions of perceived risk for vacationing in Australia and vacationing in Japan were found: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” and “Communication Risk.” The factor analyses of perceived risk in vacationing in Australia did not show the dimension of “Equipment Risk.” However, it was included in the dimensions identified in perceived risk of

vacationing in Japan. Therefore, the items measuring “Equipment Risk” were included in phase II because: (1) it was found in the dimensions of perceived risk in vacationing in Japan; and (2) it was necessary to see if the dimension appeared when the instrument (phase II) was used to measure perceived risk of vacationing at international destinations instead of vacationing at specific destinations. The second reason for including “Equipment Risk” is based on the result of a prior study in which “Equipment Risk” was present in both dimensions of risk perception of vacations in general and of vacations at a particular destination (Roehl & Fesenmaier, 1992). When phase II surveyed on risk perception of vacationing at international destinations, six common dimensions were found which were also identified in phase I but “Equipment Risk” was not found. Although “Equipment Risk” failed to appear in phase II, it was anticipated that the dimension might emerge in the final survey. The final survey, like phase I, provided two particular scenario destinations in measuring risk perception. The author decided to retain the items to measure “Equipment Risk” and proceeded to the final survey. The following sections discuss the modification of Hypothesis 1 based on the results of scale purification and findings from the final survey.

Modification of Hypothesis 1

A review of literature found ten dimensions of risk perception in international leisure travel. Based on this finding and the inclusion of one additional dimension “Communication Risk,” Hypothesis 1 proposed that there are eleven perceived risk dimensions in international leisure travel. However, only seven dimensions of risk perception were identified regarding vacationing in Australia/Japan during the process of scale purification. Therefore, it was necessary to modify Hypothesis 1 and two sub-hypotheses for the final hypotheses testing. Hypothesis 1 and sub-hypotheses are modified as presented below:

Hypothesis 1: The salient dimensions of perceived risk in vacationing at international destinations are: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Equipment Risk,” and “Communication Risk.”

Hypothesis 1a: There are seven underlying dimensions of perceived risk in vacationing in Australia.

Hypothesis 1b: There are seven underlying dimensions of perceived risk in vacationing in Japan.

Final Survey Discussion

The survey instrument was refined during the process of scale purification. This research design of providing a scenario of vacationing in Australia and a scenario of vacationing in Japan was intended to investigate any difference between the dimensions of native English speakers’ risk perceptions toward vacationing at international destinations where they can communicate in English and where they have language barriers. Therefore, one data set was obtained with regards to perceived risk in vacationing in Australia and one data set for vacationing in Japan; the sample was screened to attain only responses from native English speakers.

The total response rate of the final survey is 16.90% and the usable response rate is 14.29%. Although the comparison of early and late respondents evaluated non-response bias and revealed no statistical difference between the two groups regarding their responses, a couple of issues can be addressed regarding the low response rate. First, some survey recipients might have felt that four pages of the final survey questionnaire were too long.

Another reason can be suggested that questions regarding international leisure travel might not have been interesting to some survey recipients. This is speculated from the demographic characteristics of respondents; the majority (64.2%) of the respondents had bachelor's degrees or higher education and more than half (55.8%) of the respondents had an annual household income of \$80,000 or more. Therefore, it is possible that more educated individuals with higher incomes and who are interested in international leisure travel tended to respond to the final survey.

The final survey was analyzed using 285 usable responses from Virginia residents. Similar to the results of a previous study by Gursoy (2001) which used the same sampling frame, the survey results showed that responses from males were more numerous than responses from females. This result may have stemmed from using a mailing list based on telephone directories which are generally listed under male partners' names (Gursoy, 2001).

During the data coding process of the final survey, 46 incomplete responses were eliminated. Half of the incomplete responses failed to answer the questions related to risk perception toward vacationing in Australia. Those response scales were placed on the left side of the questions, while the response scales for Japan were on the right side of the questions. Because a survey questionnaire is generally designed to have questions on the left side of the paper and answer scales on the right side, an instruction was provided in bold and underlined fonts to explain the unique layout of the questionnaire and to ask the respondents to answer scales located on both sides of the page. However, many individuals did not respond to questions regarding risk perception of vacationing in Australia. Some responses were left blank on both sides, but most respondents filled out the scales for Japan which were located on the right side of the questions. The design of setting the statements in the middle was used

to reduce the number of pages of the questionnaire. However, these findings should be reconsidered for future surveys.

The examination of the raw data revealed that the mean of every item measuring individuals' risk perception of vacationing in Japan was higher than those of vacationing in Australia. On the whole, respondents indicated a higher perceived risk of vacationing in Japan.

Hypotheses Tests

To investigate the relationships of constructs in the proposed model of this study, four research questions and seven hypotheses were proposed. Two sub-hypotheses were then developed to elaborate on each of the seven hypotheses. Several statistical techniques were employed to test a total of fourteen sub-hypotheses.

Table 5.1 summarizes the results of the hypotheses tests. All research hypotheses were supported. Factor analyses tested Hypotheses 1a and 1b; simple correlations tested Hypotheses 2a, 2b, 4a, 4b, 6a, and 6b; paired sample t-test was used for testing Hypothesis 3a; independent sample t-tests with equal variances were performed to test Hypotheses 3b and 5a; Hypothesis 5b was tested utilizing independent sample t-test with heterogeneous variances; and finally Multiple Discriminant Analysis was applied to test Hypotheses 7a and 7b. The findings of each hypothesis test follow.

Table 5.1: Summary of Hypotheses Testing Results

Research Hypotheses	Statistical Technique	Result
Hypothesis 1a Hypothesis 1b	Factor Analysis	Supported
Hypothesis 2a Hypothesis 2b	Correlations	Supported
Hypothesis 3a Hypothesis 3b	Paired sample t-test Independent sample t-test	Supported
Hypothesis 4a Hypothesis 4b	Correlations	Supported
Hypothesis 5a Hypothesis 5b	Independent sample t-test	Supported
Hypothesis 6a Hypothesis 6b	Correlations	Supported
Hypothesis 7a Hypothesis 7b	Multiple Discriminant Analysis	Supported

Research Hypothesis 1

The salient dimensions of perceived risk in vacationing at international destinations are: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Equipment Risk,” and “Communication Risk.”

Hypothesis 1a: There are seven underlying dimensions of perceived risk in vacationing in Australia.

