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MULTISENSORY PROCESSING IMPACTS ON DESTINATION IMAGE  
AND WILLINGNESS TO VISIT

A Dissertation in  
Recreation, Park and Tourism Management

by  
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## ABSTRACT

Large sums of money have been spent to build positive images of products and services. Thus, it is not surprising that much attention has been devoted to studying image, especially within the travel and tourism context. Image is defined as the impressions that a person or persons hold about a state in which they do not reside (Hunt, 1971). Image is also considered to be a set of beliefs, ideas, and impressions that a person holds regarding an object. Gunn (1972), who was one of the first researchers to develop a conceptual framework of destination image, theorized that destination image consists of two major components—organic and induced. Organic images are based primarily upon information assimilated from non-touristic, non-commercial sources, such as the general media (news reports, magazines, books, movies); education (school courses); and the opinions of family and friends. Induced images are formed through more commercial information sources such as travel brochures, travel agents and travel guidebooks. Hence, people can have images without actually visiting a destination, and their images can be impacted through multi sensory processing such as seeing a travel brochure, smelling the surrounding environment, listening to music, tasting a local dish, and touching handicrafts. Unclear is to what extent each type (i.e., seeing, smelling, listening, tasting, touching) of multi sensory processing influences image?

The purpose of this study is to investigate the impact of multisensory processing on individuals' image of South Korea as a tourism destination while comparing study participants' responses to the dependent variable of empathy, image of South Korea and

willingness to visit. This study employed a 2 x 2 between subject experimental design in which 1,027 participants were randomly assigned to one of the group (i.e., control, video, blog, drama) that theoretically influenced by their image of the travel destination. The structure equation model results showed that the proposed causal model for the multisensory processing, fit the data satisfactorily ( $\chi^2 = 187.50$ ,  $df = 45$ , NNFI = .986, CFI = .990, RMSEA = .055). Thus, multisensory processing of both narrative and video had significant effect on empathy, images, and willingness to visit.

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## Chapter 1

### Introduction

Brand, country and other place images are mental pictures that exist in peoples' mind. Every country, state, city or place has an image that influences tourism development. Positive images can induce tourism growth and negative images can decrease tourism flow. While there has been research on various factors that contribute to image, no research exists on the impact of multisensory processing on image; thus, it is the primary purpose of this study.

Hunt (1975) defined image as the impressions that a person or persons hold about a state in which they do not reside. He went on to suggest that image is a multidimensional construct, and that brand identification as well as people's perceptions of attributes of various activities or attractions within an area will interact to form a composite image of a destination. In 1979, the World Tourism Organization (WTO) defined image of a destination as "an aura, an angle, [and] a subjective perception accompanying the various projections of the same message transmitter" (p. 2). Adopting a broader perspective, Crompton (1979) defined image as the sum of beliefs, ideas, and impressions a person has of a travel destination. Gunn (1988) and Gartner (1989) suggested that image is a complex combination of various products and associated attributes. Nearly a decade later, Kotler (1997) defined image as "...the set of beliefs, ideas, and impressions that a person holds regarding an object..." (p. 607). The objects may be actual or potential products (Kotler, 1997). With potential products, imagination,

defined as a “conscious mental process of evoking ideas or images of objects, events, relations, attributes, or processes never before experienced or perceived” (Microsoft Encarta, 2011), is necessary to evoke images. “People’s attitudes and actions toward [actual and potential] object[s] are highly conditioned by that object’s image” (Kotler, 1997, p. 607). Thus, “what motivates consumer behavior is not the true attributes of products but rather mental images in the minds of consumers” (Jaffe & Nebensahl, 2006, p. 15).

### **Destination Image and Multisensory Processing**

According to Gunn (1997), destination image consists of two major components—organic image and induced image. The organic image of a destination is what an individual already knows or perceives about a destination. Organic images are formed through actual visitation, together with the impressions individuals have of an area without having visited (Matejka, 1973). Organic images are formed through newspapers, other media, periodicals, dramas, novels and nonfiction, information received and processed from friends and relatives (Matejka, 1973), and other indirect information sources (Connell, 2005). Induced images, on the other hand, are formed through paid advertisement (Perry et al., 1976) and public relations. A destination hoping to shape its image must recognize that multiple factors may intervene to determine consumers’ resulting image. One such factor is multisensory processing.

Consumers create organic and induced images through multisensory processing (i.e., sight, hearing, touch, taste and smell) (MacInnis & Price, 1987). This distinct way of processing is often described as mental picturing/imagery (Echtner & Ritchie, 2003).

Positive content of consumer imagery stimulated by an advertisement is thought to result in positive affect. Bone and Ellen (1992) noted that a positivity bias is associated with imagery because people do not like to fantasize about negative outcomes. Hence, as Babin and Burns (1997) recognized, there is generally a positive feel to advertisements. While advertisers can stimulate imagery by employing a variety of promotional communication strategies (e.g., TV advertising, brochures), Connell (2005) found that individuals' image of a destination is more likely to be affected by non-promotional communications such as movies, souvenirs, postcards, other people's referral, and traditional foods. People who touch souvenirs; smell/taste traditional foods; or see or hear about tourist destinations through postcards or referral, dramas, and movies, will theoretically produce a more positive image of destinations.

In this study, image will be defined as a person's impression, mental knowledge, belief, idea, and memory of a destination. Image will be derived from several forms of communication, all of which involve multisensory processing.

One example of non-promotional communication—movies or “film tourism”—has gained momentum worldwide. It has been fueled by both the growth of the entertainment industry and the increase in international travel. Appealing to wide and diverse markets, film tourism offers something for everyone, just like the films themselves, and tourism organizations can use films as springboards for marketing campaigns if the films are seen as appropriate for the destination (Hudson & Ritchie, 2006<sup>a</sup>). In response, tourists are expected to identify with the location(s) in the film and express an interest in visiting. Riley and Van Doren (1992) linked movies to Ritchie's concept of “hallmark” or special events. Ritchie (1984, p. 2) defined hallmark events as

Major one-time or recurring events of limited duration, developed primarily to enhance the awareness, appeal and profitability of a tourism destination in the short and/or long term. Such events rely for their success on uniqueness, status, or timely significance to create interest and attract attention.

Movie induced tourism generates tourist visits because of the shooting location and the empathy aroused through the movie's story. The fact that individuals response to a movie can result in visitation to the destination within which the movie was shot is plausible (Kim & Richardson, 2003).

Another non-promotional communication tool is ethnic foods. Unlike tourists in the traditional sense, culinary tourists can explore the exotic without leaving their own neighborhood. Ethnic restaurants are one of an increasing number of arenas in which people can engage in touristic practices within their own culture and as part of their everyday life (Long, 2004). According to Urry, "people are much of the time tourists" (1990, p. 82) who "gaze" every day upon local sights such as restaurants. Directly promoting a country's local foods, gastronomic culture and restaurants is an indirect promotional and marketing strategy (Hjalager, 2004). In fact, many Asian countries (Hong Kong, Japan, Korea, Singapore, Taiwan and Thailand) have used culinary marketing on their government websites to provide information to prospective tourists on all aspects of their countries' culinary tourism experiences (Horng & Tsai, 2010).

A third example of a non-promotional communication tool is referral from friends, family or others through receiving a postcard, receiving a souvenir, and direct referral. For example, people like to be reminded of special moments and events, and a souvenir serves as such a reminder; indeed, the word means, "to remember." Tourists

return home carrying souvenirs and talking of their experiences. People who receive souvenirs as a gift are in effect receiving a piece of heightened reality, and are able to share it to a certain extent. Also, “souvenirs function as metonymic signs rather than metaphoric symbols. They are perceived as part of the history, essence, or experience of that location” (Leach, 1976, p. 135).

Advancements on the Internet now allow consumers to contribute and access personally meaningful critiques not only from friends and relatives but also from strangers. Given that all blogging activities are created and consumed by bloggers, the two basic behavioral orientations are that of social interaction and information search (Kurashima, Tezuka, & Tanaka, 2005; Puhlinger & Taylor, 2008). Due to their increasing popularity, travel blogs may represent the most explosive outbreak of information the world has ever seen since the creation of the Internet (Baker & Green, 2005).

The alternative to non-promotional communication—promotional communication—also affects image formation. The primary example of promotional communication is television, a centralized system of storytelling and the source of the most broadly shared images and messages in history. Its dramas, news, and other programs bring images and messages into most every home in the United States as non-promotional communication. In the 1960s, Gerbner devised a way of thinking about the effect of this media which he called, “cultivation.” The most general hypothesis of cultivation analysis is that those who spend more time watching television are more likely to see the real world in terms of the images, values, portrayals, and ideologies that emerge through the lens of television. The cultivation differential is the margin of



difference between light and heavy viewers (Gerbner, Gross, Morgan, Singnorielli, & Shanahan, 2002, p. 47). Significant differences in stereotypes of ethnic groups or foreign countries have been identified based on amount of television viewing (Fujioka, 1999; Lee, Bichard, Irely, Walt, & Carlson, 2009; Taylor & Stern, 1997; Wanta, Golan, & Lee, 2004). Given that the theory of cultivation was developed when television in the United States meant three national broadcast networks, plus a small handful of independent and public/educational stations, Morgan (2009) suggests the cultivation effect be addressed with newer forms of communication including the Internet. Research has documented that people have a cultivated image of other countries through television news, the Internet, and interaction with people from other countries. Also, many people have tried foods and received souvenirs from other countries, seen movies filmed in other countries, and viewed pictures taken in destinations around the world. Thus, people's cultivated image may depend on, for example, the time they've spent watching television or their level of interaction with people from other countries.

Similar to the theory of cultivation is exemplification theory which, according to Zillman (1999, p. 69), is about "judging the whole by some of its parts." Exemplars provide samplings of information about past occurrences that foster dispositions and ultimately direct behavior. In essence, exemplars (e.g., TV news about a country, friends or relatives' referrals, images from movies or TV dramas) serve as the basis for judging a larger body of similar occurrences. As Zillman noted, "...recipients give disproportional attention to concrete, often vividly displayed events, especially to those that engage the recipients' emotions, and... this attention preference comes at the expense of attention to more abstract comparatively pallidly presented information" (p.70).

According to Urry (2002, p. 3),

Places are chosen to be gazed upon because there is anticipation, especially through daydreaming and fantasy, of intense pleasures, either on a different scale or involving different sense form those customarily encountered. Such anticipation is constructed and sustained through a variety of non-tourist practices, such as film, TV, literature, magazines, records and videos, which construct and reinforce that gaze.

Cultivated or exemplified images from TV dramas, blogs, literature, and food can be understood through the concept of empathy. “Empathy is the capacity to recognize and, to some extent, share feelings (such as sadness or happiness) that are being experienced by another sentient or semi-sentient being” (Micro Encarta, 2011). Specifically, a cultivation/exemplification effect can be generated through the empathy people have toward a country after being exposed to cultivated images. And, empathy can positively impact people’s willingness to visit the countries. When an individuals’ cultivated image is combined with their personal experience, the result is an overall image of the destination. A positive overall image can affect people’s willingness to visit other countries (Tapachai & Waryszak, 2000).

Researchers have studied the effect of non-promotional communication on destination image (e.g., Hudson & Ritchie, 2006; Leach, 1976; Markwick, 2001; Yuksel & Akgul, 2007). However, to my knowledge no research exists on the impact of multisensory processing on destination image, and researchers have not compared the

impact of non-promotional and promotional forms of communication on tourism destination image.

Researchers have investigated the relationship between destination image and destination choice behavior (Alcaniz, Garcia, & Blas, 2009; Bigne, Sanchez, & Sanchez, 2001; Chen & Tsai, 2007; Hong, Kim, Jang, & Lee, 2006; Lee, O'Leary, & Hong, 2002; Nadeau, Heslop, O'Reilly, & Luk, 2007; Prebensen, 2007), but no one has accounted for the effect of multisensory processing or mediating variables such as empathy.

A destination that generates a new or modified position in the hope of shaping its image must recognize that multiple factors, including multisensory processing (i.e., sight, hearing, touch, taste and smell), may intervene to determine consumers' resulting image. Consumers create images through multisensory processing, which may lead to better recall of information and have a greater impact on their attitudes than verbal processing alone (MacInnis & Price, 1987). The multisensory process of creating images, also known as imagery, has been defined by psychologists as a distinct way of processing and storing multisensory information in working memory (Echtner & Ritchie, 2003).

In this study I chose to focus on South Korea as the tourism destination for a number of reasons. First, movies/motion pictures filmed on location in South Korea have induced tourism. The same is true of South Korea's growing pop culture, *Hallyu (The Korean Wave)* (Choi, 2006; Chun, 2004; Kim, Agrusa, Lee, & Chon, 2007; Wiseman, 2004). Second, the movies/motion pictures and pop culture have positively impacted the image of South Korea as a tourism destination (Kim, 2011; Kim, Agrusa, & Chon, 2007). Third, South Korea has been directly promoting its local foods and gastronomic culture via the KNTTO website (Horng & Tsai, 2010). As a result, Hallyu and Korean cuisine are

currently the foci of the tourism marketing strategy in South Korea. Hallyu and South Korean cuisine represent non-promotional approaches that involve multisensory processing, which theoretically can positively impact South Korea's destination image. Interestingly, KNTTO has incorporated these non-promotional forms of communication into their strategic marketing efforts without knowing whether they really work in shaping image. Thus, I chose to investigate the impact of multisensory processing on individuals' image of South Korea as a tourism destination.

### **Purpose Statement**

The primary purpose of this study is to investigate the impact of multisensory processing on individuals' image of South Korea as a tourism destination. A secondary focus is to compare the impact of multisensory processing on empathy as well as willingness to visit. Figure 1 provides a representation of the relationships that are to be investigated.

One research question and six hypotheses will guide my inquiry:

*Research Question 1: In what way, if any, does multisensory processing induce empathy for South Korea?*

*Hypothesis 1: Multi sensory processing will be directly associated with empathy, images, and willingness to visit South Korea.*

*Hypothesis 2: Empathy will be directly associated with images, and willingness to visit South Korea.*

*Hypothesis 3: Images will be directly associated with willingness to visit South Korea.*

*Hypothesis 4: Multi sensory processing will be indirectly associated with images via empathy.*

*Hypothesis 5: Multi sensory processing will be indirectly associated with willingness to visit South Korea via empathy and images.*

*Hypothesis 6: Empathy will be indirectly associated with willingness to visit South Korea via images.*

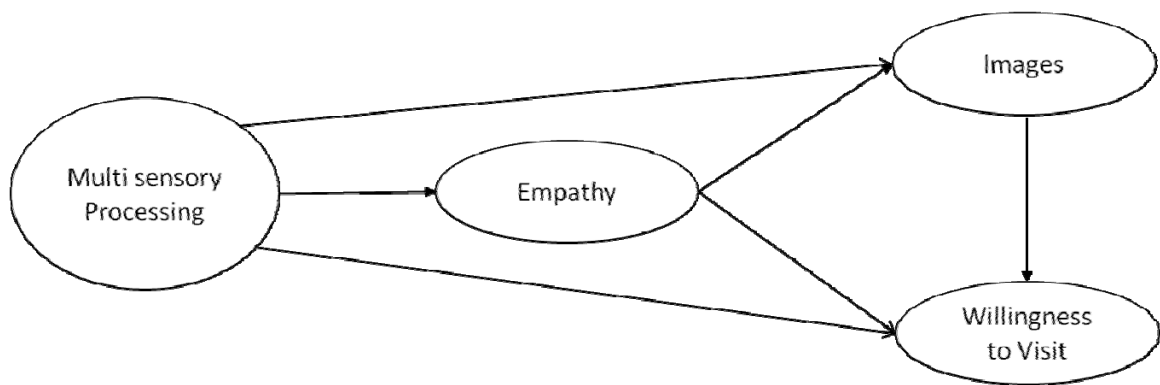


Figure 1: A proposed model of multisensory processing impacts on images and willingness to visit

I expect that the results of this study will enable tourism professionals to better understand what factors contribute to the overall image of and willingness to visit a destination. Given the fiscal constraints faced by tourism professionals, such information should lead to more effective and efficient use of marketing dollars. In addition, I expect the results to lead to a broader conceptual framework of tourism image development for researchers and, ultimately, more useful research for the tourism industry.

## **Definitions**

For the purpose of this study, terms are defined as follows:

**Image:** The image concept has generally been considered as an attitudinal construct consisting of an individual's mental representation of knowledge (beliefs), feelings, and global impression about an object or destination (Baloglu & McCleary, 1999, p. 870).

Image is the sum of beliefs, ideas, and impressions a person has of a travel destination (Crompton, 1979).

**Induced image:** The formation of image has been described by Reynolds (1965, p. 69) as “the development of a mental construct based upon a few impressions chosen from a flood of information. In the case of destination image, this flood of information has many sources including promotion (advertising and brochures); the opinions of others (family/friends, travel agents); media reporting (newspapers, magazines, television news reporting and documentaries); and popular culture (motion pictures, literatures).”

Actually visiting the destination in combination with exposure to these additional sources of information results in an induced image (Echtner & Ritchie, 2003).

**Multi-sensory processing:** Sensory processing is immediate, powerful, and can lead to profound changes in consumer attitudes. Our senses are our link to memory and can tap right into emotion. Thus, marketers should use the emotional connection to bring on the five senses (Gobe, 2001; Lindstrom, 2005).

Tourism destination: A geographical region, political jurisdiction, or major attraction, which seeks to provide visitors with a range of satisfying to memorable visitation experiences. A place tourists visit outside of their normal place of residence (Bornhorst, Ritchie, & Sheehan, 2010).

Willingness to visit: Intention to visit or tourists' future behavior. A strong link exists between memorable destinations in consumers' minds as places to visit, attitudes, and intentions toward actually visiting the destinations (Thompson & Cooper, 1979, Woodside & Sherrell, 1977).