Hypothesis 1b: There are seven underlying dimensions of perceived risk in vacationing in Japan.

Initially, a research hypothesis was developed to see if there are eleven underlying dimensions identified in the literature regarding perceived risk of vacationing in Australia and vacationing in Japan. However, Research Hypothesis 1 was modified based on the results of scale purification which identified only seven dimensions of perceived risk. The modified two sub-hypotheses were supported. Data analysis using two separate data sets found that there are seven underlying dimensions of perceived risk in international leisure travel: “Value Risk,” “Health Risk,” “Psychological Risk,” “Social Risk,” “Terrorism Risk,” “Equipment Risk,” and “Communication Risk” (See Table 4.23 for the seven dimensions of perceived risk in vacationing in Australia and Table 4.26 for the seven dimensions of perceived risk in vacationing in Japan).

First, the “Communication Risk,” which was proposed in this dissertation as one of the dimensions of risk perception of vacationing at international destinations, was confirmed

in this study. A few studies have observed the issue of language barriers in international travel; the findings of these studies were consistent in that perceived communication problems affect feelings of safety (Basala & Klenosky, 2001; Hsieh et al., 1994; Pinhey & Iverson, 1994).

Two dimensions, “Time Risk” and “Financial Risk,” identified as separate dimensions in previous studies, were combined as one dimension, “Value Risk,” in this dissertation. Two dimensions found separately in the literature, “Physical Risk” and “Health Risk,” were merged as one dimension, “Health Risk,” in this study. Two dimensions identified in the literature but not found in this study are “Political Instability Risk” and “Satisfaction Risk.” “Equipment Risk” was not identified among the dimensions of risk perception of vacationing in Australia in phase I or of vacationing at international destinations in phase II. Among the initial 21 items, one variable, “I would not let political instability keep me from vacationing here,” was removed during the factor analysis process of the final survey. This variable belonged to the dimension of “Terrorism Risk” during the process of phase I and phase II of scale purification, and was originally one of the items measuring the “Political Instability Risk” identified in the literature. In the process of scale purification, the dimension of “Political Instability Risk” was eliminated but the variable remained in the dimension of “Terrorism Risk.” The elimination of “Political Instability Risk” may have resulted from the respondents’ understanding that the two destinations, Australia and Japan, are not politically unstable. According to the information provided on the website of the U.S. Department of State (*World Travelers of America Online*, 2005), Australia is described as “a highly developed stable democracy with a federal-state system. Tourist facilities are widely available” (posted on September 24, 2004) and Japan is also depicted as “a stable, highly

developed parliamentary democracy with a modern economy. Tourist facilities are widely available” (posted on February 10, 2005). Therefore, if other countries considered politically unstable were included as scenario destinations, the dimension of “Political Instability Risk” could have appeared. This result implies that the dimensions of risk perception vary based on destinations. This notion is evidenced in the study by McCleary and Whitney (1994).

Although the study did not approach the subject from the standpoint of perceived risk, they examined political instability as one of the factors inhibiting tourist travel to Eastern Europe. Using the Delphi technique, which projects consumer attitudes based on the opinions of experts, tourism expert panel members assessed that three of six Eastern European destination countries were constrained by political instability: Bulgaria, Czechoslovakia (now Czech Republic), and Rumania. Results of another study supports this finding that those who perceived a higher degree of risk in international travel because of political instability were more likely to avoid traveling to Asia and South America (Sonmez & Graefe, 1998a). A study by Seddighi et al. (2001) found that the perceptions concerning the impact of political instability at selected Mediterranean destinations were varied according to the national cultural background of travel agents who participated in their study. Consequently, “Political Instability Risk” could be found as one dimension of perceived risk if those destination countries with political instability were surveyed. Also the “Political Instability Risk” toward vacationing in a certain destination may change over time according to the country’s political environment. The dimensions and level of risk perception toward a certain destination change over time according to changes in the travel environment and unexpected events from terrorism attacks to natural disasters.

Another dimension identified in the literature but not found in this study is “Satisfaction Risk.” In a previous study that investigated the dimensions of risk perception, “Satisfaction Risk” was found as a dimension of perceived risk in vacations in general and as a dimensions of perceived risk in traveling to a particular destination (Roehl & Fesenmaier, 1992). Therefore, the deletion of this dimension may have resulted from the possibility of measuring items not being robust. Other dimensions removed in the process of scale purification, “Financial Risk,” “Physical Risk,” and “Political Instability Risk” also might have had measuring items which were not reliable.

Research Hypothesis 2

The psychographic make-up of an individual is related to an individual’s overall perceived risk of vacationing at international destinations.

Hypothesis 2a: Individuals who have a higher level of novelty seeking will perceive less risk in vacationing in Australia.

Hypothesis 2b: Individuals who have a higher level of novelty seeking will perceive less risk in vacationing in Japan.

A factor analysis of novelty seeking in this study showed consistent results with a previous study by Lee and Crompton (1992) from which the current “novelty seeking” scale was adopted. Four dimensions were measured by 21 items and titled using the same names as

the prior study; the dimensions are: “thrill,” “change from routine,” “boredom alleviation,” and “surprise.”

Two sub-hypotheses tested the relationships between individuals’ novelty seeking characteristics and their perceived risk in vacationing in Australia and vacationing in Japan. Both sub-hypotheses were supported. Individuals who have a higher level of novelty seeking tend to have less perceived risk in vacationing at these two international destinations. Although a different scale was used, Lepp and Gibson (2003) found that individuals who seek a higher level of novelty perceive less risk than those who prefer familiarity. They used the tourist role typology of Cohen (1972) which was developed based on the continuum of novelty and familiarity. Previous research either segmented the vacation market by novelty-seeking role (Keng & Cheng, 1999; Snepenger, 1987) or examined the relationship between novelty seeking and choice of travel style (Basala & Klenosky, 2001).

Research Hypothesis 3

The ability to speak the native language of a destination influences an individual’s overall perceived risk in vacationing at the destination.

Hypothesis 3a: There is a difference between native English speakers’ overall perceived risk regarding vacationing in Australia and vacationing in Japan ($H_0: \mu_1 - \mu_2 = 0$, $H_1: \mu_1 - \mu_2 \neq 0$).

Hypothesis 3b: There is a difference in overall perceived risk in vacationing in Japan between individuals who have some level of Japanese proficiency and those who have no Japanese proficiency ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

Two different statistical methods were employed to examine the relationship between language ability and risk perception of vacationing at international destinations. A paired sample t-test was used for the research sub-hypothesis 3a to investigate the mean difference of overall risk perception of vacationing in Australia and vacationing in Japan. This was intended to discover the difference in native English speakers' perceived risk of vacationing in two different international destinations: Australia where they can communicate in English and Japan where they may have difficulty communicating in English. The result showed that native English speakers have a higher level of risk perception of vacationing in Japan.

Eighteen of the 285 individuals who responded to the final survey indicated that they have some level of Japanese proficiency, but none of them were fluent in Japanese. An independent sample t-test was performed to determine if there was a statistically significant difference in risk perception (vacationing in Japan) between individuals who have some level of Japanese proficiency and those who have no Japanese proficiency. The results revealed that individuals who have some Japanese proficiency have less risk perception of vacationing in Japan than those who have no Japanese proficiency.

An ability to speak a native language of a particular destination decreases the level of perceived risk in vacationing in that destination. This finding is consistent with previous studies. Basala and Klenosky (2001) examined language as a factor that influences tourists' choice of prospective destinations, because tourists' fluency, or lack of fluency, in the

language of a particular destination can be a barrier in international travel. When individuals have confidence in communication skills, they felt safer regardless of the type of activity that they were engaged in during their vacation (Pinhey & Iverson, 1994).

Research Hypothesis 4

Familiarity/Expertise with a particular destination will be negatively correlated with an individual's overall perceived risk in vacationing in that destination.

Hypothesis 4a: Individuals' familiarity/expertise with Australia as a vacation destination will be negatively correlated with individuals' overall perceived risk in vacationing in Australia ($H_0: \rho=0$, $H_1: \rho \neq 0$).

Hypothesis 4b: Individuals' familiarity/expertise with Japan as a vacation destination will be negatively correlated with individuals' overall perceived risk in vacationing in Japan ($H_0: \rho=0$, $H_1: \rho \neq 0$).

To explore the relationship of familiarity/expertise with a particular destination to overall risk perception of vacationing in that destination, two sub-hypotheses were developed and tested. The results of correlations supported both sub-hypotheses and implied that individuals who familiarity/expertise with a vacation destination are likely to have a lower level of perceived risk towards that destination. Previous research found that there is a strong inverse relationship between various leisure activities and individuals' familiarity with those

activities (Cheron & Ritchie, 1982). Individuals perceived less risk as their familiarity increased with leisure activities.

Research Hypothesis 5

Individuals' experience of visiting an international destination influences their overall perceived risk in vacationing in that particular destination.

Hypothesis 5a: There is a difference between individuals who have and have not visited Australia regarding their overall risk perception of vacationing in Australia ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

Hypothesis 5b: There is a difference between individuals who have and have not visited Japan regarding their overall risk perception of vacationing in Japan ($H_0: \mu_1 = \mu_2$, $H_1: \mu_1 \neq \mu_2$).

The relationship of an individual's experience visiting a particular destination to overall risk perception of vacationing in that destination was examined by testing two sub-hypotheses using independent sample t-test. Both sub-hypotheses were supported. Individuals who have visited a particular destination perceived less risk in vacationing at the destination. An interesting finding was revealed that there was no significant difference between Saudi visitors to Germany and non-visitors regarding their risk perception towards vacationing in Germany. However, both groups showed a high level of perceived risk in vacationing in

Germany (Yavas, 1990). Sonmez (1994) found that individuals with more international travel experience perceived a lower level of risk.

Research Hypothesis 6

Overall perceived risk toward a particular international destination negatively influences the likelihood of vacationing at the destination.

Hypothesis 6a: Individuals' overall risk perception of vacationing in Australia will be negatively related to the likelihood of vacationing in Australia in the next three years ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

Hypothesis 6b: Individuals' overall risk perception of vacationing in Japan will be negatively related to the likelihood of vacationing in Japan in the next three years ($H_0: \rho = 0$, $H_1: \rho \neq 0$).

Two sub-hypotheses explored the relationship of perceived risk to the likelihood of vacationing in Australia and the likelihood of vacationing in Japan. Both sub-hypotheses were supported based on the results of correlations analyses. Individuals who perceived a higher level of risk in vacationing at an international destination were significantly less likely to vacation in that destination.

While the relationship of risk perception to the decision of whether to travel or not has been ignored in tourism research, a prior study found that perception of risk and feelings of

safety had a stronger influence on avoiding certain regions (Sonmez & Graefe, 1998a). A survey conducted after the events of September 11, 2001, revealed that 30% of the leisure travelers responded that they were less inclined to travel internationally. Also, 32% of individuals who responded to the survey (business and leisure travelers) indicated that “fear for personal safety while abroad” is the most important reason to be less inclined to travel abroad (King & Leveton, 2002).

Many countries in North and Southeast Asia were badly affected by the outbreak of Severe Acute Respiratory Syndrome (SARS), which infected more than 8,000 people between November 2002 and July 2003 in what the World Health Organization deemed a "global threat" (CNN, 2004a; WTO, 2003b). The U.S. tourism industry recorded the decrease of international arrivals for three consecutive years since the September 11th attacks in 2001. Although the number of international visitors is expected to increase, the estimated international visitors in 2004 is still 10% fewer than in 2000 (CNN, 2005).

Research Hypothesis 7

Individuals' perceived risk toward vacationing at international destinations influences their choice of travel style.

Hypothesis 7a: Individuals' risk perception of vacationing in Australia will influence their choices of travel style.

Hypothesis 7b: Individuals' risk perception of vacationing in Japan will influence their choices of travel style.