## **Chapter 2**

### **Literature Review**

This review begins with a discussion regarding the general literature on destination image and the image formation process. The review closes with a discussion of the impact of multi sensory processing on tourists' destination image.

### **Destination Image**

Large sums of money have been spent to build positive images of products and services. Thus, it is not surprising that a great deal of attention has been devoted to studying image, especially within the travel and tourism context. According to Kotler (1997, p. 607), "image is the set of beliefs, ideas, and impressions that a person holds regarding an object. People's attitudes and actions toward an object are highly conditioned by that object's image." Also, according to Baloglu and McCleary (1999, p. 870), "the image concept has generally been considered as an attitudinal construct consisting of an individual's mental representation of knowledge (beliefs), feelings, and global impression about an object or destination."

Over the past 30 years numerous image studies have been published in the tourism literature. According to Pike (2002), 142 manuscripts on destination image were published in the literature between 1973 and 2000. As early as the 1960s the United States Travel Service found that the image of the United States and Americans was more



favorable among those who had visited the country than those who had not visited the U.S. By the 1970s image as a focus of study caught on with researchers. Gunn (1972), who was one of the first researchers to develop a conceptual framework of destination image, theorized that destination image consists of two major components—organic image and induced image. The organic image of a destination is what an individual already knows or perceives about a destination. Organic images are formed through actual visitation, together with the impressions individuals have of an area without having visited (Matejka, 1973). Organic images are formed through newspapers, other media, periodicals, dramas, novels and nonfiction, information received and processed from friends and relatives (Matejka, 1973), and other indirect information sources (Connell, 2005). Induced images, on the other hand, are formed through paid advertisement (Perry et al., 1976) and public relations. Hunt (1975) referred to image as a multidimensional construct, but argued that brand identification as well as people's perceptions of attributes of various activities or attractions within an area will interact to form a composite image of a destination. Adopting a broader perspective, Crompton (1979) defined image as the sum of beliefs, ideas, and impressions that a person has of a travel destination.

Mayo (1973) was one of the first researchers to link image of a destination area to consumers' destination choice process. In a study of the image formation process, LaPage and Cormier (1977) found that favorable destination images held by actual and potential tourists can play a critical role in the destination choice process and in determining the quality of the experience at a destination. According to Goodrich (1978<sup>b</sup>), individuals' perception of a product or service plays an important role in their decision regarding that

particular idea, product, or service. In other words, the more favorable the perception, the greater the likelihood it will be chosen from among similar alternatives.

During the 1970s a number of researchers studied the positive images of destinations, but did so using alternative descriptors such as: touristic attractiveness (Gearing, Swart, & Var, 1974; Goodrich, 1977, 1978<sup>a</sup>; Ritchie & Zins, 1978; Var, Beck, & Loftus, 1977); perceptions (Goodrich, 1978<sup>b</sup>; Riley & Palmer, 1975); tourists' preferences (Scott, Schewe, & Frederick, 1978); dimensions of tourist satisfaction (Pizam, Neumann, & Reichel, 1978); and tourists' resources (Ferrario, 1979).

By the 1980s, a few researchers continued to focus on tourists' positive image of destinations, but others began to address various factors relationship with image. For example, Woodside and Lysonki (1989) found that people are more likely to choose to visit destinations that have a strong and positive image. And, McLellan and Foushee (1983) noted that the image of a travel destination is a mixture of both positive and negative perceptions. Other approaches to the study of image have included: perception rather than image (Calantone, Benedetto, Hakam, & Bojanic, 1989); the contribution of experience to the formation of an image while recognizing that the nature of the image will vary with the individual (Phelps, 1986); customers' subjective perceptions of how an alternative performs on important evaluative criteria (Engel, Blackwell, & Miniard, 1986); and the notion that image may be comprised of both cognitive and evaluative components (Embacher & Buttle, 1989).

In the 1980s, Gunn (1988) and Gartner (1989) argued that image is a complex combination of various products and associated attributes. Tyagi (1989) suggested that the process underlying image formation is not static. In response, various authors

proposed multi-stage models for studying image formation. Berkman and Gilson (1986) proposed a five-stage model (i.e., need recognition, information search, evaluation of alternatives, choice of product or service, and post purchase evaluation) and Gunn (1988) proposed a seven-stage model. The first step in Gunn's model is an accumulation of mental images about the vacation experience. The second step is a modification of those images based on further information. The third step involves the decision to take a vacation. The fourth step is travel to the destination. The fifth step is participation in experiences at the destination. The sixth step is return travel. And the last step is an accumulation of new images based on experiences at the destination. He asserted that the last steps of the model involve continuous building and modification of images.

By the 1990s, researchers continued to believe that image was the total impression an entity makes on the minds of others (Echtner & Ritchie, 1991; Milman & Pizam, 1995); the set of beliefs, ideas, and impressions that a person holds of an object (Kotler, 1997); or the combination of perceptions formed through advertising, promotion, news accounts, conversations with friends and relatives, travel agents, and past contact/experiences (Bojanic, 1991; Dann, 1996). But, Fakeye and Crompton (1991) challenged their thinking by suggesting that image formation is hierarchical, evolving from an organic image, through an induced image, to a complex image. "Images are of paramount importance because they transpose representation of an area into the potential tourist's mind and give him or her pre-taste of the destination" (p. 10). Image in this definition was linked to the informative, persuasive, and reminding functions of promotion.

The notion that tourists may have multiple images was forwarded by Ahmed

(1991) and Gilbert (1990). Ahmed suggested that tourists develop an image of everything at a destination, but also form selected impressions because they attend to the information that is most closely tied to their own personal interests. Gilbert, on the other hand, suggested that a tourist may have an image of a destination, the “holiday” itself, the mode of transportation utilized, the tour operator or travel agency, or some combination of these. These various images result in what Walmsley and Jenkins (1992) refer to as environmental images, cognitive maps, or mental maps. According to Crompton, Fakeye and Lue (1992), these images create a position for the destination in the mind of the consumer. In contrast to image, position requires a frame of reference which is provided by competitive destinations. Positioning involves identifying potential visitors’ perception of the strong attributes of a destination, comparing them with their perceptions of the attributes of competitive destinations, and selecting those that differentiate a destination from its competitors.

During the 90s researchers also began to address the impact of image on other factors influencing tourist behavior. For example, Dadgostar and Isotalo (1995) questioned whether destination image contributes to time spent by tourists at a destination. Hu and Ritchie (1993) assessed whether the attractiveness of a travel destination reflects the feelings, beliefs, and opinions that an individual has about a destination’s perceived ability to provide satisfaction. Bramwell and Rawding (1996) wondered whether images of places were formed from the interaction between projected place messages and consumers’ own needs, motivations, prior knowledge, experience, and other personal characteristics. Fesenmaier and MacKay (1996) asked whether

ordinary places become tourist places when they are attributed particular meaning and values that appeal to and attract tourists. And, Ahmed (1996) questioned whether tourists' images of destinations influence their behavior, attitudes, and predispositions as consumers.

In the 20<sup>th</sup> century researchers have primarily focused on perceptions rather than image (Gallarza, Saura, & Garcia, 2002). The belief is that perceptions are closely related to attitudes, motivation, and consumptive behavior (Ajzen, 2001), and represent an impression, belief, ideal, expectation and feeling accumulated towards a place over time (Kim & Richardson, 2003). In this study, image will be defined as a person's impression, mental knowledge, belief, idea, and memory of a destination, which is derived from several communication channels. Normally, the most commonly used communication channel is advertising material from tourism agencies. However, people do have access to several other channels of communication such as word of mouth, a friend's photographs, television news, movies, experiences with international cuisine, and more. Experiences with these other channels of communication are referred to as multi sensory processing which, theoretically, can dramatically influence individuals' image of a destination. A destination's image can be modified through promotional or non promotional effects, which generally have been studied through traditional-effects cultivation research in communication (Gerbner et al., 2002).

Traditional-effects cultivation research is based on evaluating specific informational, educational, political, or marketing efforts in terms of selective exposure and measuring before/after differences between those who were and were not exposed to a message. To the extent that television dominates individuals' sources of entertainment

and information, continued exposure to its messages is likely to reiterate, confirm, and nourish their impressions of products, services, and places such as tourism destinations. Cultivation is thus a continual, dynamic, ongoing process of interaction among messages, audiences, and contexts. People already have cultivated images of other countries through television news, the Internet, and direct contact with people from other countries. Through everyday life people have multi-sensory experiences with foods, souvenirs, movies, and pictures from other countries. Thus, cultivated image levels differ by individual.

Fujioka (1999) argued that the effects of mass media are more significant when direct information is limited. Also, Hoch and Ha (1986) concluded that advertising has dramatic effects on perceptions of quality when consumers are exposed to ambiguous evidence. Thus, in this study it is expected that individuals who have less awareness (and as a result are likely to be less ambiguous) about a tourism destination will be impacted more by cultivated images than their counterparts.

### **Multisensory Processing**

A destination that generates a new or modified position in the hope of shaping its image must recognize that multiple factors, including multisensory (i.e., sight, hearing, touch, taste and smell) processing, may intervene to determine consumers' resulting image.

Consumers create images through multisensory processing, which may lead to better recall of information and have a greater impact on their attitudes than verbal

processing alone (MacInnis & Price, 1987). The multisensory process of creating images, also known as imagery, has been defined by psychologists as a distinct way of processing and storing multisensory information in working memory. This way of processing, also described as mental picturing, is incorporated into imagery processing (Echtner & Ritchie, 2003). Recognizing that individuals have a distinct approach to processing and storing information, advertisers have attempted to influence image. This is because positive content of consumer imagery stimulated by brochures, magazines, television advertisements, photographs, and, more recently, Internet advertising, is thought to result in positive affect (Babin & Burns, 1997).

While advertisers can stimulate imagery by employing a variety of promotional communication strategies (e.g., TV advertising, brochures), Connell (2005) found that individuals' image of a destination is more likely to be affected by non-promotional communication. Examples of non-promotional communication include motion pictures (e.g., Braveheart) and travel shows. Both have become important tools for raising awareness of places, as they have tourist inducing effects (Hanefors & Mossberg, 2002; Stewart, 1997). In addition, researchers have suggested that people who touch souvenirs; smell/taste traditional foods; or see or hear about tourist destinations through photographs or postcards, dramas, and movies, will have a more positive image of destinations.

### **Empathy**

The term empathy is currently applied to more than half-dozen phenomena. Those phenomena are related to one another, but they are not elements, aspects, facets, or components of a single thing that is empathy, as one might say that an attitude has

cognitive, affective, and behavioral components. Rather, each is a conceptually distinct, stand alone psychological state. Further, each of these states has been called by names other than empathy. (Batson, 2009, p. 3)

Davis (1983) argued that empathy is a multidimensional construct and, in the broadest sense, refers to the reactions of one individual to the observed experiences of another. Batson (2009) agreed that empathy is multidimensional, but suggested that the phenomena of empathy are: 1) knowing another person's internal state, 2) adopting the neutral responses of and observed other, 3) coming to feel as another person, 4) intuiting or projecting oneself into another's situation, 5) imagining how another's thinking and feeling, 6) imagining how one would think feel in the other's place, 7) feeling distress at witnessing another person's suffering, and 8) feeling for another who is suffering.

In a tourism context, researchers (Baker & Fesenmaier, 1997; Fick & Ritchie, 1991; Kouthouris & Alexandris, 2005; Park & Gretzel, 2007; Woosnam, Norman, & Ying, 2009) have accounted for empathy when measuring service quality using Parasuraman, Zeithaml, and Berry's (1988) SERVQUAL measure. Empathy also has been considered in importance-performance analysis (Deng, 2007), and in studies of sympathetic understanding with residents (Hsu & Lee, 2002; Mordue, 2009; Pearce, 2011; Reisinger & Turner, 2002; Wang & Fesenmaier, 2004; Woosnam, 2010; Woosnam & Norman, 2010).

According to Paskaleva-Shapira (2007), tourism destinations are placing a growing emphasis on inspiring visitors, creating lifelong memories, and generating empathy towards "place." Pan (2011) believes that destinations should continue to do this as the image of tourist interactions with family and friends creates empathy that



reinforces existing motivations to visit a tourism destination. Dickinger (2011) suggests that this strategy be introduced online where, for many the information is perceived to be credible, relevant and trustworthy.

Kim and Richardson (2003) suggest that empathy can be aroused through vicarious experiences, which include watching movies or viewing advertisements. For example, when people watch movies filmed in unique destinations, they are able to vicariously experience the place (Kim & Richardson, 2003). With respect to advertising, Boller (1990) found that viewing an advertisement allows individuals to understand how they might experience the product portrayed by the characters in the advertisement. These authors have concluded that both non-promotional and promotional material induce empathy amongst viewers. Some tourism advertising impact study use similar concept of empathy to measure AIDA (attention, gain interest, desire, and action) pattern (Decrop, 2007; Kim, Hwang, & Fesenmaier, 2005; Dann, 1996<sup>b</sup>).

### **Induced Image**

According to Gunn (1988), destination image consists of two major components—organic image and induced image. Organic images are formed through actual visitation whereas induced images are the impressions individuals have of an area without having visited (Matejka, 1973; Perry et al., 1976). Induced images are formed through advertising in magazines (Perry et al., 1976), newspapers and other media; news reports; information received and processed from friends and relatives (Matejka, 1973); and other indirect information sources (Connell, 2005).

### **Image Induced Through Souvenirs**

“Tourists return home carrying souvenirs and talking about their experiences, spreading, wherever they go, a vicarious experience” (MacCannell, 1976, p. 185). As Gordon (1986) noted, “People like to be reminded of special moments and events, and a souvenir serves as such a reminder; indeed, the word itself means ‘to remember’” (p. 135). Also, “souvenirs function as metonymic signs rather than metaphoric symbols. They are perceived as part of the history, essence, or experience of that location” (Leach, 1976, p. 135). Other researchers stated that one of the attributes of souvenirs is uniqueness (memory of trip) and representation of the place (Littrell et al., 1994; Turner & Reisinger, 2001). Swanson and Horridge (2005) found that travel motivations have an influence on souvenir products, product attributes, and store attributes. Many well known tourism destinations have symbolic souvenirs such as the Eiffel Tower in Paris, the Statue of Liberty in New York, the Great Wall in China, the London Bridge in England, and the Tower of Pisa in Italy. These symbolic souvenirs have a strong effect on destination image perception (Hunter & Suh, 2007).

### **Image Induced Through Postcards and Photographs**

Postcards have been referred to as the universal souvenir (Gordon, 1986). They are purchased by tourists everywhere, including tourists who ordinarily don't buy souvenirs. “It is the largest seller, by far, of any souvenir and is found in spots that carry no other souvenir items” (Stefano, 1976, p. 122). According to Yuksel and Akgul (2007), postcards evoke positive emotions, which affect recipients' willingness to consider the

destination for a holiday. In fact, the old saying, “a picture is worth a thousand words” has never been more true than for the promotion of places as tourist destinations (Jenkins, 2003). Further, photographs of scenery are a powerful component of tourist destination marketing.

### **Image Induced Through Travel Blogs**

Blogs are an Internet-based tool and a relatively new form of market intelligence arising from peer to peer communication over the Internet (Puhringer & Taylor, 2008). MySpace or Facebook are the largest social networks worldwide, having more than 750 million active users. Those users can present themselves online through a profile, accumulate friends who can post comments on each other’s pages, and view each other’s profiles. Users can join groups with common interests, see what attributes they have in common, and via the profile, learn each others’ hobbies, music tastes, work-related information, romantic relationship initiation, and more (Del Conte, 2007). Advancements on the Internet now allow consumers to contribute and access personally meaningful critiques not only from friends and relatives, but also from strangers. Given that all blogging activities are created and consumed by bloggers, the two basic behavioral orientations are that of social interaction and information search (Kurashima, Tezuka, & Tanaka, 2005; Puhringer & Taylor, 2008). Due to their increasing popularity travel blogs may represent the most explosive outbreak of information the world has ever seen since the creation of the Internet (Baker & Green, 2005).

### Image Induced Through Television Dramas or Movies

“Film tourism is a growing phenomenon worldwide, fueled by both the growth of the entertainment industry and the increase in international travel. The benefits of film tourism are becoming increasingly apparent. Appealing to wide and diverse markets, film tourism offers something for everyone, just like the films themselves, and tourism organizations can use films as springboards for marketing campaigns if the films are seen as appropriate for the destination.”

(Hudson & Ritchie, 2006<sup>a</sup>, p. 387)

How films shape destination images, increase tourist numbers, and affect tourism has been studied by various researchers (Ashworth & Voogd, 1994; Beeton, 2001; Hudson & Ritchie, 2006<sup>b</sup>; Kim & Richardson, 2003; Urry, 1990). Examples of the impact of historically-based films on travel destinations include: visitation to Rome, particularly the Coliseum, arising from *Gladiator*; visitation to the western part of the United States as a result of the depiction of the Wild West in western films; battlefield tourism stimulated by Civil War epics such as *Gettysburg*, *Gods and Generals*, and *Cold Mountain*; and visits to castles and historic landscapes encouraged by medieval epics such as *Braveheart* and *A Knight's Tale*. Croy and Walker (2003) and Frost (2006) recognized the success of *Braveheart* in promoting Stirling in Scotland. Kim, Agrusa, Lee, and Chon (2007) investigated the effects of the Korean television drama series, *Winter Sonata*. They found a dramatic increase in Japanese tourist flow to Korea. Connell (2005) witnessed increased demand from family tourists on the Isle of Mull, Scotland as a result of the popular pre-school program *Balamory*, which aired on BBC TV. Other

examples include increased tourism to: the temple of Angkor Wat as a result of the movie, *Tomb Raider* (Winter, 2002); Australia due to the movie, *Crocodile Dundee* (Riley & Van Doren, 1992; Riley, Baker & Van Doren, 1998); and London due to the movie, *Notting Hill* (Busyby & Klug, 2001). In Korea, the same phenomenon has been observed. According to Joongang Daily (2004), Korean movies (e.g., *TaeGukGi: Brotherhood of War*) and Korean TV dramas (e.g., *All-In*, *Winter Sonata* and *Daejanggeum*) have been a big hit in Asian countries and have dramatically impacted Korea's image as a travel destination. These media also have produced a sizeable economic impact from tourism. The economic impact of *Winter Sonata*, for example, reached \$1 billion in Korea and \$2 billion in Japan in 2003 (Hyundai Economic Institute, 2004). The economic impact of *Daejanggeum* was more than three billion dollars through 2007 and continues to have an impact today (Korea Times, 2008).