Two sub-hypotheses were tested to determine whether individuals' choices of travel style are influenced by their risk perception of vacationing in Australia and vacationing in Japan; three categories of travel choices are: a full package tour, a partial package tour, and independent travel. Both research sub-hypotheses were supported. The results of Multiple Discriminant Analysis show that the variate of risk perception, which consists of seven variables of risk dimensions, proved statistically significant in predicting travel style. Regarding the total variation in the dependent variables, the first function in the analysis of vacationing in Australia accounts for 12.7% ($.356^2$) of the total variance in the travel style choice in vacationing in Australia, and the first function in the analysis of vacationing in Japan accounts for 32.4% ($.569^2$) of the total variance in the travel style choice in vacationing in Japan. The percentages of explained variance are large enough to suggest a significant relationship between perceived risk and travel style choice, because some of the factors influencing travel style choice were not included in this study such as, demographic characteristics, direct impacts of psychographic characteristics, and knowledge of a destination. When the raw risk perception means of the three travel style choice groups were compared, individuals who indicated a higher level of risk in vacationing at international destinations tend to choose a full package tour rather than select a partial package tour or travel independently. These results imply that perceived risk influences the decision of travel style. This result is consistent with previous studies, such as Money and Crotts (2003) who found that high-risk aversion individuals were more likely to buy prepackaged tours and travel in larger groups of people.

Implications

This section presents the types of implications drawn from the results of this dissertation. First, managerial implications are discussed to provide beneficial findings of this study to destination marketers and promoters. Next, theoretical implications describe the contributions of this study to the body of related literature.

Managerial Implications

The most important implication of this study is that “Communication Risk” does exist as one of the dimensions of perceived risk in vacationing at international destinations. In addition, individuals perceive a higher level of overall risk towards vacationing at international destinations where they cannot communicate in their native language. Therefore, providing information in different languages, a practice which has been in place for many years in many destinations, may help to reduce risk perception of international visitors. For example, Yavas (1987) suggested that hospitality facilities in Turkey, such as hotels and stores, should hire Arabic-speaking personnel for Saudi tourists. He also recommended putting signs in Arabic to create a welcoming image. However, it is more critical for service providers to understand that international visitors perceive “communication risk.” The tourism industry can educate employees who provide services at the level of personal contact with visitors so that they are aware of visitors’ risk perceptions. Additionally employees can be trained to communicate with visitors in various ways: (1) foreign language skills; (2) listening skills and advanced anger management; and (3) understanding the economic and sociological factors that occur within a diverse and transient population (Tarlow & Gui, 2002). Visitors

will appreciate the empathetic attitudes of employees who show efforts to accommodate customers' needs even when there is a language barrier.

In the book "The Art of War" written in about 500 B.C., Sun-Tzu, a Chinese practical philosopher, wrote "know the enemy and know yourself, and you can fight a hundred battles with no danger of defeat" (Sun-Tzu, 1971). Although the expressions of war and enemy may sound odd in relation to business practices, today's business environment is often described as a battlefield (Michaelson, 1998). This notation implies the essential basics of marketing: the importance of understanding customers' needs and comprehensive knowledge of the products or services that a company provides. The latest marketing handbooks emphasize the customer must be an integral part of the marketing process (Michaelson, 2003; Raza, 2004). Promotions and marketing plans should be based on a comprehensive analysis of customers' needs and wants. Understanding customers' perceived risk helps marketers to see the world through customers' eyes (Mitchell, 1999). Therefore, it is critical for destination marketers to know the level of risk perception that individuals have when they consider vacationing at a particular destination. This knowledge provides key information of potential visitors' perception towards the destination and of areas that need improvement in promoting the destination.

Theoretical Implications

This study investigated ten dimensions identified in the literature to determine if each of them appears as an independent dimension of perceived risk in vacationing at international destinations. The ten dimensions were first investigated simultaneously in this study. Many studies have adopted five dimensions as identified by Jacoby and Kaplan (1972): "Financial

Risk,” “Performance Risk,” “Physical Risk,” “Social Risk,” and “Psychological Risk” (Cheron & Ritchie, 1982; Mitra et al., 1999; Stone & Gronhaug, 1993; Stone & Mason, 1995), and “Time Risk” was added by Roselius (1971). These six aforementioned dimensions were investigated together (Stone & Gronhaug, 1993; Stone & Mason, 1995). Studies have also focused on a particular dimension, such as “Political Instability Risk” (McCleary & Whitney, 1994; Seddighi et al., 2001; Sonmez & Graefe, 1998b) and “Terrorism Risk” (Sonmez & Graefe, 1998a, 1998b).

The findings of this study confirmed the presence and utility of “Communication Risk” as one of the dimensions of perceived risk in vacationing at international destinations. Although a few studies examined the language barriers in international travel (Basala & Klenosky, 2001; Hsieh et al., 1994), it has never been included in the study of risk perception.

Although ten dimensions were identified in the literature and one dimension was proposed for this study, only seven dimensions were found as significant dimensions of risk perception related to vacationing in Australia and Japan. This result suggests that the dimensions of perceived risk in vacationing at international destinations vary depending on destination.

This dissertation investigated the relationship of perceived risk to travel decisions in international leisure travel and found that there are significant relationships between perceived risk and travel purchase decisions. This finding expands the understanding of perceived risk related to travel decisions that has been predominantly studied within the context of destination choices.

Limitations

One limitation of this study is associated with the sampling frame; undergraduate students were surveyed during scale purification and only residents of Virginia were selected for inclusion in the final survey. Using a sample of undergraduate students who are much younger than the respondents of the final survey may have limited the results of scale purification. In the final survey, if other states' residents or individuals of other countries were surveyed, the level of risk perception might be different. The residents in other states in the northeastern regions of the U.S. may have more experience visiting international destinations, and have less risk perception of vacationing at international destinations. Also, this study only surveyed native English speaking U.S. residents. U.S. residents who do not speak English and other language speakers in other countries may have different risk perceptions. Regarding the scenario destinations, the two destinations of Australia and Japan used in the scenario may have limited the results of this dissertation. Both destinations investigated in this study are developed countries. Individuals' risk perception towards vacationing at developing or underdeveloped countries may reveal different dimensions from the results of this study. In other words, individuals may have different types of perceived risk and a different level of risk perception towards other destinations.

Another limitation is related to the boundaries of this study: international and leisure travel. The dimensions of perceived risk in international travel and domestic travel are expected to be different; however, the comparison of the dimensions regarding risk perception of international travel and domestic travel will contribute to understand the role of risk perception in tourism research. Additionally, although the travel decision process involves different decision criteria which affects risk perception in business travel and leisure travel, it

may be possible to find common dimensions of perceived risk that are inherent in both business and leisure travel.

Recommendations for Future Studies

This dissertation included only two destinations in measuring individuals' risk perception towards vacationing at international destinations: Australia and Japan. Investigating individuals' risk perception toward vacationing at other destinations may produce different results and discover different dimensions of risk perception. It is recommended to examine the common dimensions of perceived risk towards vacationing at a certain group of destinations or the distinctive dimensions which are found in risk perception of vacationing at a particular destination.

Although the limitation of resources and time constrained the sampling frame of this study, future studies should extend the sampling frame to other states and other countries. A previous study revealed that perceptions of risk associated with international tourism vary by nationality (Seddighi et al., 2001). Samples of more diverse nationalities and different geographical regions will expand the understanding of the role of risk perception in tourism research. However, one important factor, the national culture of a study population, has to be considered in replicating this study with another sample. Therefore the questionnaire should be re-examined for its appropriateness to measure perceived risk of individuals in other countries or cultures. Hofstede (1994) provided a clear example on this issue. In his studies of value differences as part of national cultures (Hofstede, 1984, 2001), a questionnaire developed by Western researchers and a questionnaire developed by Chinese scholars

revealed different results. Regarding cross-cultural research, Choudhry (1986) and Becker & Murrmann (2000) provide comprehensive discussions.

This study tested only novelty seeking characteristics and language ability as personal factors influencing perceived risk in international leisure travel. Other factors such as demographic characteristics and different measures of psychographics should be included in future research for a better understanding of the factors associated with risk perception. Also, the direct impact of personal factors on travel purchase decisions should be considered in developing a conceptual model.

This study only examined risk perceptions in international travel. Future studies may explore the common dimensions of perceived risk that exist in both domestic and international travel. In addition, more and more business travelers combine business with leisure in one trip, and destinations marketers are making efforts to attract business travelers to return for vacations. Future studies can investigate the dimensions of risk perception in business travel and the dimensions shared by business and leisure travel.

This study focused on the relationships of perceived risk to travelers' characteristics and their travel purchase decisions; however, risk perception is also closely associated with the destination image (Baloglu, 1996). Therefore, future studies should investigate the relationships of risk perception, destination image, and travel purchase decisions.

Conclusions

This dissertation extended the understanding of perceived risk in tourism in several ways: (1) “Communication Risk” is identified as one of the dimensions of risk perception in international leisure travel; (2) the dimensions of risk perception may vary based on a specific destination; (3) individuals who have a higher level of novelty seeking characteristics are likely to have a lower level of risk perception in international leisure travel; (4) individuals who have visited a particular destination tend to have a lower level of risk perception towards that destination; and (5) the overall risk perception towards a destination influences individuals’ travel purchase decisions: travel likelihood and travel style.

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Appendix A

Pretest I Questionnaire – Perceived risk in International Leisure Travel

Part I- Australia

Directions: The following questions ask your experience and perceptions on vacationing at a destination, such as Australia, where you can communicate in English.

Language Ability

1. What is your native language? 1. English 2. Other

2. If your native language is not English, what is your level of English proficiency?

Neither understand nor speak	Understand a little but cannot speak	Understand speak a little	Understand and speak
1	2	3	4

3. I'm interested in learning a foreign language

Strongly Disagree	Somewhat Disagree	Neither Nor Agree	Disagree Somewhat Agree	Strongly Agree
1	2	3	4	5

Familiarity / Expertise

- | | Not at all | | (neither) | | Extremely |
|----------------------------------------------------------------------------------------------------------------------|------------|---|-----------|---|-----------|
| 4. How familiar are you with Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 5. How interested are you in Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 6. How much do you know about Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 7. How would you rate your knowledge about vacation travel in Australia relative to the rest of the U.S. population? | 1 | 2 | 3 | 4 | 5 |

Past experience

8. Have you ever visited Australia? 1. Yes 2. No **(Please go to Question 12 on next page)**

9. **If yes**, how many times have you visited Australia? _____ time(s)

10. **If yes**, how did you travel on your last trip to Australia?

1. Alone	2. With Friends	3. With family	4. With a partner
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11. **If yes**, how did you arrange your last trip to Australia?

1. All-inclusive package tour	2. Only flight and hotel included package	3. All arranged by myself
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Part III – Perceptions

Directions: The following statements address your perception of **vacations in Australia and Japan**. Please read each statement and indicate the level of your agreement or disagreement for each country by using the scale below.

1	2	3	4	5
Very unlikely	Unlikely	Neither	Likely	Very Likely

	Vacation in Australia	Vacation in Japan
It will result in physical danger or injury.	21.	22.
I may experience or witness violence.	23.	24.
It is absolutely safe for me.	25.	26.
I may become sick from eating food or drinking water.	27.	28.
There is a possibility of contracting infectious diseases.	29.	30.
Potential health problems are a concern.	31.	32.
It will not provide value for the money spent.	33.	34.
It will be a bad way to spend my money.	35.	36.
I would rather spend money on purchases at home.	37.	38.
It will negatively affect others' opinion of me.	39.	40.
Friends and relatives will disapprove of my vacation.	41.	42.
I want a vacation in this destination because everyone goes there.	43.	44.
Having a vacation here is too time-consuming.	45.	46.
It will be a waste of time.	47.	48.
It will require too much planning time.	49.	50.
It may result in mechanical or equipment problems.	51.	52.
I'll experience inconvenience of telecommunication facilities.	53.	54.
My baggage may be misplaced or delayed (by the airline or hotel).	55.	56.

1	2	3	4	5
Very unlikely	Unlikely	Neither	Likely	Very Likely

	Vacation in Australia	Vacation in Japan
It may be a disappointment considering everything that can go wrong during the vacation.	57.	58.
It is likely to enhance my feeling of well-being.	59.	60.
It will not reflect my personality.	61.	62.
It will not reflect my self-image.	63.	64.
The thought of vacationing here will give me a feeling of unwanted anxiety.	65.	66.
The thought of vacationing here will make me feel comfortable.	67.	68.
The thought of vacationing in this destination will cause me to experience unnecessary tension.	69.	70.
This destination should be avoided by tourists because of its political instability.	71.	72.
I would not let political instability keep me from vacationing in this destination.	73.	74.
I would like to vacation in this destination but negative news about this destination discourages me.	75.	76.
Travelers have a high probability of being targeted by terrorists.	77.	78.
I'll not be intimidated by terrorism when vacationing in this destination.	79.	80.
Terrorism will not influence my decision to vacation here.	81.	82.
It is important that people who I meet speak English during my vacation in this destination.	83.	84.
I have concerns about having possible communication problems during my vacation here.	85.	86.
I will not have problems in communication with others whom I meet during my vacation here.	87.	88.