Korean television programs are spreading to other countries and cultures (Kim, Agrusa, Lee, & Chon, 2007). In recent years, Korean TV dramas have been exported to the United States, Mexico, a number of African countries, and countries in Asia such as Japan, China, Taiwan, Vietnam, Thailand, and Mongolia. According to the Korea Tourism Organization's Annual Report (2008), 76.3% of respondents positively changed their image of South Korea after watching the Korean movie, *Destiny*, and 93.4% suggested that a Korean movie or TV drama increased their interest in learning about Korean culture. Also, 80.7% of respondents expressed a willingness to visit South Korea within one year, and 79.3% will recommend to others that they tour South Korea.

### **Image Induced Through Traditional Foods**

A town, city, region or entire country's unique cuisine embodies and expresses its character and may eventually become a famous brand (Cohen & Avieli, 2004). It also plays an important role in the differentiation of specific tourist destinations (Horng & Tsai, 2010). As Long (2004) suggested, food is an important vehicle for tourism because of its power to define tourist destinations.

Sometimes people experience unique cuisine at restaurants instead of visiting the country from which the cuisine came. Hence, as Long (2004) stated, ethnic restaurants are one of an increasing number of arenas in which people can engage in touristic practices within their own culture and as part of their everyday life. Urry (1990) mentioned that everyday local sights and experiences come under the tourist gaze. If these arguments are true, ethnic restaurants and foods should be considered a marketing tool that could be employed to increase the number of future tourists.

### **Willingness to Visit**

Willingness to visit can be called as intention to visit or tourists' future behavior. A strong link between memorable destinations in consumers' minds as places to visit and attitudes and intentions toward actually visiting these destinations called as willingness to visit (Thompson & Cooper, 1979, Woodside & Sherrell, 1977). In marketing research, consumer's future behavior intention to a product or a service focused of customer satisfaction or service quality (Cadotte, Woodruff, & Jenkins, 1987; Oliver, 1980). Oliver (1993) stated that consumer satisfaction has great interest in service marketing because

satisfaction links purchase or consumption to post purchase phenomena such as attitude change, repeat purchase, positive word of mouth, and brand loyalty. Previous research documented that is a significant relationship among tourist satisfaction, intention to visit, and word of mouth communication (Beeho & Prentice, 1997; Hallowell, 1996; Kozak & Rimmington, 2000; Pizam, 1994; Ross, 1993).

Destinations with strong positive images have a higher probability of being selected by potential tourists. Image thus becomes a basic factor in the analysis of the tourists' behavior, pre (before), during, and post (after) the vacation experience (Bigne, Sanchez, & Sanchez, 2001; Tasci & Gartner, 2007). The positive image of a destination also has been found to affect intention to revisit (Alcaniz, Garcia, & Blas, 2009; Bigne et al., 2001; Chen & Tsai, 2007; Kneesel et al., 2009).

### Summary

Researchers have studied images, souvenirs, photography, brochures, and foods in a tourism context. However, to my knowledge there are no studies that have: (a) focused on the relationship between multisensory processing and image or how multisensory processing induces or amplifies positive images of a tourism destination; (b) focused on image change as a result of promotional and non-promotional sensory processing effects; assessed the direct or indirect effects of multisensory processing on other factors (e.g., empathy) suspected to influence overall image or willingness to visit a destination. Thus, I will investigate the direct and indirect relationships between multisensory processing

and individuals' empathy for, images of, overall image of, and willingness to visit South Korea.



## **Chapter 3**

### **Methodology**

The procedures used to conduct this study are reviewed in this chapter. These procedures are as follows: (1) selection of subjects, (2) study design, (3) data collection, (4) experimental procedures, (5) variables and instrument, and (6) data analysis.

#### **Selection of Subjects**

The study population consisted of faculty and staff who were working at The Pennsylvania State University in March 2011 and were listed on Penn State University's listserv. An invitation to participate in the study was sent via e-mail to 6,019 faculty and staff members. Faculty and staff rather than students were chosen as the study population because they have the income and/or interest necessary for travel to foreign countries.

#### **Study Design**

No research has compared the impact of non-promotional and promotional forms of promotion on tourism destination image. Moreover, researchers have not investigated the impact of multisensory processing on destination images. Thus, I employed a factorial design to compare the impact of two different types of sensory processing (video and narrative) on individuals' image of South Korea as a tourism destination. More specifically, the design involved a 2 (Video) x 2 (Narrative) between subject experimental design (see Table 1). The decision to adopt this design was based on a

number of factors. First, the design controlled for the effects of the experiment. Second, having multiple groups allowed for the testing of two types of sensory processing (i.e., video, narrative) and promotion (i.e., E-brochure, video, travel blog, TV drama), both of which have been and will continue to be used in South Korea and other countries to attract tourists. Third, to ensure comparability, only official forms of promotion that include some reference to food from Korea's National Tourism Organization website were used in this study. The decision to have all forms of promotion include some reference to food was because many Asian countries, including South Korea, are using culinary marketing techniques on their government websites to educate prospective tourists about their countries' culinary tourism experiences (Horng & Tsai, 2010). Fourth, all the independent variables contributed to the external validity of the findings.

Table 1: 2\*2 Experimental design

		Narrative	
		No	Yes
Video	No	Control Group E-Brochure Only	Travel Blog Group E-Brochure/ Travel Blog
	Yes	Video Group E-Brochure/ Video	Drama Group E-Brochure/ TV Drama

### Data Collection

To begin, 6,019 individuals were sent an e-mail invitation to participate in an on-line experiment. Individuals who chose to participate clicked on one of four links at the end of the e-mail, which took them directly to the on-line experiment. Four links to the on-line experiment were included at the end of the e-mail invitation in an effort to

randomize who was assigned to each experiment. The four links were set up as follows: individuals whose birthday falls between January and March were asked to respond to the first link (i.e., Group 1—Control); individuals whose birthday falls between April and – June were asked to respond the second link (i.e., Group 2—Video); individuals whose birthday falls between July and September were asked to respond to the third link (i.e., Group 3—Travel Blog); and individuals whose birthday falls between October and December were asked to respond to the fourth link (i.e., Group 4—Drama). (Table 2)

Table 2: Summary of experimental design with notations

Group					
Control Group	R				X <sub>4</sub>
Video Group	R	X <sub>1</sub>			X <sub>4</sub>
Travel Blog Group	R		X <sub>2</sub>		X <sub>4</sub>
TV Drama Group	R			X <sub>3</sub>	X <sub>4</sub>

Key: R = Random assignment  
X<sub>1</sub> = Video  
X<sub>2</sub> = Travel Blog  
X<sub>3</sub> = TV Drama  
X<sub>4</sub> = E-Brochure

The first page of the on-line questionnaire was a letter from me describing the purpose of the study, the amount of time necessary to complete the study, issues of confidentiality, and more (Appendix). If respondents chose to continue with the experiment, they followed the experimental procedure aligned with their group (i.e., control or treatment).

## Experimental Procedure

Members of the control and treatment groups began the procedure by answering questions related to their level of ambiguity about South Korea. For the control group, this was followed by exposure to the E-brochure (i.e., an advertisement and promotional form of communication), an assessment of their empathy level, and questions about their overall image of and willingness to visit South Korea, their travel behavior, and their socio-demographic characteristics. Alternatively, the process for members of the treatment groups was: exposure to treatment (i.e., video, travel blog, or TV drama); exposure to E-brochure; an assessment of empathy level; and completion of the last section of the questionnaire, which included questions about their overall image of and willingness to visit South Korea, their travel behavior, and their socio-demographic characteristics.

## Variables and Study Instruments

### Variables

The treatment variables were “response to the E-brochure” and “response to the sensory stimulation” (i.e., narrative and video). The dependent variable was willingness to visit South Korea. Other variables that were addressed included level of ambiguity, overall image of South Korea as a travel destination, travel-related questions (i.e., travel to South Korea, travel to a foreign country, international travel plans, ownership of a passport) and four questions about respondents’ socio-demographic characteristics (i.e., age, position at Penn State, household income, and gender).

## Study Instruments

The treatment variables consisted of exposure to an E-Brochure, a video, a travel blog, or a TV drama. This study used as E-Brochure which was current official promotional E-Brochure of Korean National Tourism Organization. A promotional video used in this study also current official promotional Korean traditional cuisine video of Korean National Tourism Organization. A travel blog used in this study was one of Korean cuisine blog which wrote by American tourist visited Korea previously at Korean National Tourism Organization web site. TV drama used in this study was the most famous Korean traditional food drama Daejanggeum which was used several tourism inducement studies (Kim, 2012; Kim, Agrusa, & Chon, 2007).

An on-line questionnaire was used to collect individuals' response to their individual treatment as well as additional data. The first section of the questionnaire included questions focused on level of ambiguity about South Korea. Individuals' responses to these questions were not used in this study, but will be used in the future to address other issues related to multisensory processing. The second section of the questionnaire focused on individuals' empathetic response to the sensory stimulation (i.e., video, travel blog, TV drama). As noted in Table 3, individuals were asked to indicate the extent to which they agree with statements about the sensory stimulation using a 7-point Likert scale ranging from 1 (Strongly disagree) to 4 (Neither agree or disagree) to 7 (Strongly agree). The statements were generated from Boller and Olson's (1991) study of crucial aspects of narrative/drama processing study. They suggested that through their Viewer Empathy In Response To Drama Ads (VEDA) scale, empathy can

be measured by asking consumers how much they (a) identified with the characters, (b) vicariously participated in the experience of the characters, and (c) were persuasively impacted by the drama. This scale is similar to the tourism advertising impact measurement scale—AIDA (Decrop, 2007; Kim, Hwang, & Fesenmaier, 2005; Dann, 1996<sup>b</sup>), which stands for, attention, interest, desire, and action. The VEDA scale has been successfully used by Kim and Richardson (2003) to measure empathy in a movie inducement tourism study.

Table 3: Statements used to assess empathic response to treatment

	Statements
Empathy	<ol style="list-style-type: none"> <li>1. I want to try Korean Cuisine.</li> <li>2. I can imagine tasting Korean Cuisine.</li> <li>3. I will try tasting Korean Cuisine.</li> </ol>

The third section of the on-line questionnaire focused on image. Individuals were asked to indicate the extent to which they agree that 35 image attributes (Table 4) adapted from the work of Echtner and Ritchie (1993) represent South Korea. Individuals responded using a 7-point scale that ranged from 1 (Strongly disagree) to 4 (Neither disagree or Agree) to 7 (Strongly agree). Several researchers have used Echtner and Ritchie's scale; thus, their work has been deemed reliable to measure functional and psychological dimensions of destination image.

Table 4: Statements used to measure image of South Korea

	Statements
1.	South Korea has many interesting tourist sites and activities. (Tourist Sites)
2.	South Korea has many national parks. (National Park)
3.	South Korea has many historic sites such as museums. (Historic Site)
4.	South Korea has good places to go for the beaches. (Beaches)
5.	South Korea has many fairs/exhibits/festivals. (Fair/Festival)
6.	South Korea has many natural/scenic areas. (Scenery)
7.	South Korea has good nightlife and entertainment. (Nightlife)
8.	South Korea has good shopping facilities. (Shopping)
9.	South Korea has good tourist information. (Info Facilities)
10.	South Korea has good sports facilities. (Sport Facilities)
11.	South Korea has good transportation systems. (Transportation)
12.	South Korea has many cities. (Cities)
13.	South Korea has good quality hotels and restaurants. (Hotel/Restaurant)
14.	South Korea has different styles of architecture/buildings. (Architecture)
15.	South Korea has good prices. (Costs)
16.	South Korea has good weather. (Climate)
17.	South Korea is crowded. (Crowding)
18.	South Korea is clean. (Cleanliness)
19.	South Korea is urbanized. (Urbanization)
20.	South Korea has a good standard of living. (Economic Develop)
21.	South Korea is commercialized. (Commercialization)
22.	South Korea has political stability. (political Stability)
23.	South Korea is accessible for foreigners. (Accessibility)
24.	Many people speak English in South Korea. (Personal Safety)
25.	South Korea is a safe place to visit. (Communication)
26.	South Korea has customs and cultures different from my own. (Culture)
27.	South Korea offers a different cuisine. (Different cuisine)
28.	South Korea has many friendly people. (Hospitality)
29.	South Korea is a restful and relaxing place to visit. (Relax)
30.	South Korea is different and fascinating. (Atmosphere)
31.	South Korea provides many opportunities for adventure. (Adventure)
32.	South Korea provides many opportunities to increase knowledge. (Knowledge)
33.	South Korea is a family-oriented place. (Family oriented)
34.	South Korea offers a high quality of service. (Quality of service)
35.	South Korea has a positive reputation. (Reputation)

The fourth section included three questions that addressed respondents' willingness to visit South Korea (Table 5). These statements were obtained from Bizer,

Tormala, Rucker, and Petty's (2006) scale. Individuals responded using a 7-point scale that ranged from 1 (Definitely no) to 7 (Definitely yes) about attitudes, attitude certainty, and attitude accessibility. These three attitude items have been used by Krosnick and Petty (1995) and Pomerantz, Chaiken, and Tordesillas (1995), who found that as attitude strength increases, attitudes have a greater biasing effect and are more predictive of behavior.

Table 5: Statements used to measure willingness to visit South Korea

	Statement
Willingness to visit	1. How attractive is South Korea as a travel destination?
	2. How sure are you that your current impression of South Korea is correct?
	3. How willing are you to visit South Korea?

The final section of the questionnaire included four travel-related questions (i.e., travel to South Korea in the last 10 years, travel to any foreign country, international travel plans, ownership of a passport) and four questions about the respondent's socio-demographic characteristics (i.e., age, position at Penn State, household income, and gender). The results associated with these questions were only used to screen and profile respondents.

### Data Analysis

*Research Question 1: In what way, if any, does multi sensory processing induce more empathy for South Korea?*

*RQ1.1: Are there differences between the sensory processing groups and the non sensory processing group in terms of empathy induced for South Korea?*



*RQ 1.2:* Are there differences between the dual sensory processing group (drama) and the sole sensory processing groups (video or narrative) in terms of empathy induced for South Korea?

*RQ 1.3:* Are there differences between the narrative sensory processing group and the video sensory processing group in terms of empathy induced for South Korea.

Structural equation modeling (SEM) was used to respond to research questions 1.1, 1.2 and 1.3. Rather than utilizing a normal 2\*2 factorial design, a planned comparison orthogonal coding in SEM was used. This kind of coding scheme allows the researcher to determine whether treatment groups perform better than the control group. As noted in Figure 2, the model begins with three grouping variables. The first grouping variable, “Multi-sensory,” represents all treatment groups versus the control group. The second grouping variable, “Combined vs. Alone,” represents individual combined groups (video + narrative) versus treatment groups (video or narrative). The third grouping variable, “Narrative vs. Video,” compares the two treatment groups (narrative vs. video). The three manifest variables in the model are coded as multisensory: -3 = no sensory (i.e., control) and 1 = any sensory (i.e., video, blog, drama); combined vs. alone: 0 = no sensory, -1 = one sensory (i.e., video or blog) and 2 = both sensory (i.e., drama); narrative vs. video: 0 = no sensory (i.e., control) & both sensory (i.e., drama), 1 = narrative only (i.e., blog), -1 = video only (i.e., video). Also, theta was fixed at 1 to control for residual variances and covariance between the three manifest categorical group variables in the model (see Figure 2).

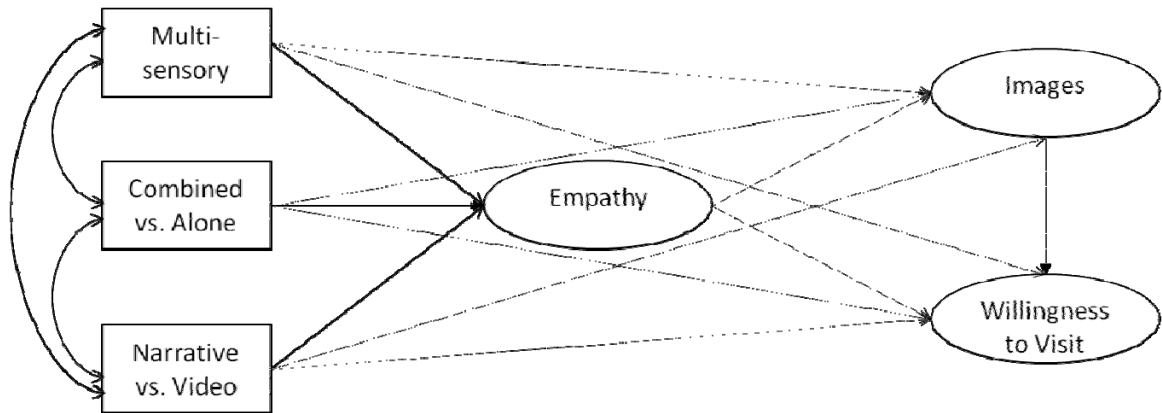


Figure 2: Conceptual model of comparison of multisensory processing impacts on empathy

Both an exploratory and a confirmatory factor analysis were used to determine whether distinct image dimensions of South Korea exist. A confirmatory factor analysis was conducted with the three manifest variables (i.e., functional image, mixed image, psychological image) adopted from Echtner and Ritchie (1993). Then, the mean score for each resulting image dimension was calculated for each group. The difference between the means for each group was assessed using one-way ANOVA.

Hypotheses 1 to 6 were as follows:

*Hypothesis 1: Multisensory processing will be directly associated with empathy and images of South Korea.*

*Hypothesis 2: Empathy will be directly associated with images and willingness to visit South Korea.*

*Hypothesis 3: Images will be directly associated with willingness to visit South Korea.*

*Hypothesis 4: Multisensory processing will be indirectly associated with images via empathy.*

*Hypothesis 5: Multisensory processing will be indirectly associated with willingness to visit South Korea via empathy and images.*

*Hypothesis 6: Empathy will be indirectly associated with willingness to visit South Korea via images.*

Structural equation modeling (SEM) was used to respond to these hypotheses. Prior to conducting the SEM, however, several reliability analyses were performed to construct indices of the four latent variables (i.e., empathy, images of South Korea, overall image, willingness to visit). This approach helped to decrease the error term correlations among the indicators in the confirmatory factor analysis.

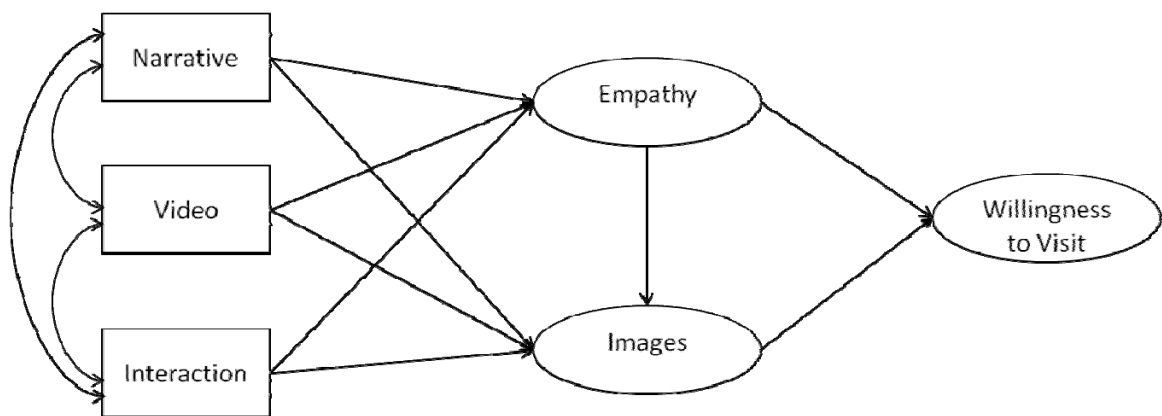


Figure 3: The conceptual model

A normal 2 \* 2 factorial design effect coding in SEM was used. As noted in Figure 3, the “Narrative” variable represents the main effect for narrative, and compares the means of the narrative and non-narrative groups. The “Video” variable represents the main effect for video, and compares the means of the video and non-video groups. The Narrative \* Video variable represents the interaction typically found in ANOVA. These three manifest variables in the model are coded as Narrative: 1 = narrative sensory (i.e., blog, drama) and -1 = no narrative sensory (i.e., control, video); Video: 1 = video sensory (i.e., video, drama) and -1 = no video sensory (i.e., control & blog); Narrative \* Video: 1 = interaction (i.e., drama, control), -1 = no interaction (i.e., video, blog only). Also, theta was fixed at 1 to control for residual variances and covariance between the three manifest variables in the model.

In terms of the manifest variable in Hypothesis 1—images of South Korea—the results of the factor analysis of the image items were reviewed using parceling approach.

## Chapter 4

### Results and Discussion

The specific information presented in this chapter includes: (1) a description of the sample, (2) the manipulation check, (3) effect of multisensory impacts on empathy, (4) effect of multisensory impacts on induced image, (5) effect of multisensory processing on anticipated image and willingness to visit, and (6) discussion.

#### Description of the Sample

A total of 1,238 individuals responded to the survey. Seven percent of the respondents indicated that they had visited South Korea in the last ten years or submitted incomplete questionnaires. They were eliminated from the sample prior to data analysis. Thus, a total of 1,027 individuals answers were used in the data analysis. Within the final sample, 259 individuals fell into the control group, 251 individuals were in the video group, 259 individuals were in the blog group, and 258 individuals were in the drama group.

Eighty-nine percent of the respondents have traveled to a foreign country, a slightly smaller percentage (84%) has a passport, and fifty-three percent are planning to travel internationally in the next twelve months. In terms of their demographic characteristics, respondents ranged in age from 22 to 69 ( $M = 42.36$ ,  $SD=12.27$ ). The

largest percentage reported that they are faculty, have household incomes of \$100,000 or more per year, and a little bit more than half are female (59%) (Table 6).

Table 6: Characteristics of the sample (N=1,027)

Category	N	Percentage
Traveled to a foreign country		
Yes	888	89.4
No	105	10.6
Planning international travel within 12 months		
Yes	527	53.4
No	460	46.6
Have a passport		
Yes	838	84.4
No	155	15.6
Age		
22-29	212	21.4
30-39	200	20.2
40-49	248	25.0
50-59	245	24.7
60-69	86	8.7
Position		
Faculty	386	39.0
Research Associate/Assistant	52	5.2
Post Doc	19	1.9
Staff	304	30.7
Graduate Student	230	23.2
Household income		
Under \$20,000	83	8.4
\$20,000-\$39,999	176	17.9
\$40,000-\$59,999	168	17.1
\$60,000-\$79,999	101	10.3
\$80,000-\$99,999	177	18.0
\$100,000 and above	278	28.3
Gender		
Female	581	58.6
Male	411	41.4

### Manipulation Check

To examine the extent to which the inclusion of video and narrative had an effect on participants' empathy for South Korea, two general linear model analyses of variance (ANOVAs) were conducted, employing video (present/absent) and narrative

(present/absent) as the independent variables (IVs). The analysis revealed a main effect for empathy, with empathy scores higher in the video present condition ( $M=5.21$ ,  $SE=1.30$ ) than in the video absent condition ( $M=4.69$ ,  $SE=1.31$ ),  $F(1,1025)=41.12$ ,  $p<.05$ ,  $\eta_p^2=.04$ . Similarly, the analysis of the narrative condition revealed a main effect for empathy, with empathy scores higher in the narrative present condition ( $M=5.43$ ,  $SE=1.20$ ) than in the narrative absent condition ( $M=4.46$ ,  $SE=1.28$ ),  $F(1,1025)=157.57$ ,  $p<.05$ ,  $\eta_p^2=.13$ . Table 7 reports the results of a univariate analysis of variance test for each main effect.

Table 7: Main effect for video & narrative

IV	DV	Univariate F	M (SE)	
			Absent	Present
Video	Empathy	41.12*	4.69 (1.31)	5.21 (1.30)
$F(1, 1025) = 41.12, p<.05, \eta_p^2=.04$				
Narrative	Empathy	157.57*	4.46 (1.28)	5.43 (1.20)
$F(1, 1025) = 157.57, p<.05, \eta_p^2=.13$				

In addition, Table 8 reports the result of the general linear multivariate analysis of variance (MANOVA) for the three items manipulated.

The overall results of the ANOVA and MANOVA highlight that multisensory processing induces more empathy for South Korea. Thus, the manipulation was successful.

Table 8: Descriptive statistics for the empathy items (want, imagine, tasting) by group

Want	N	Mean	S.D
Control Group	259	4.16	1.39
Video Group	251	4.57	1.35
Blog Group	259	5.06	1.34
Drama Group	258	5.67	1.32
F(3, 1023) = 59.41, p<.05, $\eta_p^2$ =.15			
Imagine	N	Mean	S.D
Control Group	259	4.03	1.39
Video Group	251	4.72	1.28
Blog Group	259	5.07	1.28
Drama Group	258	5.60	1.33
F(3, 1023) = 64.27, p<.05, $\eta_p^2$ =.16			
Tasting	N	Mean	S.D
Control Group	259	4.38	1.39
Video Group	251	4.90	1.35
Blog Group	259	5.42	1.22
Drama Group	258	5.76	1.29
F(3, 10213) = 54.86, p<.05, $\eta_p^2$ =.14			

### Effect of Multisensory Processing on Empathy

To examine what ways, if any, multisensory processing impacts empathy, an analysis with the maximum likelihood estimation process within LISREL 8.71 (Joreskog & Sorbom, 1993) was used. Figure 4 contains the final model in this analysis, with all paths reporting standardized coefficients ( $X^2 = 133.05$ ,  $df = 42$ ). The three indicators of practical fit suggested a good fitting model (NNFI=.990, CFI=.994, RMSEA=.046) (Figure 4).



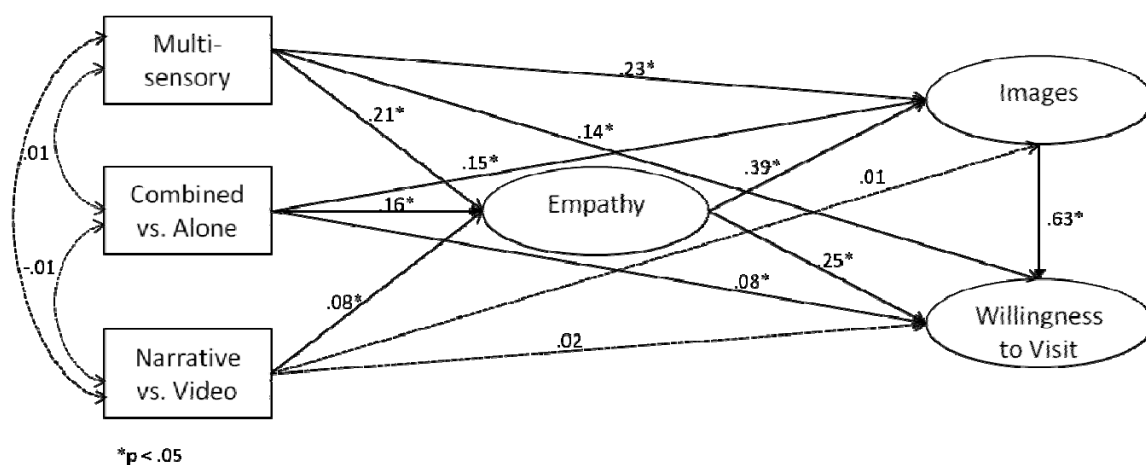


Figure 4: Comparison of multisensory processing impacts on empathy

There were significant paths between the three sensory processing groups and empathy. To begin, the direct effect of the comparison between the sensory groups and the non-sensory group on empathy was statistically significant at the .05 level (unstandardized coefficient = .18, t-value = 6.76). Thus, research question 1.1 was supported. Second, the direct effect of the comparison between the combined effect of the sensory groups together and each individual sensory group on empathy was statistically significant at the .05 level (unstandardized coefficient = .19, t-value = 5.03). In addition, the direct effect of the comparison between the video sensory group and the narrative sensory group on empathy was statistically significant at the .05 level (unstandardized coefficient = .17, t-value = 2.64). Thus, research questions 1.2 and 1.3 were supported.

### Effect of Multisensory Processing on Images

To examine whether participants' images of South Korea differed based on type of multisensory processing, a general linear model analyses of variance (ANOVA) and post hoc tests were employed. The analysis (Table 9) revealed a main effect for images, with anticipated image scores highest in the drama group (M=5.49, SE=.84), followed by the blog group (M=5.17, SE=.46), the video group (M=5.07, SE=.62), and the sensory processing absent (i.e., control) group (M= 4.73, SE=.65),  $F(3,1023)=57.30, p<.05, \eta_p^2=.14$ . In sum, images of South Korea were significantly impacted by sensory processing.

Table 9: Mean differences in images by sensory processing groups

	<b>N</b>	<b>Mean</b>	<b>S.D</b>
Control Group	259	4.73 <sub>a</sub>	.65
Video Group	251	5.07 <sub>b</sub>	.62
Blog Group	259	5.17 <sub>b</sub>	.46
Drama Group	258	5.49 <sub>c</sub>	.84

$F(3,1023)=57.30, p<.05, \eta_p^2=.14$ .

Note: Different subscripts indicate significant difference between mean scores. For example, the control group was significantly less likely to agree with the images of South Korea than the video group, the blog group, and the drama group.

Prior to addressing the study hypotheses, confirmatory factor analysis (CFA) and an exploratory factor analysis (EFA) using the principle component method with promax rotation were employed to test the factor structure of the 35 image items. As shown in Figure 6, the CFA of the 35 image items indicated that the initial model did not offer a good fit ( $X^2 = 7657, df = 560; NNFI=.945, CFI=.948, RMSEA= .141$ ). As a result, all 35 image items could not be imputed into the model as an individual image item.

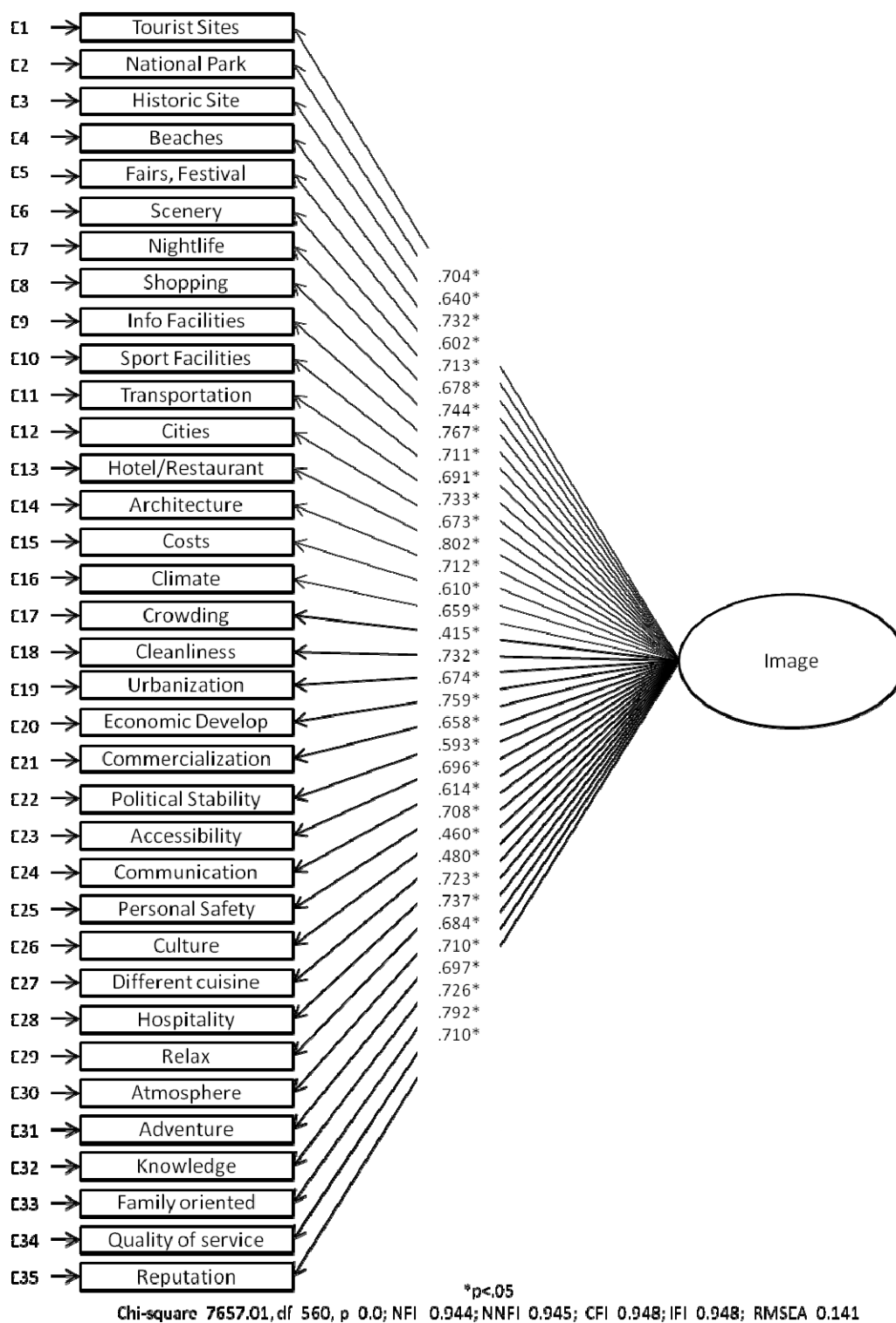


Figure 5: Confirmatory factor analysis of image dimension

As Shown Table 10, the EFA indicated the presence of 5 image dimensions, which accounted for 62% of the total variance.