Appendix B

Pretest II Survey Questionnaire - Perceived Risk in International Leisure Travel

Directions: The following statements address your perception of Vacationing at International Destinations. Please read each statement and indicate your level of agreement or disagreement by using the scale below.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree

1. It will be a bad way to spend my money.	1.
2. I would rather spend money on purchases at home.	2.
3. It will be a waste of time	3.
4. I may become sick from eating food or drinking water.	4.
5. There is a possibility of contracting infectious diseases.	5.
6. Potential health problems are a concern.	6.
7. I would not let political instability keep me from vacationing at international destinations.	7.
8. I will be intimidated by terrorism when vacationing at international destinations.	8.
9. Terrorism will influence my decision to vacation at international destinations.	9.
10. It may result in mechanical or equipment problems.	10.
11. Telecommunication systems (phone, fax, etc.) will be inconvenient to use.	11.
12. My baggage may be misplaced or delayed (by airline or hotel).	12.
13. It is important that people who I meet speak English during my vacations at international destinations.	13.
14. I have concerns about having possible communication problems during my vacations at international destinations	14.
15. I will have problems in communication with others whom I meet during my vacations at international destinations.	15.
16. Having vacations at international destinations will negatively affect others' opinion of me.	16.
17. Friends and relatives will disapprove of my vacations at international destinations.	17.
18. I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing at international destinations a bad choice.	18.
19. Having vacations at international destinations will not reflect my personality or self-image.	19.
20. When I think about vacation purchases at international destinations, I feel tension.	20.
21. The thought of purchasing vacations at international destinations makes me feel uncomfortable.	21.
22. The thought of purchasing vacations at international destinations fills me with anxiety.	22.
23. I worry about purchasing vacations at international destinations.	23.

Appendix C

Cover Letter and Final Survey Questionnaire

May 1, 2004

Name of the respondent

Address of the respondent

Dear (name of the respondent),

I am currently a doctoral student in Hospitality and Tourism Management at Virginia Tech and investigating perceived international travel risk. This study is required for me to finish my degree. I am covering all costs of this mailing myself and I am not being paid to do it.

Your address was obtained from the phone directory and I don't have any of your personal information. All of the responses will be summarized and your answers are totally anonymous. This study will provide important information for the tourism and hospitality industry to aid them in understanding travelers like you so that they can serve you better.

It does not matter if you have taken a trip recently or not, I really need your help!!!! It will take about 10 to 15 minutes to complete the attached questionnaire. Once you have finished it please return it in the enclosed postage-paid envelope by May 21, 2004, if possible.

Your kind participation can help me more than you can imagine. Thank you so much for taking time to fill out this important questionnaire. If you have any questions, please feel free to contact me at the phone number and/or email provided below. I will be glad to answer any questions you may have.

Sincerely,

Jiho Han
Ph.D. Candidate
Phone: (540) 951-7564
Email: jihan1@vt.edu

Pamela Weaver, Ph.D.
Professor

Survey Questionnaire – Perceived Risk in International Leisure Travel

Part I - Australia

Directions: The following questions ask your experience and perceptions on vacationing at a destination, such as **Australia**, where you can communicate in English.

Language Ability

1. What is your native language? 1. English 2. Other (Please go to Part VI on page 4)
2. I'm interested in learning a foreign language. Strongly Disagree Somewhat Disagree Neither Disagree Nor Agree Somewhat Agree Strongly Agree
- 1 2 3 4 5

Familiarity / Expertise

- | | Not at all | | Somewhat | | Extremely |
|---------------------------------------------------------------------------------------------------------------------|------------|---|----------|---|-----------|
| 3. How familiar are you with Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 4. How interested are you in Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 5. How much do you know about Australia as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 6. How knowledgeable are you about vacation travel in Australia relative to the rest of the U.S. population? | 1 | 2 | 3 | 4 | 5 |

Past experience

7. Have you ever visited Australia? 1. Yes 2. No (Please go to Part II below)
8. If yes, how many times have you visited Australia? _____ time(s)
9. If yes, how did you travel on your last trip to Australia? (Please check all that apply)
1. Alone 2. With Friends 3. With family group 4. With a partner only
10. If yes, how did you arrange your last trip to Australia?
1. A fully packaged tour
2. A partially packaged tour with transport and accommodation only
3. Non-packaged/independent travel

Part II - Japan

Directions: The following questions ask your experience and perceptions on vacationing at a destination, such as **Japan**, where its native language is not English.

1. How would you rate your fluency in Japanese? Neither understand nor speak Understand a little but cannot speak Understand speak a little Understand and speak Very fluent
- 1 2 3 4 5

Familiarity / Expertise

- | | Not at all | | Somewhat | | Extremely |
|-----------------------------------------------------------------------------------------------------------------|------------|---|----------|---|-----------|
| 2. How familiar are you with Japan as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 3. How interested are you in Japan as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 4. How much do you know about Japan as a vacation destination? | 1 | 2 | 3 | 4 | 5 |
| 5. How knowledgeable are you about vacation travel in Japan relative to the rest of the U.S. population? | 1 | 2 | 3 | 4 | 5 |

Past experience

6. Have you ever visited Japan? 1. Yes 2. No (Please go to Part III below)
7. If yes, how many times have you visited Japan? _____ Time(s)
8. If yes, how did you travel on your last trip to Japan? (Please check all that apply)
 1. Alone 2. With Friends 3. With family group 4. With a partner only
9. If yes, how did you arrange your last trip to Japan?
 1. A fully packaged tour
 2. A partially packaged tour with transport and accommodation only
 3. Non-packaged/independent travel

Part III – Novelty Seeking

Directions: Please read each statement and indicate the level of your agreement or disagreement by using the scale below.

Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree	
1	2	3	4	5	
1. I sometimes like to do things on vacation that are a little frightening.	1	2	3	4	5
2. I enjoy doing “daring” activities while on vacation.	1	2	3	4	5
3. Sometimes it is fun to be a little scared on vacation.	1	2	3	4	5
4. I enjoy experiencing a sense of danger on a vacation trip.	1	2	3	4	5
5. I would like to be on a raft in the middle of a wild river at the time of the spring flood waters.	1	2	3	4	5
6. I enjoy activities that offer thrills.	1	2	3	4	5
7. I seek adventure on my vacation.	1	2	3	4	5
8. I like to find myself at destinations where I can explore new things.	1	2	3	4	5
9. I want to experience new and different things on my vacation.	1	2	3	4	5
10. On vacation, I want to experience customs and cultures different from those in my own environment.	1	2	3	4	5
11. On vacation, I enjoy the change of environment which allows me to experience something new.	1	2	3	4	5
12. My ideal vacation involves looking at things I have not seen before.	1	2	3	4	5
13. I want there to be a sense of discovery involved as part of my vacation.	1	2	3	4	5
14. I like to travel to adventurous places.	1	2	3	4	5
15. I feel a powerful urge to explore the unknown on vacation.	1	2	3	4	5
16. I want to travel to relieve boredom.	1	2	3	4	5
17. I have to go on vacation from time to time to avoid getting into a rut.	1	2	3	4	5
18. I like to travel because the same routine work bores me.	1	2	3	4	5
19. I don’t like to plan a vacation trip in detail because it takes away some of the unexpectedness.	1	2	3	4	5
20. I like vacations that are unpredictable.	1	2	3	4	5
21. I would like to take off on a trip with no preplanned routes in my mind.	1	2	3	4	5

Part IV – Perceptions

Directions: The following statements address your perception of **vacationing in Australia and Japan**. Please read each statement and indicate the level of your agreement or disagreement for each country by using the scale below. Please respond to the scale regarding **Australia on the left** and **Japan on the right**.

Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree
1	2	3	4	5

Vacation in Australia	Statements	Vacation in Japan
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	1. It will be a bad way to spend my money. 2. I would rather spend money on purchases at home. 3. It will be a waste of time.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	4. I may become sick from eating food or drinking water. 5. There is a possibility of contracting infectious diseases. 6. Potential health problems are a concern.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	7. I would not let political instability keep me from vacationing here. 8. I will be intimidated by terrorism when vacationing here. 9. Terrorism will influence my decision to vacation here.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	10. It may result in mechanical or equipment problems. 11. Telecommunication systems (phone, fax, etc.) will be inconvenient to use. 12. My baggage may be misplaced or delayed (by airline or hotel).	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	13. It is important that people who I meet speak English during my vacation here. 14. I have concerns about having possible communication problems during my vacation here. 15. I will have problems in communication with others whom I meet during my vacation here.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	16. Having a vacation here will negatively affect others' opinion of me. 17. Friends and relatives will disapprove of my vacation here. 18. I would be concerned what people, whose opinion was of value to me, would think of me, if they considered my vacationing here a bad choice.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	19. The thought of purchasing a vacation here makes me feel uncomfortable. 20. The thought of purchasing a vacation here fills me with anxiety. 21. I worry about purchasing a vacation here.	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5

Appendix D

Number of Survey Recipients assigned to each county and city of Virginia

County and city populations according to Census 2000			
State Total Population: 7,078,515		1.00	2000.00
NAME	Total Population	%	target sample
Accomack County	38,305	0.01	11
Albemarle County	79,236	0.01	22
Alleghany County	12,926	0.00	4
Amelia County	11,400	0.00	3
Amherst County	31,894	0.00	9
Appomattox County	13,705	0.00	4
Arlington County	189,453	0.03	54
Augusta County	65,615	0.01	19
Bath County	5,048	0.00	1
Bedford County	60,371	0.01	17
Bland County	6,871	0.00	2
Botetourt County	30,496	0.00	9
Brunswick County	18,419	0.00	5
Buchanan County	26,978	0.00	8
Buckingham County	15,623	0.00	4
Campbell County	51,078	0.01	14
Caroline County	22,121	0.00	6
Carroll County	29,245	0.00	8
Charles City County	6,926	0.00	2
Charlotte County	12,472	0.00	4
Chesterfield County	259,903	0.04	73
Clarke County	12,652	0.00	4
Craig County	5,091	0.00	1
Culpeper County	34,262	0.00	10
Cumberland County	9,017	0.00	3
Dickenson County	16,395	0.00	5
Dinwiddie County	24,533	0.00	7
Essex County	9,989	0.00	3
Fairfax County	969,749	0.14	274
Fauquier County	55,139	0.01	16
Floyd County	13,874	0.00	4
Fluvanna County	20,047	0.00	6
Franklin County	47,286	0.01	13
Frederick County	59,209	0.01	17
Giles County	16,657	0.00	5
Gloucester County	34,780	0.00	10
Goochland County	16,863	0.00	5
Grayson County	17,917	0.00	5
Greene County	15,244	0.00	4

Greensville County	11,560	0.00	3
Halifax County	37,355	0.01	11
Hanover County	86,320	0.01	24
Henrico County	262,300	0.04	74
Henry County	57,930	0.01	16
Highland County	2,536	0.00	1
Isle of Wight County	29,728	0.00	8
James City County	48,102	0.01	14
King and Queen County	6,630	0.00	2
King George County	16,803	0.00	5
King William County	13,146	0.00	4
Lancaster County	11,567	0.00	3
Lee County	23,589	0.00	7
Loudoun County	169,599	0.02	48
Louisa County	25,627	0.00	7
Lunenburg County	13,146	0.00	4
Madison County	12,520	0.00	4
Mathews County	9,207	0.00	3
Mecklenburg County	32,380	0.00	9
Middlesex County	9,932	0.00	3
Montgomery County	83,629	0.01	24
Nelson County	14,445	0.00	4
New Kent County	13,462	0.00	4
Northampton County	13,093	0.00	4
Northumberland County	12,259	0.00	3
Nottoway County	15,725	0.00	4
Orange County	25,881	0.00	7
Page County	23,177	0.00	7
Patrick County	19,407	0.00	5
Pittsylvania County	61,745	0.01	17
Powhatan County	22,377	0.00	6
Prince Edward County	19,720	0.00	6
Prince George County	33,047	0.00	9
Prince William County	280,813	0.04	79
Pulaski County	35,127	0.00	10
Rappahannock County	6,983	0.00	2
Richmond County	8,809	0.00	2
Roanoke County	85,778	0.01	24
Rockbridge County	20,808	0.00	6
Rockingham County	67,725	0.01	19
Russell County	30,308	0.00	9
Scott County	23,403	0.00	7
Shenandoah County	35,075	0.00	10
Smyth County	33,081	0.00	9
Southampton County	17,482	0.00	5
Spotsylvania County	90,395	0.01	26
Stafford County	92,446	0.01	26
Surry County	6,829	0.00	2