Table 10: Exploratory factor analysis of images

Questionnaire Statement	Fac 1	Fac 2	Fac 3	Fac 4	Fac 5
South Korea has many interesting tourist sites and activities. (Tourist Sites)	<b>.783</b>	.084	.241	-.127	-.201
South Korea has many national parks. (National Park)	<b>.630</b>	-.037	-.194	.280	.013
South Korea has many historic sites such as museums. (Historic Sites)	<b>.786</b>	.038	.075	-.056	-.026
South Korea has good places to go for the beaches. (Beaches)	.464	-.066	-.195	<b>.513</b>	-.063
South Korea has many fairs/exhibits/festivals. (Fair/Festival)	<b>.609</b>	-.117	.176	.184	-.031
South Korea has many natural/scenic areas. (Scenery)	<b>.799</b>	-.052	.223	-.045	-.169
South Korea has good nightlife and entertainment. (Nightlife)	<b>.543</b>	-.148	.002	.183	.300
South Korea has good shopping facilities. (Shopping)	<b>.603</b>	-.069	-.031	.068	.327
South Korea has good tourist information. (Info Facilities)	<b>.726</b>	.231	.113	-.232	-.052
South Korea has good sports facilities. (Sport Facilities)	<b>.421</b>	.106	-.259	.366	.136
South Korea has good transportation systems. (Transportation)	<b>.381</b>	.138	-.152	.155	.333
South Korea has many cities. (Cities)	<b>.353</b>	-.019	.093	.129	.255
South Korea has good quality hotels and restaurants. (Hotel/Restaurant)	<b>.383</b>	.106	.156	.062	.256
South Korea has different styles of architecture/buildings. (Architecture)	.322	-.021	.265	.240	.048
South Korea has good prices. (Costs)	-.062	-.079	-.106	<b>.793</b>	.202
South Korea has good weather. (Climate)	.037	.013	-.038	<b>.692</b>	.085
South Korea is crowded. (Crowding)	-.111	-.178	.005	.261	<b>.611</b>
South Korea is clean. (Cleanness)	.126	.335	.027	.107	.175
South Korea is urbanized. (Urbanization)	-.084	.086	.180	.037	<b>.698</b>
South Korea has a good standard of living. (Economic Develop)	.025	<b>.530</b>	.048	-.040	.376
South Korea is commercialized. (Commercialization)	-.007	.220	.099	-.136	<b>.703</b>
South Korea has political stability. (Political Stability)	-.161	<b>.954</b>	-.099	-.059	.058
South Korea is accessible for foreigners. (Accessibility)	.060	<b>.762</b>	.027	.057	-.115
Many people speak English in South Korea. (Communication)	-.033	<b>.456</b>	-.119	.351	.061

South Korea is a safe place to visit. (Personal Safety)	.126	<b>.866</b>	-.088	-.039	-.073
South Korea has customs and cultures different from my own. (Culture)	-.033	-.049	<b>.843</b>	-.219	.139
South Korea offers a different cuisine. (Different Cuisine)	.002	-.076	<b>.908</b>	-.285	.164
South Korea has many friendly people. (Hospitality)	-.070	.289	<b>.415</b>	.278	-.009
South Korea is a restful and relaxing place to visit. (Relax)	-.011	.298	.104	<b>.616</b>	-.145
South Korea is different and fascinating. (Atmosphere)	.093	-.065	<b>.766</b>	.167	-.063
South Korea provides many opportunities for adventure. (Adventure)	.086	-.044	<b>.607</b>	.336	-.080
South Korea provides many opportunities to increase knowledge. (Knowledge)	.068	.034	<b>.670</b>	.166	-.035
South Korea is a family-oriented place. (Family Oriented)	.011	.166	.156	<b>.513</b>	.028
South Korea offers a high quality of service. (Quality of Service)	.001	.257	.170	<b>.373</b>	.165
South Korea has a positive reputation. (Reputation)	.063	<b>.712</b>	.019	.073	-.054
Eigenvalue	16.49	2.12	1.35	0.91	0.67
Proportion of Variance	47.12	6.05	3.86	2.60	1.93
Extraction Method: Principal Axis Factoring.					
Rotation Method: Promax with Kaiser Normalization.					

Despite the results of the EFA, treating the resulting image factors as five latent variables was not appropriate for several reasons. First, all of the manifest variables were not clearly divided into five factors; several items were assigned to two or more factors and many variables were highly correlated. In addition, the 35 image items, which were adopted from Echtner and Ritchie's (1993) study, were originally envisioned as having three main component characteristics (i.e., attribute – holistic, functional (tangible) - psychological (abstract), and unique – common). However, in the past, researchers have not completely adopted their approach and have used only the tangible and intangible dimensions (Alcaniz et al., 2009; Ryan & Cave, 2005; Suh & Gartner, 2004), or only selected image dimensions (Chen & Tsai, 2007; Hsu, Wolfe, & Kang, 2004;

Stepchenkova & Morrison, 2008). Thus, I chose to use a parceling technique to merge the 35 image items (35 manifest variables) into one latent image variable to test model fit.

Parceling refers to aggregating individual items into one or more parcels and using those parcels, instead of items, as the indicator of the latent construct (Bandalos, 2002; Coffman, & MacCallum, 2005; Graham, Tatterson, & Widaman, 2001; Little, Cunningham, Shahar, & Widaman, 2002; Matsunaga, 2008; Peter & Valkenburg, 2008; Rogers & Schmitt, 2004). Little et al. (2002) suggested using item parceling rather than individual items to estimate latent constructs, because item parceling leads to a more parsimonious model, reduces double loading, and diminishes the impact of sampling error. However, item parceling should be only used if researchers are interested in relations among the latent construct not among the items (Little et al., 2002). In this study I am interested in relations among the latent construct; thus, I have chosen to use item parceling.

According to Little et al. (2008), parceling is appropriate only when a construct is unidimensional. However, this criteria has been challenged. Some researchers feel that parceling can be conducted with a partially disaggregated model (Coffman & MacCallum, 2005; Graham, Tatterson, & Widaman, 2001) or when an a priori conceptualized factor structure fit the data adequately without large error covariance (Matsunaga, 2011). Based on EFA result (Table 10), the items load on various first order factors and the other 4 order factors explains the correlations among the first order factors. First order factor had 13 items (i.e., Tourist Sites, National Park, Historic Sites, Fair/Festival, Scenery, Nightlife, Shopping, Info Facilities, Sport Facilities, Transportation, Cities, Hotel/Restaurant, Architecture) compare to have 5 or 6 items in

other 4 factors, and highly correlated among factors. In a situation like the one presented here Coffman and MacCallum (2005) suggest first creating a homogenous parcel and second creating one more domain representative parcel (Kishton & Widaman, 1994). Alternatively, Graham and Tatterson (2010) suggest first creating a factorial parcel (Rogers & Schmitt, 2004) and second creating a domain representative parcel (Kishton & Widaman, 1994). I chose to first create a factorial parcel of each factor separately and then create a domain representative parcel based on the results of the EFA.

With Rogers and Schmitt's approach,

The factorial algorithm rank order[s] the manifest indicators using their loadings on the first principal axis factor. ... Each parcel [is] sequentially assigned the remaining indicators with the highest and lowest rankings, alternating direction through the parcels, until all indicators were assigned. For example, in the case of 12 indicators assigned to 3 parcels, Parcel #1 = indicators ranked 1, 6, 7, 12; Parcel #2 = 2, 5, 8, 11; and Parcel #3 = 3, 4, 9, 10 (p. 387).

To generate a factorial parcel I assigned 12 first factor items to 3 parcels, 6 second factor items to 3 parcels, 6 third factor items to 3 parcels, and 6 fourth factor items to 3 parcels based on the communality rank order results from the principal axis factor analysis results. Then, I generated a domain representative parcel of items assigned into the three image parcels. Specifically, after the two items with factor scores lower than .4 were deleted, a total of 33 image items were assigned to 3 image parcels (Table 11).

Table 11: Factorial parcel &amp; domain parcel of image items

Image Parcel 1	Scenery, fairs/festival, shopping, cities, politic stability, communication, different cuisine, hospitality, costs, quality of service, commercialization
Image Parcel 2	Historic site, national park, nightlife, transportation, personal safety, economic development, culture, adventure, climate, beaches, urbanization
Image Parcel 3	Tourist sites, info facilities, sport facilities, hotel/restaurant, accessibility, reputation, atmosphere, knowledge, relax, family oriented, crowding

### Effect of multisensory processing on images and willingness to visit

The measurement model was tested using with maximum likelihood estimation process within the LISREL 8.71 program (Joreskog & Sorbom, 1993). First, confirmatory factor analysis was conducted to test the measurement model with the latent variables (i.e., empathy, image, willingness to visit). Based on the goodness-of-fit indices ( $\chi^2=133.049$ ,  $df=42$ ,  $p<.01$ ; RMSEA=.046; CFI=.994; SRMR=.020; NNFI=.990), the measurement model had an acceptable level of model fit (Hu & Bentler, 1999). In addition, to check whether there was a sufficient level of convergent validity for the measurement model, average variance extracted (AVE) and composite reliability values for the multi-item scales were referenced. All were greater than the minimum criterion of 0.5 and 0.7, respectively (Hair, Black, Babin, Anderson, & Tatham, 2006) (Table 12).

Table 12: Results of confirmatory factor analysis

Latent Variables	FL	t-value	SE	ME
Factor 1: Empathy				
EM 1. Want to try Korean Cuisine.	.93	NA	NA	.13
EM 2. Imagine tasting Korean Cuisine.	.85	40.69	.02	.27
EM 3. Try tasting Korean Cuisine.	.91	46.82	.02	.17
Factor 2: Images				
IM 1. Mean (scenery, fair, shopping, cities, politic, English, cuisine, hospitality, cost, quality, commercial)	.96	NA	NA	.09
IM 2. Mean (museum, park, nightlife, transportation, safe, economic, custom, adventure, climate, beach, urban)	.97	77.36	.01	.06
IM 3. Mean (sites, info, sports, accommodation, access, reputation, atmosphere, knowledge, rest, family, crowding)	.97	80.13	.01	.05
Factor 3: Willingness to Visit				
WTV 1. How attractive is South Korea as a travel destination?	.84	NA	NA	.29



WTV 2. How sure are you that your current impression of South Korea is correct?	.80	30.23	.03	.34
	.88	34.75	.03	.22
WTV 3. How willing are you to visit South Korea?				

Note: All factor loading are significant at  $p < .05$ . Parameters are fixed at 1.0 for the maximum-likelihood estimation. Thus, t values were not obtained (NA) for those fixed at 1 for identification purpose. FL = factor loading; SE = standard error for unstandardized coefficient; ME = measurement error.

To check scale reliability, I referenced Cronbach's alpha, which showed excellent results (empathy, 0.97; image, 0.96; willingness to visit, 0.90). In terms of the discriminant validity of the measurement model, the AVEs of each construct were assessed. All were greater than the squared correlation coefficients for the corresponding inter-constructs (Fornell & Larcker, 1981), resulting in the average variance extracted being less than the critical value of 0.5. Hence, the three latent variables construct exhibited an acceptable level of discriminant validity (Table 13).

Table 13: Correlations (squared correlations), composite reliability, AVE, and Mean

	X1	X2	X3	Empathy	Image	WTV
X1	1.00					
X2	.01(.00)	1.00				
X3	-.01(.00)	.01(.00)	1.00			
Empathy	.25(.06)	.13(.02)	.01(.00)	1		
Image	.38(.09)	.24(.06)	-.01(.00)	.46(.21)	1	
WTV	NA	.28(.08)	-.02(.00)	.58(.34)	.81(.66)	1
CA	NA	NA	NA	.926	.976	.880
CR	NA	NA	NA	.927	.976	.880
AVE	NA	NA	NA	.787	.927	.635
Mean	NA	NA	NA	5.10	5.11	5.02
Std. Dev.	NA	NA	NA	1.44	.71	1.02

Note: X1 = narrative; X2 = video; X3 = narrative x video; CA = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted; WTV= Willingness to visit. Mean values are based on 7-point scales. All correlations are significant at  $p < .05$  except 3 groups. X1, X2, X3 is group variable that cannot obtain variables (NA).

The proposed hypotheses were tested using the maximum likelihood estimation process within the LISREL 8.71 program (Joreskog & Sorbom, 1993). The chi-square ( $\chi^2 = 187.500$ ,  $df = 45$ ) was significant. However, with large samples such as the one in this

study (N=1,027), chi-square is often statistically significant even when the model differs only trivially from the true model (Hair et al, 2006). For this reason, other indices of practical fit were referenced (NNFI=.986, CFI=.990, SPMR=.029, RMSEA=.055), all of which suggested an acceptable fitting model (Bentler, 1990; Bentler & Bonett, 1989; Browne & Cudeck, 1993).

Unstandardized path coefficients were used in the analysis because they allow for a comparison of each individual factor regression. As illustrated in Table 14, the direct effect of “narrative” on “empathy” (unstandardized coefficient=.37, t-value=7.97), and images (unstandardized coefficient=.14, t-value=7.36) and the direct effect of “video” on “empathy” (unstandardized coefficient=.19, t-value=4.20), and images (unstandardized coefficient=.13, t-value=6.93) were statistically significant at the .05 level. There was no interaction effect between “narrative” and “video.” Thus, H 1 was supported.

Empathy had a significant (.05 level) direct effect on images (unstandardized coefficient =.18, t-value=13.04), and willingness to visit (unstandardized coefficient=.17, t-value=10.73); therefore, H2 was supported.

H3 was also supported. There were significant direct effects of images on willingness to visit (unstandardized coefficient=.94, t-value=25.29) significant at the.05 level.

The result illustrated in Table 14 shows that multisensory processing (i.e., narrative, video) was associated with willingness to visit through the path from empathy and images. Specifically, the indirect effect of narrative on image revealed a significant indirect effect for empathy (unstandardized coefficient=.07, t-value=6.84,  $p<.05$ ), while

the effect of video on image revealed a significant indirect effect for empathy (unstandardized coefficient=.03, t-value=3.90,  $p<.05$ ). Thus, H4 was supported.

Also, the indirect effect of narrative on willingness to visit (unstandardized coefficient=.23, t-value=10.32,  $p<.05$ ) revealed significant indirect effects for empathy and images. Another indirect effect of multi sensory processing, video on willingness to visit (unstandardized coefficient=.17, t-value=7.73,  $p<.05$ ), also revealed significant indirect effects on empathy and images. Hence, H5 was supported.

Finally, the indirect effect of empathy willingness to visit (unstandardized coefficient=.16, t-value=11.67,  $p<.05$ ) revealed significant indirect effects for images. These results provided support for H6.

All hypothesized indirect and direct paths were statistically significant. To verify their significance, the joint significance test (MacKinnon, Lockwood, Hoffman, West, Sheets, 2002) of the indirect (mediated) effects was employed. The difference in total and indirect effects of multisensory processing, empathy, images, overall image, and willingness to visit were reviewed (Table 14).

Table 14: Factor regression, total effects, and indirect effects

Factors		X1	X2	X3	Empathy
Factor Regression	Empathy	<b>.37<sup>a</sup></b>	<b>.19</b>	.01	
		<b>(.05)<sup>b</sup></b>	<b>(.05)</b>	(.05)	
		<b>7.97<sup>c</sup></b>	<b>4.24</b>	.021	
	Images	<b>.14</b>	<b>.13</b>	-.01	<b>.18</b>
		<b>(.02)</b>	<b>(.02)</b>	(.02)	<b>(.01)</b>
		<b>7.36</b>	<b>6.93</b>	-.45	<b>13.04</b>
	WTV				<b>.17</b>
					<b>(.02)</b>
					<b>10.73</b>
Total Effect of ETA on ETA	Empathy	<b>.37</b>	<b>.19</b>	.01	
		<b>(.05)</b>	<b>(.05)</b>	(.05)	
		<b>7.97</b>	<b>4.20</b>	.19	
	Image	<b>.21</b>	<b>.16</b>	-.01	<b>.18</b>

		<b>(.02)</b>	<b>(.02)</b>	(.02)	<b>(.01)</b>
		<b>10.31</b>	<b>8.08</b>	-.34	<b>13.04</b>
	WTV	<b>.26</b>	<b>.26</b>	-.01	<b>.34</b>
		<b>(.03)</b>	<b>(.03)</b>	(.02)	<b>(.02)</b>
		<b>10.63</b>	<b>9.30</b>	-.22	<b>17.10</b>
Indirect Effect of ETA on ETA	Image	<b>.07</b>	<b>.04</b>	.00	
		<b>(.01)</b>	<b>(.01)</b>	(.01)	
		<b>6.84</b>	<b>4.01</b>	.02	
	WTV	<b>.26</b>	<b>.19</b>	-.01	<b>.17</b>
		<b>(.02)</b>	<b>(.02)</b>	(.02)	<b>(.01)</b>
		<b>10.63</b>	<b>7.94</b>	-.22	<b>11.82</b>

The indirect (mediated) effects of multisensory processing on images explained a small portion of the total effect. The results indicated that the mediated effect of multisensory processing on images for narrative (.07/.21=32.06%) and video (.04/.19=21.08%) was not strong compared to the direct effect.

Table 15 shows the standardized path coefficients between multisensory processing, empathy, images and willingness to visit for the result. Figure 6 shows the final SEM model of multisensory processing impacts on images and willingness to visit.