Sussex County	12,504	0.00	4
Tazewell County	44,598	0.01	13
Warren County	31,584	0.00	9
Washington County	51,103	0.01	14
Westmoreland County	16,718	0.00	5
Wise County	40,123	0.01	11
Wythe County	27,599	0.00	8
York County	56,297	0.01	16
Alexandria city	128,283	0.02	36
Bedford city	6,299	0.00	2
Bristol city	17,367	0.00	5
Buena Vista city	6,349	0.00	2
Charlottesville city	45,049	0.01	13
Chesapeake city	199,184	0.03	56
Clifton Forge city	4,289	0.00	1
Colonial Heights city	16,897	0.00	5
Covington city	6,303	0.00	2
Danville city	48,411	0.01	14
Emporia city	5,665	0.00	2
Fairfax city	21,498	0.00	6
Falls Church city	10,377	0.00	3
Franklin city	8,346	0.00	2
Fredericksburg city	19,279	0.00	5
Galax city	6,837	0.00	2
Hampton city	146,437	0.02	41
Harrisonburg city	40,468	0.01	11
Hopewell city	22,354	0.00	6
Lexington city	6,867	0.00	2
Lynchburg city	65,269	0.01	18
Manassas city	35,135	0.00	10
Manassas Park city	10,290	0.00	3
Martinsville city	15,416	0.00	4
Newport News city	180,150	0.03	51
Norfolk city	234,403	0.03	66
Norton city	3,904	0.00	1
Petersburg city	33,740	0.00	10
Poquoson city	11,566	0.00	3
Portsmouth city	100,565	0.01	28
Radford city	15,859	0.00	4
Richmond city	197,790	0.03	56
Roanoke city	94,911	0.01	27
Salem city	24,747	0.00	7
Staunton city	23,853	0.00	7
Suffolk city	63,677	0.01	18
Virginia Beach city	425,257	0.06	120
Waynesboro city	19,520	0.00	6
Williamsburg city	11,998	0.00	3
Winchester city	23,585	0.00	7

CURRICULUM VITAE

Jiho Y. Han

EDUCATION:

Ph.D., Hospitality and Tourism Management, May 2005
Virginia Polytechnic Institute and State University (Virginia Tech),
Blacksburg, VA

M.A., School of Tourism Management, March 1999
Rikkyo (St. Paul's) University, Tokyo, Japan
Thesis: "A Study on the Mutual Development of Corporate and Tourism
Industry through Corporate Convention: The Case of 'IBM Japan's
Corporate Incentive Meeting"
Thesis Advisor: Professor Kazuo Murakami

B.A., Japanese language, February 1994 Minor: English language
Hankuk University of Foreign Studies, Seoul, S. Korea

RESEARCH INTERESTS:

Hospitality Marketing, Tourists' behavior, Communication Issues in
International Tourism, Cross-cultural Studies

ACADEMIC EXPERIENCE:

- Fall 2003 : Teaching assistant for Dr. Pamela Weaver with "Research
methods" and "Advanced research methods"
- Spring 2003: Teaching assistant for Dr. Candice Clemenz with "Catering
Management"
- Spring 2002: Teaching assistant for Dr. Pamela Weaver with "Research
methods" and for Mr. Hyung-Il Jung with "Introduction to
hospitality and tourism management"
- Fall 2001 : Research assistant for Dr. Pamela Weaver
- Spring 2001: Teaching assistant for Mr. Howard Feiertag with
"Hospitality Sales" and for Dr. Ken McCleary with "Wines
and the hospitality industry"
- Fall 2000 : Teaching assistant for Mr. Howard Feiertag with "Intro to
and convention management" and for Mr. Hyung-Il Jung with
"Intro to hospitality and tourism management"

1998: Undergraduate Teaching Assistant, School of Tourism Management,
Rikkyo (St. Paul's) University, Japan

INDUSTRY EXPERIENCE:

May 1998 to March 2000
Office Administrator, Tokyo Convention & Visitors Bureau, Tokyo, Japan

January 1994 to January 1996
Associate in Strategic Planning Team for Semiconductor Division
Samsung Electronics Co., Ltd., Korea

PUBLICATIONS:

Clemenz, C., Weaver, P., Han, J., and McCleary, K. (2004). "Categories of Participants Based on Their Expectations of Instructor-led Training", Journal of Quality Assurance in Hospitality & Tourism, 4(3/4), 135-148.

PRESENTATIONS:

Han, J. and Weaver, P. (2003). "Graduate distance learning programs in hospitality and tourism management: perceptions of students on and off campus", 2003 Annual International Society of Travel and Tourism Educators (ISTTE) Conference Poster presentation, Rhode Island, U.S.A.

Han, J. and Weaver, P. (2003). "Communication Problems in Foreign Travel", Advances in Hospitality and Tourism Research, Volume VIII, Edited by Hailin Qu and Patrick Moreo.

Han, J. Clemenz, C., and Weaver, P. (2003). "Exploring expectations of trainees: what trainees expect when attending instructor-led training sessions ", Advances in Hospitality and Tourism Research, Volume VIII, Edited by Hailin Qu and Patrick Moreo.

You, Hyoung-Sook. and Han, J. (1998). Motives and Preferred Behavior; An Application of Structural model to Japanese students. '98 Tanyang International Tourism Conference; Graduate Program, Korea.

Han, J. (1998). The Important Role of Tourism Industry in Corporate Convention. Annual Conference of Japanese Institute of Tourism Research, Osaka, Japan.

ACTIVITIES:

Fall 2003 – Spring 2004

Delegate of Hospitality and Tourism Management Department
Graduate Student Assembly, Virginia Tech.

Fall 2002 – May 2005

Volunteer member
Graduate Honor System, Virginia Tech

Fall 2002 – Spring 2003

Staff officer, Virginia Tech Chapter
Korean-American Scientist and Engineers Association (KSEA)

1999: Assistant for Dr. Isamu Maeda, Dean of Graduate School of
Tourism, Rikkyo University, Japan (To assist Annual International
Seminar between Hanyang University of Korea and Rikkyo
University)

1998: Editorial Board Member of St. Paul's Annals of Tourism Research,
Rikkyo University