Table 15: Standardized path coefficients in the final model

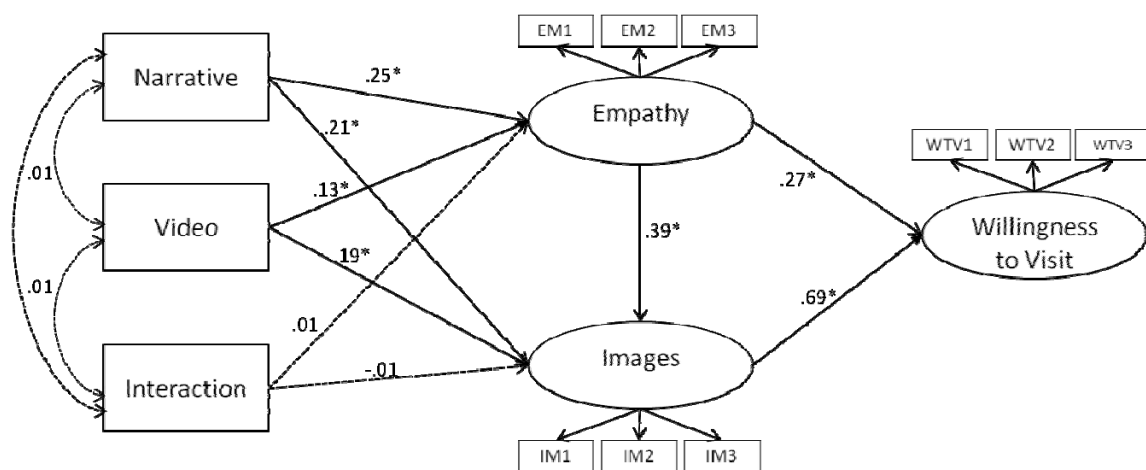
Factors		X1 <sup>a</sup>	X2 <sup>b</sup>	X3 <sup>c</sup>	Empathy	Images
Factor Regression	Empathy	.25*	.13*	.01		
	Images	.21*	.19*	-.01	.39*	
	WTV				.27*	.69*
Total Effect	Empathy	.25*	.13*	.01		
	Images	.30*	.24*	-.01	.39*	
	WTV	.27*	.20*	-.01	.53*	.69*
Indirect Effect	Images	.10*	.05*	.00		

Note: \*p<.05

<sup>a</sup>X1: Narrative sensory treatment main effect

<sup>b</sup>X2: Video sensory treatment main effect

<sup>c</sup>X3: Narrative sensory by Video sensory interaction



\*p < .05  
 Chi-square = 187.50, *df* = 45, *p* = .000, RMSEA = .055, SPMR = .029, NNFI = .986, CFI = .990

Figure 6: Final model

## Chapter 5

### Discussion and Conclusions

This chapter begins with a review of the sample, followed by a discussion of the study results and their contribution to the tourism literature. In an effort to help with additional research on this study topic, I also discuss the limitations of the study and what directions future research might take.

#### The Sample

In terms of the demographic characteristics of the study sample, the largest percentage was highly educated, from 40-49 years of age, and well-off. According to the International Travel Association (2010), the majority of U.S. outbound travelers are in their 40s, have a professional job, and report an average annual household income in excess of \$100,000. Thus, the study sample appears to be representative of the U.S. outbound (i.e., international) travelers.

#### The Effect of Multisensory Processing on Empathy

Multisensory processing was positively and directly related to empathy for Korean cuisine (the focus of the empathy items). When sensory conditions (i.e., video or narrative) were present, empathy scores increased. Further, when accounting for *types* of sensory processing groups, significant differences were observed. For example, the

sensory processing groups (blog, video, drama) were significantly more likely than the non-sensory processing group (control) to empathize with Korean cuisine. Also, the dual sensory group (drama) was more likely than the individual sensory groups (i.e., blog, video) to empathize with Korean cuisine. These results are consistent with previous research (Babin & Burns, 1997; Connell, 2005; Echtner & Ritchie, 2003; Hanefors & Mossberg, 2002; MacInnis & Price, 1987; Stewart, 1997) which has shown that multisensory processing through promotional and non-promotional communication has a great impact on tourists' "mental picture" of a destination. The study results also confirmed Kim and Richardson's (2003) findings that empathy can be aroused through vicarious experiences, which include watching movies or viewing advertisements. Moreover, the results in this study indicated that the significant effects of multisensory processing were directly related to empathy. This is good news for tourism marketers who promote a country's local foods, gastronomic culture and restaurants in an effort to attract tourists to their destination (Hjalager, 2004; Horng & Tsai, 2010; Long, 2004). Whether examining the particular effects of viewing ethnic foods in a promotional video or responding to the narrative highlighting ethnic foods in a blog or TV drama, this study revealed that video and narrative led to an increase in empathy for a destination's traditional foods.

The analyses also revealed a main effect for empathy, with the drama group reporting a more positive response than the blog, video or control groups. MacInnis and Price (1987) reported a similar result. They indicated that multi sensory processing has a greater impact than verbal processing alone. The results also revealed significant direct effects on multisensory processing of non-promotional tools. These results same from

those highlighted by Connell (2005) who noted that an individual's image of a destination is more likely to be affected by non-promotional communication.

### **The Effect of Multisensory Processing on Images, and Willingness to Visit South Korea**

To truly understand the effect of multiprocessing on images of South Korea, the image items had to be manipulated. Using exploratory factor analysis, confirmatory factor analysis, and Rogers and Schmitt's (2004) factorial parceling approach, three "parcels" of images were identified. These resulting "parcels" represented well the image items proposed by Echtner and Ritchie (1993). This finding challenges the approach adopted by researchers who have chosen to handpick items from the Echtner and Ritchie's inventory of image items.

The analyses revealed a main effect for images, with the narrative and video group reporting direct and indirect effect on individuals' overall image and willingness to visit a destination. Alcaniz et al. (2009) reported a similar result. They indicated that functional and psychological image items have a direct and positive effect on overall image and intention to return to a destination. The results also revealed significant direct and indirect effects of image on willingness to visit South Korea through multisensory processing and empathy. These results differed from those highlighted by Alcaniz et al. who focused only on the direct effects of images on overall image and willingness to visit a destination.

Individuals responded positively to the content of the promotional and non promotional collateral, suggesting that they believe the information presented fairly



portrays the destination and may serve as a basis for their thoughts about what to expect from the country. Induced images are formed through promotional advertising (Babin & Burns, 1997; Bone & Ellen, 1992; Perry et al., 1976) or non promotional collateral such as referrals from friends and relatives (Matejka, 1973); multisensory processing (MacInnis & Price, 1987); non-promotional communications (Connell, 2005); movies (Hudson & Ritchie, 2006<sup>a</sup>; Kim, 2012; Kim & Richardson, 2003; Riley & Van Doren, 1992; Kim, Agrusa, Lee & Chon, 2007); and ethnic foods (Hjalager, 2004; Horng & Tsai, 2010; Long, 2004).

### **A Summary Review of the Overall Causal Model**

The causal model for the effect of multisensory processing on images of South Korea indicated that a positive and direct relationship with empathy for South Korean cuisine exists. And, empathy directly and indirectly affected individuals' images of and willingness to visit South Korea. With respect to images, they directly and significantly affected individuals' willingness to visit South Korea.

Previously, researchers stated that overall images are derived from either generic or iconic advertising promotion of a destination (Richardson & Cohen, 1993; Litvin & Mouri, 2009) and, as such, should be considered a basic factor in the analysis of tourists' behavior before, during, and after the vacation experience (Bigne, Sanchez, & Sanchez, 2001). Also, the functional and psychological components of images of a destination should significantly affect overall image and intention to visit a destination (Alcaniz, Garcia, & Blas, 2009), and the strongest effects of overall image should directly and indirectly effect individuals' visitation intention (Chen & Tsai, 2007). The overall model

presented in this study reinforced and built upon the known relationships between an individual's empathy, images, and intention to visit a destination.

### **Contributions and Future Research**

An important contribution of this study was its use of the 35 image items proposed by Echtner and Ritchie (1993) to document a destination's image. To my knowledge, Alcaniz et al (2009) are the only other researchers who have employed a similar approach. In this study 33 of Echtner and Ritchie's 35 image items were grouped into 3 image parcels to use factorial parceling approach proposed by Rogers and Schmitt (2004). The use of the factorial parceling approach is new to tourism research and presents a viable and important option for studying destination image as well as other multidimensional constructs. Image can not be defined using one item. Image must be assessed using multiple items representing several different dimensions. Depending on the study destination, image dimensions likely will be different. Thus, to fairly and completely measure all relevant image items in future research, researchers should attempt to replicate this study using the parceling technique with Echtner and Ritchie's image items in different destinations.

In addition, while the empathy scale worked in this study, tourism research needs a better empathy scale. I say this because my results indicated that there isn't a strong indirect effect of empathy. This was surprising given the fact that multiple researchers have found strong indirect effects of empathy in a tourism context (Baker & Fesenmaier, 1997; Fick & Ritchie, 1991; Kouthouris & Alexandris, 2005; Park & Gretzel, 2007;

Woosnam, Norman, & Ying, 2009). If a better measurement scale is created for empathy, we may find a strong indirect effect of empathy on multisensory processing. For example, instead of using a three item, seven-point scale empathy measure, researchers should have individuals respond to an open-ended question about their empathic response to a treatment. This approach would allow researchers to: (a) document the way in which (e.g., the words used) people respond to a treatment; (b) identify themes in their responses; and (c) generate a new emotion scale that could be used in further structural equation modeling of multisensory processing and its effect on images, overall image, and willingness to visit a destination.

Future research should also be conducted using a two group analysis based on individual's level of cultivation. In our global environment, people can obtain other countries' image through multiple channels of communication. This exposure can dramatically influence individuals' image of a destination. Gerbner et al. (2002) have documented that individuals' images of other countries are cultivated through television news, the Internet, and direct contact with people from other countries, and those cultivated image levels differ by individual. Thus, in the future researchers should investigate differences based on cultivation level.

One of the benefits of structural equation modeling is that it deals directly with how well researchers have measured their intended construct. My model statistics suggested that I have developed a viable model for measuring the effect of multisensory processing on image and willingness to visit. Further, structural equation modeling employs confirmatory factor analysis to assess the measurement properties of scales (Kelloway, 1998), which is more rigorous and parsimonious than exploratory factor

analysis. Thus, future image research should employ structural equation modeling or confirmatory factor analysis in an effort to assess the measurement properties of image scales.

In this study I used a 2 \*2 factorial experimental design. With this design the control group's experiences are considered to be identical to the experimental groups, with one exception: they are exposed to a manipulated independent variable. Thus, random selection of participants and their assignment to the experimental groups was very important. In the future researchers need to conduct more experimental designs to compare between group differences, identify interaction effects among variables, and compare the effect of independent variables.

### **Implications for the Tourism Industry**

The study results indicated that multisensory processing had an impact on destination images, overall image, and willingness to visit, offering evidence of the role multisensory processing should play in tourism marketing. For example, tourism marketers could consider developing new forms of communication that incorporate interactive components such as being able to smell foods in a brochure or adding 3D effects to advertisements. Also, the results suggested that promotional and non promotional collateral such as blogs and TV dramas have a strong effect on tourists' image and willingness to visit a tourist destination. Moreover, empathy for ethnic food appears to have a strong effect on a country's image. In response, marketers should

consider including references to food in their promotional and non-promotional collateral.

Individuals appeared to have used the material portrayed through the promotional and non promotional collateral as the basis for their thoughts about what to expect from the country as a tourism destination. Thus, tourism marketers should work with movie and television production companies, advertising agencies, and more to get their destination visibility through various media. They may also want to work with current and previous visitors to share their experiences on travel blog sites.

### **Limitations**

First, although two different types of sensory processing were examined in this study, additional types of sensory processing, including smell, taste and touch, exist. Thus, this study documents the impact of select examples of multi sensory processing. Second, in this study all three types of promotional collateral focused on food. Clearly there are other factors that may encourage empathy from study participants. Nature, heritage, shopping, or adventure in the promotional collateral, for example, might provide different results depending on the sample population. I suggest this because some researchers have found, for example, that sports events induce a positive image of a destination (Custodio & Gouveia, 2007; Funk & Bruun, 2007; Kim, Borges, & Chon, 2006; Lee, Lee, & Lee, 2004; Weed, 2009), and souvenirs have a motivation effect on perception of a destination (Hunter & Suh, 2007; Littrell, Baizerman, Kean, Gahring, Niemeyer, Reilly, & Stout, 1994; Swanson & Horridge, 2005).

Finally, the study destination was South Korea, which is not representative of all travel destinations. Perhaps focusing on different destinations may yield different results. Without additional research, however, this is simply conjecture.

### **Closing Summary**

The overall results of this study suggest that multisensory processing has an impact on destination images and willingness to visit a travel destination. These results were documented through the use of an experimental design and rigorous statistical analyses. Specifically, a 2 x 2 experimental design was used to assess whether multisensory processing effects image development and, ultimately, willingness to visit. Not only was the use of an experimental design novel, so too was the incorporation of multisensory processing in a study of travel destination image. Further, Rogers and Schmitt's (2004) parceling technique was used to modify Echtner and Ritchie's (1993) image dimensions which, to my knowledge, has not been done previously. The result suggested that image is a multidimensional construct, but does not split cleanly into the three dimensions previously proposed by Echtner and Ritchie. Additionally, the importance of a destination's cuisine in generating empathy was investigated. The results indicated that cuisine can be used by tourism marketers to generate interest in and empathy for a destination and, more importantly, potential visitation. Finally, tourism practitioners and government officials should use the results of this study to guide the development of promotional and non promotional communications directed toward enticing individuals to visit their destination.

## REFERENCES

- Ahmed, Z. U. (1991). The influence of the components of a state's tourist image on product positioning strategy. *Tourism Management, 12*(4), 331-340.
- Ahmed, Z. U. (1996). The need for the identification of the constituents of a destination's tourist image: A promotion segmentation perspective. *Journal of Professional Services Marketing, 14*(1), 37-60.
- Ahn, J. (2008, September 12). More than three billion dollar economic effects from hallyu queen Youn-Ae Lee. *Korea Times*. Retrieved from <http://news.hankooki.com/ArticleView/ArticleView.php?url=sports/200809/h2008091206494391970.htm&ver=v002>.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology, 52*, 27-58.
- Ashworth, G. J., Voogd, H. (1994). Marketing and place promotion. In J. R. Gold, & S. V. Ward (Eds.), *Place promotion: the use of publicity and marketing to sell towns and regions* (pp. 39-52). New York, NY: Wiley.
- Babin, L. A., & Burns, A. C. (1997). Effects of print ad pictures and copy containing instructions to imagine on mental imagery that mediates attitudes. *Journal of Advertising, 26*(3), 33-44.
- Baker, D. A., & Fesenmaier, D. R. (1997). Effects of service climate on managers' and employees' rating of visitors' service quality expectations. *Journal of Travel Research, 36*(3), 15-22.
- Baker, S., & Green, H. (2005). Blogs will change your business. *Business Week, 39*(31), 56-67.

- Baloglu, S., & McCleary, K. W. (1999). A model of destination image formation. *Annals of Tourism Research, 26(4)*, 868-897.
- Bandalos, D. L. (2002). The effects of item parceling on goodness-of-fit and parameter estimate bias in structure equation modeling. *Structural Equation Modeling, 9*, 78-102.
- Batson, D. (2009). The Social Neuroscience of Empathy. In J. Decety, & W. Ickes (Eds.). *These things called empathy: Eight related but distinct phenomena*. (pp. 3-16). Cambridge, MA: MIT Press.
- Beeho, A. J., & Prentice, R. C. (1997). Conceptualizing the experiences of heritage tourists: A case study of New Lanark world heritage village. *Tourism Management, 18(2)*, 75-87.
- Beerli, A., & Martin, J. D. (2004). Tourists' characteristics and the perceived image of tourist destinations: a quantities analysis-a case study of Lanzarote, Spain. *Tourism Management, 25(5)*, 623-636.
- Beeton, S. (2001). Smiling for the camera: The influence of film audiences on a budget tourism destination. *Tourism Culture & Communication, 3*, 15-25.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.
- Bentler, P.M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariate structures. *Psychological Bulletin, 88*, 588-606.
- Berkman, H. W., & Gilson, C. (1986). *Consumer Behavior: Concepts and Strategies*. Boston, MA: Kent Publishing Company.



- Bigne, E., Sanchez, I., & Sanz, S. (2009). The functional- psychological continuum in the cognitive image of destination: A confirmatory analysis. *Tourism Management, 30(5)*, 715-723.
- Bigne, J. E., Sanchez, M. I., & Sanchez, J. (2001). Tourism image, evaluation variables and after purchase behavior: inter-relationship. *Tourism Management, 22(6)*, 607-616.
- Bizer, G. Y., Tormala, Z. L., Rucker, D. D., & Petty, R. E. (2006). Memory-based versus on-line processing: Implications for attitude strength. *Journal of Experimental Social Psychology, 42*, 646-653.
- Bojanic, D. C. (1991). The use of advertising in managing destination image. *Tourism Management, 12(4)*, 352-355.
- Boller, G. (1990). The vicissitudes of product experience: Songs of our consuming selves in drama ads. *Advances in Consumer Research, 17*. 621-625.
- Boller, G., & Olson, J. (1991). Experiencing ad meanings: Crucial aspects of narrative/drama processing. *Advances in Consumer Research, 18*, 172-175.
- Bone, P. F., & Ellen, P. S. (1992). Generation and consequences of communication evoked imagery. *Journal of Consumer Research, 19(1)*, 93-104.
- Bornhorst, T., Ritchie, J. R. B., & Sheehan, L. (2010). Determinants of tourism success for DMOs & destinations: An empirical examination of stakeholders e perspectives. *Tourism Management, 31(5)*, 572-589.
- Bramwell, B. & L. Rawding (1996). Tourism marketing images of industrial cities. *Annals of tourism Research, 23(1)*, 201-221.
- Browne, M. W., & Chdeck, R. (1993). Alternative ways of assessing model fit. In K. A.

- Busby, G., & Klug, J. (2001). Movie-induced tourism: The challenge of measurement and other issues. *Journal of Vacation Marketing*, 7(4), 316-332.
- Cadotte, E. R., Woodruff, R. B., & Jenkins, R. L. (1987). Expectations and norms in models of consumer satisfaction. *Journal of Marketing Research*, 24(3), 305-314.
- Calantone, R. J., Benedetto, A. D. Hakam, A., & Bojanic, D. C. (1989). Multiple multinational tourism positioning using correspondence analysis. *Journal of Travel Research*, 28(2), 25-32.
- Chen, C., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions?, *Tourism Management*, 28(4), 1115-1122.
- Chun, S. (2004, June 24). A Korean wave in Japan. *Joongang Daily*. Retrieved from <http://joongangdaily.joins.com/article/view.asp?aid=2432838>.
- Coffman, D. L., & MacCallum, R. C. (2005). Using parcels to convert path analysis models into latent variable models. *Multivariate Behavioral Research*, 40(2), 235-259.
- Cohen, E., & Avieli, N. (2004). Food in tourism attraction and impediment. *Annals of Tourism Research*, 31(4), 755-778.
- Connell, J. (2005). Toddlers, tourism and tobermory: Destination marketing issues and television-induced tourism. *Tourism Management*, 26(5), 763-776.
- Crompton, J. L. (1979). An Assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research*, 17(1), 18-23.
- Crompton, J. L., Fakeye, P. C., & Lue, C. (1992). Positioning: The example of the

- Lower Rio Grande Valley in the winter long stay destination market. *Journal of Travel Research*, 31(2), 20-26.
- Croy, G., & Walker, R. D. (2003). Rural tourism and film-issues for strategic rural development. In d. Hall, Roberts, & M. Mitchell (Eds.), *New directions in rural tourism (pp. 115-133)*. Burlington, VT: Ashgate.
- Custodio, M. J. F., & Gouveia, P. M. D. C. B. (2007). Evaluation of the cognitive image of a country/destination by the media during the coverage of mega-events: the case of UEFA Euro 2004 in Portugal. *International Journal of Tourism Research*, 9, 285-296.
- Dadgostar, B., & Isotalo, R. M. (1995). Content of city destination image for near-home tourists. *Journal of Hospitality & Leisure Marketing*, 3(2), 25-33.
- Dann, G. M. S. (1996<sup>a</sup>). *The Language of Tourism. A Sociolinguistic Perspective*. Wallingford, UK: CAB International.
- Dann, G. M. S. (1996<sup>b</sup>). Tourists' images of a destination-an alternative analysis. *Journal of Travel and Tourism Marketing*, 5(1/2), 41-55.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113-126.
- Decrop, A. (2007). The influence of message format on the effectiveness of print advertisements for tourism destinations. *International Journal of Advertising*, 26(4), 505-525.

- Del Conte, N. (2007, August 08). Education 2.0: The best social networks for students. *Wired Magazine*. Retrieved from <http://www.wired.com/software/webservices/news/2007/08/studentnetworks?currentPage=all>.
- Deng, W. (2007). Using a revised importance-performance analysis approach: the case of Taiwanese hot springs tourism. *Tourism Management*, 28(5), 1274-1284.
- Dickingr, A. (2011). The trustworthiness of online channels for experience-and goal-directed search tasks. *Journal of Travel Research*, 50(4), 378-391.
- Echtner, C. M. & Ritchie, J. R. B. (1991). The meaning and measurement of destination image. *Journal of Tourism Studies*, 2(2), 2-12.
- Echtner, C. M. & Ritchie, J. R. B. (1993). The measurement of destination image: An empirical assessment. *Journal of Travel Research*, 31(3), 3-13.
- Echtner, C. M. & Ritchie, J. R. B. (2003). The meaning and measurement of destination image. *Journal of Tourism Studies*, 14(1), 37-48.
- Elliot, S., Papadopoulos, N., Kim, S. S. (2011). An integrative model of place image: Exploring relationship between destination, product, and country images. *Journal of Travel Research*, 50(5), 520-534.
- Embacher, J., & Buttle, F. (1989). A repertory grid analysis of Austria's image as a summer vacation destination. *Journal of Travel Research*, 27(3), 3-7.
- Empathy. (n.d.). In *Encyclopædia Britannica online*. Retrieved from <http://en.wikipedia.org/wiki/Empathy>.
- Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1986). *Consumer Behavior* (5th ed.). Chicago, IL: The Dryden Press.
- Fakeye, P. C., & Crompton, J. L. (1991). Image differences between prospective, first

- time, and repeat visitors to the Lower Rio Grande Valley. *Journal of Travel Research*, 30(2), 10-16.
- Ferrario, F. F. (1979). The evaluation of tourist resources: An applied methodology. *Journal of Travel Research*, 17(3), 18-22.
- Fesenmaier, D., & MacKay, K. (1996). Deconstructing destination image construction. *Revue du Tourisme*, 51(2), 37-43.
- Fick, G. R., & Ritchie, J. R. B. (1991). Measuring service quality in the travel and tourism industry. *Journal of Travel Research*, 30(3), 2-9.
- Fornell, C., & Larcker, D. (1981). Structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.
- Frost, W. (2006). Braveheart- Ed Ned Kelly: historic films, heritage tourism and destination image. *Tourism Management*, 27(2), 247-254.
- Fujioka, Y. (1999). Television portrayals and African-American stereotypes: Examination of television effects when direct contact is lacking. *Journalism and Mass Communication Quarterly*, 76(1), 52-75.
- Funk, D. C., & Bruun, T. J. (2007). The role of socio-psychological and culture-education motives in marketing international sport tourism: A cross-cultural perspective. *Tourism Management*, 28(2), 806-819.
- Gallarza, M. G., Saura, I. G., & Garcia, H. C. (2002). Destination image: Towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56-78.
- Gartner, W. C. (1989). Tourism image: Attribute measurement of state tourism products using multidimensional scaling techniques. *Journal of Travel Research*, 28(2), 16-20.

- Gearing, C. E., Swart, W. W., & Var, T. (1974). Establishing a measure of touristic attractiveness. *Journal of Travel Research*, 12(4), 1-8.
- Gerbner, G., Gross, L., Morgan, M., Signorielli, N., & Shanahan, J. (2002). Growing up with television: Cultivation processes. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 43-67). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gil, S. M., & Ritchie, J. R. B. (2008). Understanding the museum image formation process: A comparison of residents and tourists. *Journal of Travel Research*, 47(4), 480-493.
- Gilbert, D. (1990). Strategic marketing planning for national tourism. *The Tourist Review*, 1, 18- 27.
- Gobe, M. (2001). *Emotional Branding*. New York, NY: Allworth.
- Gordon, B. (1986). The souvenir: messenger of extraordinary. *Journal of Popular Culture*, 20(3), 135-146.
- Goodrich, J. N. (1977). Benefit bundle analysis: An empirical study of international travelers. *Journal of Travel Research*, 16(2), 6-9.
- Goodrich, J. N. (1978<sup>a</sup>). A new approach to image analysis through multidimensional scaling. *Journal of Travel Research*, 16(3), 3-7.
- Goodrich, J. N. (1978<sup>b</sup>). The relationship between preferences for and perceptions of vacation destinations: Application of a choice model. *Journal of Travel Research*, 17(2), 8-13.
- Graham, J. W., & Tatterson, J. W. (2010). Creating parcels for multi-dimensional constructs in structural equation modeling. University Park, PA; Authors.

- Graham, J. W., Tatterson, J. W., & Widaman, K. F. (2001). Creating parcels for multi-dimensional constructs in structural equation modeling. *Proceeding of the annual meeting of the society of multivariate experimental psychology*. Saratoga Spring, NY: Society of Multivariate Experimental Psychology.
- Gunn, C. A. (1972). *Vacationscape: Designing tourist regions*. Austin, TX: Bureau of Business Research, University of Texas at Austin.
- Gunn, C. A. (1988). *Vacationscape: Designing tourist regions* (2nd ed.) New York, NY: Van Nostrand Reinhold.
- Gunn, C. A. (1997). *Vacationscape: Designing tourist areas* (3rd ed.) Washington, D. C.: Taylor & Francis.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed). New Jersey. Pearson-Prentice Hall.
- Hallowell, R. (1996). The relationship of customer satisfaction, customer loyalty, profitability: An empirical study. *International Journal of Service Industry Management*, 7(4), 27-42.
- Hanefors, M., & Mossberg, L. (2002). TV travel shows – A pre-taste of the destination. *Journal of Vacation Marketing*, 8(3), 235-246.
- Hjalager, A. M. (2004). What do tourists eat and why? Towards a sociology of gastronomy and tourism. *Tourism (Zagreb)*, 52(2), 195-201.
- Hoch, S. J., & Ha, Y. (1986). Consumer learning: Advertising and the ambiguity of product experience. *Journal of Consumer Research*, 13(2), 221-233.

- Hong, S., Kim, J., Jang, H., & Lee, S. (2006). The role of categorization, affective image and constraints on destination choice: An application of the NMNL model. *Tourism Management, 27(5)*, 750-761.
- Horng, J., & Tsai, C. S. (2010). Government websites for promotion East Asian culinary tourism: A cross-national analysis. *Tourism Management, 31(1)*, 74-85.
- Hsu, C. H. C., & Lee, E. (2002). Segmentation of senior motorcoach travelers. *Journal of Travel Research, 40(2)*, 364-373.
- Hsu, C. H. C., Wolfe, K., & Kang, S. K. (2004). Image assessment for a destination with limited comparative advantages. *Tourism Management, 25(1)*, 121-126.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6(1)*, 1-55.
- Hu, Y., & Ritchie, J. R. B. (1993). Measuring destination attractiveness: A contextual approach. *Journal of Travel Research, 32(2)*, 25-34.
- Hudson, S., & Ritchie, J. R. B. (2006<sup>a</sup>). Promoting destination via film tourism: An empirical identification of supporting marketing initiatives. *Journal of Travel Research, 44(4)*, 387-396.
- Hudson, S., & Ritchie, J. R. B. (2006<sup>b</sup>). Film tourism and destination marketing: The case of Captain Corelli's Mondolin. *Journal of Vacation Marketing, 12(3)*, 256-268.
- Hunt, J. D. (1975). Image as a factor in tourism development. *Journal of Travel Research, 13(3)*, 1-7.
- Hunter, W. C., & Suh, Y. K. (2007). Multimethod research on destination image Perception: Jeju standing stones. *Tourism Management, 28(1)*, 130-139.



- Hyundai Economic Research Institute. (2004). *Hallyu and its commercialization strategy*. Seoul, Korea: Hyundai.
- Imagination. (n.d.). In *Encyclopedia Britannica online*. Retrieved from <http://en.wikipedia.org/wiki/Imagination>.
- Impression. (n.d.). In *Encyclopedia Britannica online*. Retrieved from <http://uk.encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?lextype=3&search=impression>.
- International Trade Administration Manufacturing and Services Office of Travel and Tourism Industries (2011). *U.S. International Outbound Air Travel for 2010*. Washington, D.C., U.S.A.: U.S. Department of Commerce.
- Jaffe, E. D., & Nebenzahl, I. D. (2006). *National Image & Competitive Advantage; The Theory and Practice of Place Branding*. Herndon, VA: Copenhagen Business School Press.
- Jenkins, O. H. (2003). Photography and travel brochures: The circle of representation. *Tourism geographies*, 5(3), 305-328.
- Joppe, M., Martin, D. W., & Waalen, J. (2001). Toronto's image as a destination: A comparative importance-satisfaction analysis by origin of visitor. *Journal of Travel Research*, 39(3), 252-260.
- Joreskog, K. G. (1971). Statistical analysis of sets of congeneric test. *Psychometrika*, 36, 109-133.
- Joreskog, K. G., Sorbom, D. (1993). *LISREL 8: A guide to the program and applications*. Chicago, IL: Scientific Software International.

- Kelloway, K. E. (1998). *Using LISREL for Structure Equation Modeling: A researcher's guide*. Thousand Oak, CA: Sage Publication, Inc. .
- Kim, H., Borges, M. C., & Chon, J. (2006). Impacts of environmental values on tourism motivation: The case of FICA, Brazil. *Tourism Management, 27(5)*, 957-967.
- Kim, H., & Richardson, S. L. (2003). Motion picture impacts on destination images. *Annals of Tourism Research, 30(1)*, 216-237.
- Kim, S. (2011). Audience involvement and film tourism experiences: Emotional places, emotional experiences. *Tourism Management, 33(2)*, 387-396.
- Kim, S. S., Agrusa, J. Lee, H., & Chon, K. (2007). Effects of Korean television dramas on the flow of Japanese tourists. *Tourism Management, 28(5)*, 1340-1353.
- Kishton, J. M., & Widaman, K. F. (1994). Unidimensional verses domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement, 54(3)*, 757-765.
- Kneesel, E., Baloglu, S., & Millar, M. (2010). Gaming destination images: Implications for branding. *Journal of Travel Research, 49(1)*, 68-78.
- Korea Tourism Organization (2008). *Annual report of Hallyu tourism*. Seoul, Korea: KNTTO.
- Kotler, P. (1997). *Marketing Management*. Upper Saddle River: Prentice Hall.
- Kouthouris, C., & Alexandris, K. (2005). Can service quality predict customer satisfaction and behavioral intentions in the sport tourism industry? An application of the SERVQUAL model in an outdoors setting. *Journal of Sport Tourism, 10(2)*, 101-111.
- Kozak, M., & Rimmington, M. (2000). Tourist satisfaction with Mallorca, Spain, as an

- off-season holiday destination. *Journal of Travel Research*, 38(1), 260-269.
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.) *Attitude strength: Antecedents and consequences* (pp. 413-432). Mahwah, NJ: Erlbaum.
- Kurashima, T., Tesuka, T., & Tanaka, K. (2005). *Blog Maps of Experience: Extracting and Geographically Mapping Visitor Experience from Urban Blogs*. Berlin: Springer.
- LaPage, W. F., & Cormier, P. L. (1977). Image of Camping Barriers to Participation. *Journal of Travel Research*, 15(4), 21-25.
- Leach, E. (1976). *Culture and Communication: The Logic by which symbols are connected*. New York, NY: Cambridge University Press.
- Lee, C., Lee, Y., & Lee, B. (2005). Korea's destination image formed by the 2002 World Cup. *Annals of Tourism Research*, 32(4), 839-858.
- Lee, G. H., O'Leary, J. T., & Hong, G. S. (2002). Visiting propensity predicted by destination image: German long-haul pleasure travelers. *International Journal of Hospitality & Tourism Administration*, 3(2), 63-92.
- Lee, M. J., Bichard, S. L., Irely, M. S., Walt, H. M., & Carlson, A. J. (2009). Television viewing and ethnic stereotypes: Do college students form stereotypical perception of ethnic groups as a result of heavy television consumption? *The Howard Journal of Communications*, 20, 95-110.
- Li, X., Pan, B., Zhang, L., & Smith, W. W. (2009). The effect of online information search on image development. *Journal of Tourism Research*, 48(1), 45-47.
- Lindstrom, M. (2005). *Brand Sense*. New York, NY: Free Press.

- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*, 151-173.
- Littrell, M. A., Baizerman, S., Kean, R., Gahring, S., Niemeyer, S., Reilly, R., & Stout, J. (1994). Souvenirs and tourism styles. *Journal of Travel Research, 33(1)*, 3-11.
- Litvin, S. W. & Mouri, N. (2009). A comparative study of the use of iconic versus generic advertising images for destination marketing. *Journal of Travel Research, 48(2)*, 152-161.
- Long, L. M. (2004). *Culinary Tourism*. Lexington, KY: The University Press of Kentucky.
- MacCannell, D. (1976). *The Tourist: A New Theory of the Leisure Class*. New York, NY: Schocken Books.
- MacInnis, D. J., & Price. L. L. (1987). The role of imagery in information processing: review and extensions. *Journal of Consumer Research, 13(4)*, 473-491.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G. & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7(1)*, 83-104.
- Markwick, M. (2001). Postcards from Malta: image, consumption, context. *Annals of Tourism Research, 28(2)*, 417-438.
- Matejka, J. K. (1973). Critical factors in vacation area selection. *Arkansas Business and Economic Review, 6*, 17-19.
- Matsunaga, M. (2008). Item parceling in structure equation modeling. *A Primer, Communication Methods and Measures, 2(4)*, 260-293.

- Mayo, E. J. (1973). Regional images and regional travel behavior. *The Travel Research Association Fourth Annual Conference proceeding*. Sun Valley, ID: TTRA.
- McLellan, R. W., & Foushee, K. D. (1983). Negative images of the United States as expressed by tour operators from other countries. *Journal of Travel Research*, 22(1), 2-5.
- Milman, A., & Pizam, A. (1995). The role of awareness and familiarity with a destination: The Central Florida case. *Journal of Travel Research*, 33(3), 21-27.
- Mordue, T. (2009). Television, tourism, and rural life. *Journal of Travel Research*, 47(3), 332-345.
- Morgan, M. (2009). Cultivation analysis and media effects. In R. L. Nabi & M. B. Oliver (Eds.), *The Sage handbook of media processes and effects* (pp. 69-82). Newbury Park, CA: Sage.
- Nadeau, J., Heslop, L., O'Reilly, N., & Luk, P. (2007). Destination in a country image context. *Annals of Tourism Research*, 35(1), 84-106.
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York, NY: McGraw-Hill.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.
- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3), 418-430.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

- Paskaleva-Shapira, K. (2007). New paradigms in city tourism management: Redefining destination promotion. *Journal of Travel Research*, 46(3), 108-114.
- Pan, S. (2011). The role of TV commercial visuals in forming memorable and impressive destination images. *Journal of Travel Research*, 50(2), 171-185.
- Park, Y. A., & Gretzel, U. (2007). Success factors for destination marketing web sites: A qualitative meta-analysis. *Journal of Travel Research*, 46(3), 46-63.
- Pearce, P. L. (2011). Tourists' written reactions to poverty in Southern Africa. *Journal of Travel Research*, XX(X), 1-12.
- Perry, M., Izraeli, D., & Perry, A. (1976). Image change as a result of advertising. *Journal of Advertising*, 16(1), 45-50.
- Peter, J., & Valkenburg, P. M. (2008). Adolescents' exposure to sexually explicit internet material and sexual preoccupation: A three-wave panel study. *Media Psychology*, 11, 207-234.
- Phelps, A. (1986). Holiday destination image - the problem of assessment: An example developed in Menorca. *Tourism Management*, 7(3), 168-180.
- Pike, S. (2002). Destination Image Analysis - A review of 142 papers from 1973 to 2000. *Tourism Management*, 23(5), 541-549.
- Pizam, A. (1994). In food and beverage management: A selection of readings. In B. David, & A. Lockwood (Eds.), *Monitoring customer satisfaction* (pp. 231-247). Oxford, UK: Butterworth-Heinemann.
- Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of tourist satisfaction with a destination area. *Annals of Tourism Research*, 5(3), 314-322.

- Pomerantz, E. M., Chaiken, S., & Tordesillas, R. S. (1995). Attitude strength and resistance processes. *Journal of Personality and Social Psychology*, 69, 408-419.
- Prebensen, N. K. (2007). Exploring tourists' images of a distant destination. *Tourism Management*, 28(3), 747-756.
- Puhringer, S., & Taylor, A. (2008). A practitioner's report on blogs as a potential source of destination marketing intelligence. *Journal of Vacation Marketing*, 14(2), 177-187.
- Reisinger, Y., & Turner, L. W. (2002). The determination of shopping satisfaction of Japanese tourists visiting Hawaii and the Gold Coast compared. *Journal of Travel Research*, 41(4), 167-176.
- Reynolds, W. H. (1965). The role of the consumer in image building. *California Management Review*, Spring, 69-76.
- Richardson, J., & Cohen, J. (1993). State slogans: The case of the missing USP. *Journal of Travel and Tourism Marketing*, 2(2), 91-109.
- Riley, R., Baker, D., & Van Doren, C. S. (1998). Movie induced tourism. *Annals of Tourism Research*, 25(4), 919-935.
- Riley, R. W., & Van Doren, C. S. (1992). Movies as tourism promotion: A pull factor in a push location. *Tourism Management*, 13(3), 267-274.
- Riley, S., & Palmer, J. (1975). Of attitudes and latitudes: a repertory grid study of perceptions of seaside resorts. *Journal of the Market Research Society*, 17(2), 74-89.
- Ritchie, J. R. B. (1984). Assessing the Impact of Hallmark Events: Conceptual and Research Issues. *Journal of Travel Research*, 23(1), 2-11.

- Ritchie, J. R. B., & Zins, M. (1978). Culture as Determinant of the Attractiveness of a Tourism Region. *Annals of Tourism Research*, 5(2), 252-267.
- Rogers, W. M., & Schmitt, N. (2004). Parameter recovery and model fit using multidimensional composites: A comparison of four empirical parceling. *Multivariate Behavioral Research*, 39(3), 379-412.
- Ross, G. (1993). Destination evaluation and vacation preferences. *Annals of Tourism Research*, 20(3), 477-489.
- Ryan, C., & Cave, J. (2005). Structuring destination image: A qualitative approach. *Journal of Travel Research*, 44(2), 143-150.
- Scott, D. R., Schewe, C. D., & Frederick, D. G. (1978). A Multi-Brand /Multi-Attribute Model of Tourist State Choice. *Journal of Travel Research*. 17(1), 23-29.
- Stefano, F. (1976). *Pictorial Souvenirs and Commemoratives of North America*. New York, NY: Dutton.
- Stepchenkova, S., & Morrison, A. M. (2008). Russia's destination image among American pleasure travelers: revisiting Echtner and Ritchie. *Tourism Management*, 29(3), 548-560.
- Stewart, M. (1997). *The Impact of Films in the Stirling Area*. STB Newsletter (July 12).
- Suh, Y. K., & Gartner, W. C. (2004). Perceptions in international urban tourism: An analysis of travelers to Seoul, Korea. *Journal of Travel Research*, 43(1), 39-45.
- Swanson, K. K., & Horridge, P. E. (2006). Travel motivations as souvenir purchase indicators. *Tourism Management*, 27(4), 671-683.



- Tapachai, N., & Waryszak, R. (2000). An examination of the role of beneficial image in tourist destination selection. *Journal of Travel Research, 39(1)*, 37-44.
- Tasci, A. D. A., & Gartner, W. C. (2007). Destination image and its functional relationships. *Journal of Travel Research, 45(4)*, 413-425.
- Taylor, C. R., & Stern, B. B. (1997). Asian-Americans: Television advertising and the model minority stereotype. *The Journal of Advertising, 27(2)*, 47-60.
- Thompson, J. R., & Cooper, R. D. (1979). Additional evidence on the limited size of evoked and inept sets of travel destinations. *Journal of Travel Research, 17(3)*, 23-25.
- Turner, L. W., & Reisinger, Y. (2001). Shopping Satisfaction for Domestic Tourists. *Journal of Retailing and Consumer Services, 8*. 15-17.
- Tyagi, A. K. (1989). *A Study of Tourist Culture in India: Insight and Implications*. Doctoral Dissertation, Syracuse University, 1989.
- Urry, J. (1990). *The Tourist Gaze: Leisure and Travel in Contemporary Societies*. Newbury Park, London: Sage Publications.
- Urry, J. (2002). *The Tourist Gaze*. Newbury Park, London: Sage Publications.
- Var, T., Beck, R. A. D., & Loftus, P. (1977). Determination of touristic attractiveness of the touristic areas in British Columbia. *Journal of Travel Research, 15(3)*, 23-29.
- Voase, R. (1999). Consuming tourist sites/sights: a note on York. *Leisure Studies, 18*, 289-296.
- Walmsley, D. J., & Jenkins, J. M. (1992). Tourism cognitive mapping of unfamiliar environments. *Annals of Tourism Research, 19(2)*, 268-286.

- Wang, Y., & Fesenmaire, D. R. (2004). Modeling participation in an online travel community. *Journal of Travel Research*, 42(1), 261-270.
- Wanta, W., Golan, G., & Lee, C. (2004). Agenda Setting and International News: Media influence on public perceptions of foreign nations. *Journalism & Mass Communication Quarterly*, 81(2), 364-377.
- Weed, M. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Management*. 30(5), 615-628.
- Winter, T. (2002). Angkor meets Tomb Raiders: setting the scene. *The International Journal of Heritage Studies*, 8(4), 323-336.
- Woodsid, A. G., & Lysonski, S. (1989). A general model of traveler destination choice. *Journal of Travel Research*, 27(4), 8-14.
- Woodsid, A. G., & Sherrell, D. (1977). Traveler evoked, inept, and inert sets of vacation destinations. *Journal of Travel Research*, 16(1), 14-18.
- Woosnam, K. M. (2011). Testing a model of Durkheim's theory of emotional solidarity among residents of tourism community. *Journal of Travel Research*, 50(5), 546-558.
- Woosnam, K. M., & Norman, W. C. (2010). Measuring residents' emotional solidarity with tourists: scale development of Durkheim's theoretical constructs. *Journal of Travel Research*, 49(3), 365-380.
- Woosnam, K. M., Norman, W. C., & Ying, T. (2009). Exploring the theoretical framework of emotional solidarity between residents and tourists *Journal of Travel Research*, 48(2), 245-258.
- World Tourism Organization (1979). *Tourist Image*. Madrid, Spain: WTO.

Yuksel, A., & Akgul, O. (2007). Postcards as affective image makers: An idle agent in destination marketing. *Tourism Management*, 28(3), 714-725.

**Appendix A**  
**Cover Letter**

# PENNSSTATE



Department of Recreation, Park & Tourism Management  
The Pennsylvania State University  
801 Ford Building  
University Park, PA 16802

Phone: 814-865-1851  
Fax: 814-867-1751

## Multisensory Processing Impacts on Destination Images

The purpose of this study is to investigate the impact of multisensory processing on individuals' image of South Korea as a tourism destination.

Should you choose to continue with this on-line questionnaire you will be asked to view promotional materials and answer 65 questions, which should take you no more than 30 minutes to complete.

Your participation in this study is voluntary; you may choose not to participate, or you may quit at any time. You do not have to answer any questions you do not want to answer. In addition, your confidentiality will be kept to the degree permitted by the technology being used. No guarantees can be made regarding the interception of data sent via the Internet by any third parties. Further, the data resulting from this study will be stored and secured in a file on a password protected computer in Ford Building at Penn State. In the event of publication or presentation resulting from this research, no personally identifiable information will be disclosed.

You must be 18 years of age or older to take part in this research study. Completion of the questionnaire implies your consent to participate in the research. Please print a copy of this form for your records.

Please contact Jihee Kim (814-867-1741) or Deb Kerstetter (814-863-8988) with questions, complaints, or concerns about this research.

Thank you,

Jihee Kim  
Recreation, Park and Tourism Management  
704K Ford Building  
(814) 867-1741 or [jxk287@psu.edu](mailto:jxk287@psu.edu)

Dr. Deborah Kerstetter  
Recreation, Park and Tourism Management  
801 Ford Building  
(814) 863-8988 or [debk@psu.edu](mailto:debk@psu.edu)

## Appendix B

### Recruitment Posting at PSU Faculty Staff Newswire

Penn State Faculty and Staff UPark Newswire (3.7.2011)

From: l-facstaff-newswire-up@lists.psu.edu on behalf of Penn State Newswire (newswire@psu.edu)

Sent: Mon 3/07/11 5:16 PM

To: L-FACSTAFF-NEWSWIRE-UP@LISTS.PSU.EDU

Penn State Faculty and Staff UPark Newswire - 3.7.2011

Study to measure image of South Korea as tourism destination

Jihee Kim, a doctoral candidate in Recreation, Park and Tourism Management at Penn State, is conducting research regarding the impact of multisensory processing on individuals' image of South Korea as a tourism destination.

Participation in the study will require the completion of a 15-minute-long online survey. Participants must be at least 18 years old; those who participate will be entered in a drawing to win traditional Korean souvenirs or a dessert coupon for a local Korean restaurant.

To complete the survey,

those born between January and March should visit <http://www.surveymonkey.com/s/image1> -- those born between April and June should visit <http://www.surveymonkey.com/s/image2> -- those born between July and September should visit <http://www.surveymonkey.com/s/image3> and those born between October and December should visit <http://www.surveymonkey.com/s/image4> online.

**Appendix C**  
**Recruitment Email**



Dear Faculty or Staff:

To complete my doctoral degree at Penn State, I am conducting research regarding the impact of multisensory processing on individuals' image of South Korea as a tourism destination. Participation in my study requires completion of an online survey, which will take approximately 15 minutes. Those who participate will be entered in a drawing for traditional Korean souvenirs or a dessert coupon for a Korean restaurant in the local area. Participants must be at least 18 years old.

To complete the survey,  
--those born between January and March should visit  
<http://www.surveymonkey.com/s/image1>

--those born between April and June should visit  
<http://www.surveymonkey.com/s/image2>

--those born between July and September should visit  
<http://www.surveymonkey.com/s/image3> and

--those born between October and December should visit  
<http://www.surveymonkey.com/s/image4> online.

This study announcement was sent via PSU Faculty Staff Newswire on the 7<sup>th</sup> of March and also is on Penn State Live in the study recruitment list at [http://live.psu.edu/tag/Study\\_Recruitment](http://live.psu.edu/tag/Study_Recruitment) online.

Please contact me if you have any questions or concerns about this survey.

Thank you.

Jihee Kim  
(814)867-1741 or [jihee@psu.edu](mailto:jihee@psu.edu)

**Appendix D**  
**Questionnaire**

### Section A: Level of Ambiguity

**Using the 5-point scale that ranges from “Never” to “Very often,” please indicate the extent to which you agree with each statement.**

	Never				Very Often
How often do you heard about South Korea on TV?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please describe what you've heard about South Korea:					
How often do read or heard about South Korea on the Internet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please describe what you've read or heard about South Korea:					
How often do you heard or read about South Korea though media other than those mentioned above?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please indicate what media sources and describe what you've heard or read about South Korea:					
	No Contact				Very Often
How often do you have contact with South Koreans (in class or at work)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often do you have contact with South Koreans (outside class or at work)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section B: Evaluation of Empathic Response

**Using the 7-point scale that ranges from “Strongly disagree” to “Strongly agree,” please indicate the extent to which you agree with each statement.**

	Strongly disagree						Strongly agree
I want to try Korean Cuisine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can imagine tasting Korean Cuisine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will try tasting Korean Cuisine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section C: Image

**Please indicate the extent to which you agree with the following statements about South Korea.**

	Strongly Disagree			Neither Disagree or Agree			Strongly Agree
South Korea has many interesting tourist sites and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has many national parks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has many historic sites such as museums.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good places to go for the beaches.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has many fairs/exhibits/festivals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has many natural/scenic areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good nightlife and entertainment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good shopping facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good tourist information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good sports facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good transportation systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has many cities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good quality hotels and restaurants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has different styles of architecture/buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good prices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has good weather.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is crowded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is clean.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is urbanized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has a good standard of living.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is commercialized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has political stability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is accessible for foreigners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many people speak English in South Korea.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is a safe place to visit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has customs and cultures different from my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea offers a different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

cuisine.							
South Korea has many friendly people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is a restful and relaxing place to visit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is different and fascinating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea provides many opportunities for adventure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea provides many opportunities to increase knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea is a family-oriented place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea offers a high quality of service.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Korea has a positive reputation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Section D: Overall Image

Using the 5-point scale that ranges from “Highly unfavorable” to “Highly favorable,”

please indicate the extent to which you agree with each statement.

	Highly unfavorable				Highly favorable
How would you describe the image that you have of South Korea?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Section E: Willingness to Visit

Using the 7-point scale that ranges from “Strongly disagree” to “Strongly agree,” please indicate the extent to which you agree with each statement.

	Strongly disagree						Strongly agree
How attractive is South Korea as a travel destination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How sure are you that your current impression of South Korea is correct?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How willing are you to visit South Korea?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Section F: About Yourself</b>
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**For each question below, check the appropriate box or write down the answer.**

1. Have you visited South Korea in the last 10 years?  
 Yes       No
  
2. Have you ever traveled to a foreign country?  
 Yes       No
  
3. Are you planning to travel internationally in the next 12 months?  
 Yes       No
  
4. Do you have a passport?  
 Yes       No
  
5. What is your age? \_\_\_\_\_
  
6. Which of the following titles best reflects your position at Penn State?  
 Faculty  
 Research Associate/Assistant  
 Staff  
 Graduate student  
 Other, please specify \_\_\_\_\_
  
7. Which of the following best describes your total household income in 2009?  
 Under \$20,000  
 \$20,000 to \$39,999  
 \$40,000 to \$59,999  
 \$60,000 to \$79,999  
 \$80,000 to \$99,999  
 \$100,000 and above
  
8. Are you?  
 Male       Female

**Appendix E**  
**Reminder Email**

Dear Faculty or Staff:

Last week you should have received an email from me through the “Faculty, Staff and Graduate Student Listserv. In the email I invited you to participate in a survey regarding the impact of multisensory processing on individuals' image of South Korea as a tourism destination. If you’ve responded to the survey, thank you. If you have not yet responded, please consider doing so.

As a thank you for completing the survey you can enter your name into a drawing for a traditional Korean souvenir or a coupon for Say Sushi Korean restaurant. The total value of the drawing is approximately \$1,500; the highest value item is a \$200 traditional Korean jewelry chest with mother of pearl inlay.

Your response to my survey will help me complete my doctoral degree at Penn State. Participation in my study requires completion of an online survey, which will take approximately 15 minutes. Participants must be at least 18 years old and not Korean.

To complete the survey,

--those born between January and March should visit  
<http://www.surveymonkey.com/s/image1>

--those born between April and June should visit <http://www.surveymonkey.com/s/image2>

--those born between July and September should visit  
<http://www.surveymonkey.com/s/image3> and

--those born between October and December should visit  
<http://www.surveymonkey.com/s/image4>.

This study announcement was sent via PSU Faculty Staff Newswire on the 7<sup>th</sup> of March and also is on Penn State Live in the study recruitment list at  
[http://live.psu.edu/tag/Study\\_Recruitment](http://live.psu.edu/tag/Study_Recruitment) online.

Please contact me if you have any questions or concerns about this survey.  
Thank you.

Jihee Kim  
(814)867-1741 or [jihee@psu.edu](mailto:jihee@psu.edu)



## VITA

### Jihe Kim

#### EDUCATION

Ph.D.	2012	The Pennsylvania State University Major: Recreation, Park, & Tourism Management
M.S.	2002	The Pennsylvania State University Major: Workforce Education
M.S.	2000	The Pennsylvania State University Major: Leisure Studies
B.S.	1996	University of Nevada at Las Vegas Major: Hotel Administration

#### ACADEMIC EXPERIENCES

Research Associate	2010-current	HDR/DTA
Research Faculty	2008- current	Department of RPTM The Pennsylvania State University
Research Faculty	2006-2008	Food Innovation Lab The Pennsylvania State University
Teaching Assistant	1999-2002	School of HRRM The Pennsylvania State University
Research Assistant	1997-1998	School of HRRM The Pennsylvania State University

#### PUBLICATIONS

- Kim, J., & Kerstetter, D. L. (2011). Multisensory processing impacts on destination image and willingness to visit. Submitted to *International Journal of Tourism Research*.
- Kim, J., Lee, W., Kerstetter, D. L., & Graefe, A. (2011). Perceived knowledge, image, and willingness to pay. Submitted *Asia Pacific Journal of Tourism Research*.
- Kim, J., Oh, H., Lee, W. (2012). Psychological ownership in the trail. Submitted to *Journal of Hospitality & Tourism Research*.
- Kim, J., & Kerstetter, D. L. (2012). Foods role on destination images. Submitted to *Tourism Management*.
- Choi, Y., Kim, J., & Lee, C. (2012). Mediating role of functional and wellness values in visitors' evaluation of spa experiences. Submitted to *Journal of Travel Research*.

#### RESEARCH PROJECTS

- Bricker, K., & Kim, J. (2011, 2010). *Recreation Use and Visitor Survey 2010 & 2011*. Merced Irrigation District.
- Kerstetter, D. L., & Kim, J. (2010, 2009, 2008, 2002, 2001, 2000, 1999, 1998). *The Central Pennsylvania Convention and Visitors Bureau's Advertising Initiatives*. CPCVB.